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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR 1982

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETY-SEVENTH CONGRESS

FIRST SESSION

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

TOM BEVILL, Alabama, *Chairman*

EDWARD P. BOLAND, Massachusetts
LINDY (MRS. HALE) BOGGS, Louisiana
BILL CHAPPELL, Florida
VIC FAZIO, California
WES WATKINS, Oklahoma
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HUNTER L. SPILLAN, GEORGE A. URIAN, M. C. GREER, and DONALD P. SMITH, *Staff Assistants*

PART 9

(Pages 1–1240)

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INTERESTED INDIVIDUALS AND ORGANIZATIONS

Printed for the use of the Committee on Appropriations

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

TESTIMONY OF MEMBERS OF CONGRESS AND OTHER INDIVIDUALS AND ORGANIZATIONS

MONDAY, MARCH 23, 1981.

TENNESSEE-TOMBIGBEE WATERWAY

COOSA-ALABAMA WATERWAY

WARRIOR-TOMBIGBEE WATERWAY

WITNESSES

HON. HOWELL HEFLIN, U.S. SENATOR FROM THE STATE OF ALABAMA
HON. JEREMIAH DENTON, U.S. SENATOR FROM THE STATE OF ALABAMA
HON. G. V. MONTGOMERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI
HON. DAVID R. BOWEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI
HON. WILLIAM DICKINSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA
HON. BILL NICHOLS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA
HON. TRENT LOTT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI
HON. RICHARD SHELBY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA
HON. CARROLL HUBBARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY
FOB JAMES, GOVERNOR, STATE OF ALABAMA
LAMAR ALEXANDER, GOVERNOR, STATE OF TENNESSEE
MARTHA LAYNE COLLINS, LIEUTENANT GOVERNOR, STATE OF KENTUCKY
WILLIAM WINTER, GOVERNOR, STATE OF MISSISSIPPI

Mr. BEVILL. The committee will come to order.

We are delighted to have my Governor, Governor Fob James, here this morning; Governor Lamar Alexander of Tennessee; and Governor Winter of Mississippi; and the lovely Lt. Governor Collins of Kentucky.

Of course, also our old friend Governor Wilkins. We are always pleased to have you.

I notice there are several of our Senators and Congressmen sitting in here. I am going to ask you if you will please patiently let me ask them to quickly make their statements and move on,

because they all have committees starting at 10 o'clock. There are two Senators from Alabama here, several of our Congressmen, and we can do this quickly because we want to hear from each of you, and let you testify as long as you wish.

Our senior Senator from Alabama, Senator Howell Heflin, is here. Howell, if you wish to just stand and make your statement and proceed, we will recognize you at this time and we are delighted to have all of these good people here supporting this waterway and thus we get to see you once a year and always look forward to it. We know it is not easy for you to take off from your work and business to come up here on this. Your presence certainly adds a lot to the prestige and support of this waterway.

STATEMENT OF SENATOR HEFLIN OF ALABAMA

Senator Heflin.

Senator HEFLIN. Glover has given me his seat. I will be a little better if I do it seated. Otherwise, you might think you were like a jury and I was arguing before a jury. I might wave my hands and do all sorts of things and stomp my feet.

Mr. BEVILL. You never know what to expect from a former Chief Justice.

Senator HEFLIN. This is a foot-stomping issue.

Mr. MYERS. It has been done out there.

Mr. BEVILL. Senator Heflin helped me get through law school. You see, I appreciate him for many reasons.

Mr. MYERS. Was he on the faculty?

Mr. BEVILL. No. [Laughter.]

He was a colleague.

Senator HEFLIN. I shared my cold briefs with him.

Mr. MYERS. We call that cribbing, don't we?

Senator HEFLIN. Mr. Chairman, members of the committee, it is a real pleasure to join a very distingushed array of my Congressional colleagues and fellow Alabamians and Southerners in support of the appropriation of funds for the continued development of the water resources of Alabama.

My remarks will be brief inasmuch as there are several delegations here today to present their cases to you in behalf of their respective waterway systems. Those who are here today are friends of mine. They have been outstanding in their work to see that the people of Alabama will, in fact, realize and benefit from the vast potential Alabama's rivers and streams.

I have prepared statements dealing with each of the waterway projects, the Coosa-Alabama which is coming along nicely. I ask that that be entered into the record. The Warrior-Tombigbee waterway in Mobile Harbor, and then a general one dealing with the Bayou Caden, the Bayou La Batre, Bon Secour, Dauphin Island Bay, Perdido Pass, the Gulf Intercoastal Waterway, and the Dog and Fowl Rivers as well as the Appalachicol-Chattahoochee-Flint River System.

I would like to make a few comments about the Tennessee-Tombigbee since it is now the focal point of a large battle.We all from Alabama have been staunch supporters of the Tennessee-Tombigbee and with all the force and earnestness at my command,

I want to register my conviction that no one project holds so much promise for the people of our Nation.

A former chairman of the Tennessee Valley Authority, the late Gordon Clapp, once made the following statement about TVA. "TVA is controversial because it is consequential."

To my way of thinking—and I believe a majority of those at this hearing today will agree—those reflective words of Mr. Clapp also apply to the Tennessee-Tombigbee waterway.

The campaign against the project is not new. It has long been enmeshed in politics and subjected to vicious attacks including many, many court suits. These attacks have been based on misleading data, faulty reasoning and unsupported dogma. The courts have finally come to a conclusion. The campaign has been widespread, ranging from lobbying in the halls of Congress down to the grass roots.

With all the money and talent that has been poured into the effort to distort the true benefits about the Tennessee-Tombigbee Waterway, it is small wonder that doubt has been sowed in the minds of many Members of Congress concerning the project.

Having been so directly involved in the most recent fights in Congress for funds for the Tennessee-Tombigbee Waterway, there is absolutely no doubt in my mind that the project—when completed—will stand as a monument to the progress of the entire Nation.

Even now when the people of our Nation are crying out for programs to strengthen their enterprise, opponents of the Tennessee-Tombigbee Waterway have renewed their campaign to becloud the importance of the project to future growth and progress of our Nation. The single, lethal objective of the die-hard opposition to the Tennessee-Tombigbee Waterway is to destroy the project. That is their bottom line.

There is no doubt in my mind that many Members of the Congress have been recipients of some awfully bad advice regarding the feasibility of the Tennessee-Tombigbee Waterway. I do not question the sincerity of most of the critics of this waterway, but I do question their judgment.

Others far more eloquent than I will present to you today the detailed iron-clad case for approving the funds requested by President Reagan—I emphasize again requested by President Reagan for the Tennessee-Tombigbee Waterway. I only ask that when you meet to mark up the public works money bill that you fill your minds and imaginations with the wondrous benefits and possibilities that await the entire Nation with the completion of the project. I think you will find them to be incalculable.

I would also ask permission that I can later supply for the record a letter which has been signed by the Senators from Alabama, Mississippi, Tennessee, and Kentucky, pertaining to the Tennessee-Tombigbee that we sent to all of our colleagues in the Senate. It has the dollar and cents figures. Basically, it would show that to complete the Tennessee-Tombigbee, there is approximately $500 million more needed. To close down the Tennessee-Tombigbee, to terminate it, would cost over $300 million.

I would dare say that we have heard a lot about the cost-benefits. I would like to see some cost-benefit analysis of what it would be to close it down and to terminate it.

The people that have long been arguing on an environmental basis, I think that they are very shortsighted. If there has been any damage to the environment, the insult occurred when the ditch was dug. Therefore, all the anticipated environmental insults have already occurred. It has moved along to the extent that if you were to stop it, the figure by the Corps of Engineers is that it would cost well over $300 million to put the land back into the condition of where it was beforehand.

I will not get into the details of this. This I will leave to the others, but I ask this committee to give very careful consideration to it. We are now at a stage where the project is well on its way, and it would be a disaster—a disaster—to the whole South.

I think you have to look at all aspects of it, the jobs that you would lose, the increase that would occur in unemployment, many, many of those jobs are now held by minority people. It would be a great disaster to them.

I appreciate the courtesies of this committee and ask that all of my statements appear in the record as I have written them in order that you may have the full benefit of all details I have written about.

Mr. BEVILL. Those will be made a part of the record.

[The information follows:]

STATEMENT OF SENATOR HOWELL T. HEFLIN OF ALABAMA

Mr. Chairman and Members of the Committee:

It is more than an ordinary pleasure to again join with a very distinguished array of my Congressional colleagues and fellow Alabamians in support of the appropriation of funds for the continued development of the water resources of Alabama.

My remarks will be brief inasmuch as there are several delegations here today to present their cases to you in behalf of their respective waterway systems. Those who are here today are friends of mine. They have been outstanding in their work to see that the people of Alabama will, in fact, realize and benefit from the vast potential of Alabama's rivers and streams. I warmly commend their testimonies to you.

Mr. Chairman, water is Alabama's richest and most abundant natural asset. Many, if not most, of the projects for which we are seeking funds will serve several purposes at once. More and better economic opportunities, more and better public health and safety, more jobs and a higher standard of living—indeed, the overall quality of life in our State and elsewhere—will be enhanced if we fund these projects and bring them to complete fruition.

When rivers and harbors are developed, this creates the means and incentive for entire sections of our nation to move forward. The people of Alabama long ago recognized the merits of the comprehensive development of our State's water resources and they have already enjoyed many of the beneficial effects of the wise development and management of their rivers, streams and ports. But, they will not be content to stop now in midstream.

We look to the future. But we chart our course by the past. And when we look back to the growth of our State from partial water resource development, it comes to us how vast indeed are the possibilities that still lie ahead when our waterways are fully developed.

We are most grateful to this Committee for its interest and understanding of the full development of Alabama's water resources. You have been our friend. With your continued help, Alabama will gain her rightful economic place among the States and will benefit fully from her resources.

Thank you.

STATEMENT OF SENATOR HOWELL T. HEFLIN OF ALABAMA

Mr. Chairman, I strongly commend to you the budget request for $201,100,000 in funds to continue construction of the great Tennessee-Tombigbee Waterway.

I have been and I continue to be a staunch supporter of the Tennessee-Tombigbee Waterway. With all the force and earnestness at my command, I want to register

my conviction that no one project holds so much promise for the people of our nation.

A former chairman of the Tennessee Valley Authority, the late Gordon Clapp once made the following statement about TVA:

"TVA is controversial because it is consequential . . ."

To my way of thinking—and I believe a majority of those at this hearing today will agree—those reflective words of Mr. Clapp also apply to the Tennessee-Tombigbee Waterway.

The campaign against the project is not new. It has long been enmeshed in politics and subjected to vicious attacks. These attacks have been based on misleading data, faulty reasoning and unsupported dogma. The campaign has been widespread, ranging from the lobbying in the Halls of Congress down to the grassroots. With all the money and talent that has been poured into the effort to distort the true benefits about the Tennessee-Tombigbee Waterway, it is small wonder that doubt has been sowed in the minds of many members of Congress concerning the project.

Having been so directly involved in the most recent fights in Congress for funds for the Tennessee-Tombigbee Waterway, there is absolutely no doubt in my mind that the project—when completed—will stand as a monument to the progress of the entire nation.

Even now when the people of our nation are crying out for programs to strengthen their enterprise, opponents of the Tennessee-Tombigbee Waterway have renewed their campaign to becloud the importance of the project to future growth and progress of our nation. *The single, lethal objective of the die-hard opposition to the Tennessee-Tombigbee Waterway is to destroy the project. That is the bottom line.*

There is not doubt in my mind that many members of the Congress have been recipients of some awfully bad advice regarding the feasibility of the Tennessee-Tombigbee Waterway. I do not question the sincerity of most of the critics of this Waterway, but I do question their judgment.

Others far more eloquent than I will present to you today the iron-clad case for approving the funds requested by President Reagan for the Tennessee-Tombigbee Waterway. I only ask that when you meet to mark up the public works money bill that you fill your minds and imaginations with the wondrous benefits and possibilities that await the entire nation with the completion of the project. I think you will find them to be incalculable.

Thank you.

STATEMENT OF SENATOR HOWELL T. HEFLIN OF ALABAMA

Mr. Chairman, other waterway items in the budget for the 1982 fiscal year include $2,509,000 for operation and maintenance activities for the following projects: Bayou Caden, Bayou La Batre, Bon Secour, Dauphin Island Bay, Perdido Pass, the Gulf Intracoastal Waterway, and the Dog and Fowl Rivers.

Also, included in the budget is a request for $49,000 to remove aquatic growth on navigable streams in our State.

In closing, I should like to comment briefly upon the budget requests for the Apalachicola-Chattahoochee-Flint River System. The budget for the 1982 fiscal year calls for $7,320,000 in operation funds at the Walter F. George Lock and Dam and $3,153,000 for similar activities at the West Point Lake Project.

As this Committee knows, this waterway has experienced severe navigation problems in recent years. There is no doubt that this river basin is ideal for growth, but commercial users of the waterway must have the assurance of navigation on a twelve month basis.

Unfortunately, interstate disagreements concerning this waterway has limited the benefits the river system can bring to the people of the watershed. Happily, the Governors of the States of Alabama, Georgia and Florida have reached a meeting of the minds through the establishment of a task force which identified and proposed solutions to the myriad of problems surrounding the endeavor to insure year round navigation on the waterway.

In the Administration's budget for the 1982 fiscal year, there is a request in the amount of $3,635,000 in operation and maintenance activities for the Apalachicola-Chattahoochee-Flint River system. I strongly urge approval of this item. Additionally, I would hope that this Committee would consult with officials of the Army Engineers regarding the need for approving funds for the removal of rock ledges which set the controlling depth in the river system during low flow. It is my understanding that the U.S. Fish and Wildlife Service can advise the Army Engineers on the procedure which must be followed in connection with the rock removal whereby fish propagation will not be endangered.

Thank you.

Mr. BEVILL. Also the letter you referred to, Senator Heflin, the record will be held open five days so you can put that in the record. We would like to have that in the record.

Mr. MYERS. Senator, the discussion this year about terminations come from your side of the Capitol, not ours, so far.

Senator HEFLIN. I might say that the House is showing extreme wisdom.

Mr. MYERS. We think it always has.

Mr. BEVILL. Thank you, Senator Heflin.

Now our beloved colleague, Senator Denton of Alabama.

We are delighted to have you with us, Senator Denton. You may proceed as you wish.

STATEMENT OF SENATOR DENTON OF ALABAMA

Senator DENTON. Thank you, Mr. Chairman.

Mr. Chairman, I appreciate very much the opportunity to offer my support for the Tennessee-Tombigbee Waterway this morning. I recognize that we have very distinguished people here this morning. My colleague, Senator Heflin, has testified, the Governor of our State, my friend Fob James, the many distinguished Governors 'representatives and delegates from those States directly affected by this important project, a project which is of vital benefit to the Nation as well as to the people of Alabama.

Many of you have addressed this subject in this environment here for many years. In fact, since the inception of the Tennessee-Tombigbee. I am a new boy, but I have been working hard to understand this and to support it.

I will underscore facts which the committee may or may not be aware of, recognizing others will present the full case.

It was indeed an error when the Senate Environment and Public Works Committee stated that $25 million would be sufficient to terminate the Tennessee-Tombigbee project properly restoring the environment. It will require $328 million, not $25 million to terminate it. Given that $328 million, only $353 million more is needed to complete this vital project. Once complete, at least $136 million annually is accrued in savings by using this shorter route. It would be penny-wise and tom-foolish to terminate such a project. I have spoken to the gentlemen on that committee who raised those objections. They have confessed to me that they may have made an error, and in that particular committee, I think you will see a reassessment and a restatement of the situation. I cannot say what will happen on the Senate floor with the moods being as transcient as I see they are there and as you all must notice they are over here, but I do believe that a more objective approach will be taken by the committees now as they throw these numbers around in talking about the Tenn-Tom.

Over the years, I have emphasized to them that Tenn-Tom has earned the bi-partisan support of five Presidents, numerous Congressional delegations and a host of private industries and business concerns. Why? Because completion of the waterway will provide a more economical water transportation system for the 14 States in the region currently shipping bulk commodities, by trimming more

than 900 miles from present water routes between these many points of origin and the Gulf of Mexico.

As one of the busiest waterways in the Nation, it will provide the least expensive and most efficient mode for moving coal from the abundant Appalachian fields to the Gulf of Mexico.

The savings in time and money in shipping steam coal and high sulfur coal will have a positive effect on both national energy independence and our balance of payments with other nations.

High sulfur coal has been only marginally exported in the past, because of high shipping costs. The shortened route created by Tenn-Tom would save an estimated $2.80 per ton of coal for the new fields on or close to the waterway, making exports profitable. The estimate of $135 million annual benefits is extremely conservative as they agreed with me yesterday and the day before down in Mobile. Those statements are based on 1975 data.

Now the prospects for coal production and the cost of oil are both much higher.

Also, experts are projecting an increased demand for steam coal for the 50-year period beginning in 1986. The same $2.80 per ton shipping savings applies here—encouraging the mining of coal fields which heretofore were deemed non-economical.

Upon completion, it will benefit one of the areas of greatest American poverty: Appalachia.

It may be relatively new to talk about the national defense implications, the national security implications of Tenn-Tom. For example, the Houston volunteer and Milan army ammunition plants, the Redstone Arsenal and Marshal Space Flight Center and the Army's Armor Center at Fort Knox are a few of many defense activities which are sure to accrue benefits in flexibility, costs and efficiency in a mobilization or war-time situation. Alabama is very conscious of that. I am very proud of our Governor's record in terms of our Reserve National Guard.

In order that the maximum benefit of the monies already spent on this project might be attained, I urge this committee to approve the amount requested by President Reagan's budget proposal, of $201.1 million for fiscal year 1982.

I applaud the efforts of the chairman and this subcommittee for the wisdom it has shown in the past in supporting the Tennessee-Tombigbee Waterway.

I would also like to commend my many Alabama friends for making the long trip to testify before this subcommittee today.

Mr. BEVILL. Thank you very much, Senator Denton.

[Senator Denton's prepared statement follows:]

STATEMENT BY SENATOR JEREMIAH DENTON OF ALABAMA

Mr. Chairman (Congressman Bevill), distinguished members of this subcommittee, thank you for providing me this opportunity to appear before you and record my support for the Tennessee-Tombigbee Waterway.

It is indeed a privilege to appear in the company of my colleague Senator Heflin, the Governor of our State, the Honorable Fob James and the many distinguished representatives and delegates from those States directly affected by this important project, a project which is of vital benefit to the Nation as well as to the people of Alabama.

There are many here who have addressed this subject before this committee every year for the past several years. They have been directly involved with the Tenn-Tom since its inception and therefore will provide a detailed analysis of this project.

My purpose here today is to underscore some basic facts which the committee may or may not be aware of.

I was fortunate to receive a briefing by the Corps of Engineers just this past weekend in Mobile. It was an error when the Senate Environment and Public Works Committee stated that $25 million would be sufficient to terminate the Tenn-Tom project properly restoring the environment. It will require $328 million not $25 million to terminate. Given that $328 million, only $353 million more is needed to complete this vital project. Once complete, at least $136 million annually is accrued in savings by using this shorter route. It would be penny-wise and Tom-foolish to terminate such a project.

Over the years, Tenn-Tom has earned the bi-partisan support of five Presidents, numerous congressional delegations and a host of private industries and business concerns. Why? Because completion of the waterway will provide a more economical water transportation system for the fourteen States in the region currently shipping bulk commodities, by trimming more than nine hundred miles from present water routes between these many points of origin and the Gulf of Mexico.

As one of the busiest waterways in the Nation, it will provide the least expensive and most efficient mode for moving coal from the abundant Appalachian fields to the Gulf of Mexico.

The savings in time and money in shipping steam coal and high sulfur coal will have a positive effect on both national energy independence and our balance of payments with other nations.

High sulfur coal has been only marginally exported in the past, because of high shipping costs. The shortened route created by Tenn-Tom would save an estimated $2.80 per ton of coal for the new fields on or close to the waterway, making exports profitable. The estimate of $135 million annual benefits is extremely conservative being based on 1975 data. Now the prospects for coal production and the cost of oil are much higher.

Also, experts are projecting an increased demand for steam coal for the fifty year period beginning in 1986. The same $2.80 per ton shipping savings applies here—encouraging the mining of coal fields which heretofore were deemed non economical.

The shortened route alone will help reduce fuel consumption on the waterway by 25.4 million gallons per year.

Upon completion, it will benefit one of the areas of greatest American poverty: The Appalachia region.

During my years of military experience I came to recognize the Tenn-Tom's strategic importance to our national defense efforts. Completion of Tenn-Tom has important implications for our national security. For example, the Houston, volunteer and Milan army ammunition plants, the Redstone Arsenal and Marshal Space Flight Center and the Army's Armor Center at Fort Knox are a few of many defense activities which are sure to accrue benefits in flexibility, costs and efficiency in a mobilization or war-time situation.

In order that the maximum benefit of the monies already spent on this project might be attained, I urge this committee to approve the amount requested by President Reagan's budget proposal, of $201.1 million dollars for fiscal year 1982.

While President Reagan and I have been longtime advocates of balancing the Federal budget, I think it is prudent, wise and fiscally responsible to generate Federal dollars into those areas that will bring the greatest return. The economic benefits of the Tenn-Tom will be far-reaching. It will solve many problems we have concerning demands, export policies, and national security.

I applaud the efforts of this subcommittee for the wisdom it has shown in the past in supporting the Tennessee-Tombigbee Waterway.

I would also like to commend my many Alabama friends for making the long trip to testify before this subcommittee today.

Mr. BEVILL. I am very proud of our two Alabama Senators. They each have made a distinct, outstanding career before they came to Washington. Senator Heflin was Chief Justice of the Alabama Supreme Court and made a national record in his work on judicial reform throughout the United States, and Senator Denton, of course, has had a brilliant military career and is playing a leading role up here in the defense of our country. We appreciate both of you.

Glad to have you with us.

I see our friend Congressman Montgomery of Mississippi, General Montgomery, I call him. That is a title I gave him here because, you see, when General Montgomery died over there in Europe, the only Monty we had, I understand he started signing his mail Monty after that. [Laughter].

General, we are delighted to have you with us.

STATEMENT OF CONGRESSMAN MONTGOMERY OF MISSISSIPPI

Mr. MONTGOMERY. Mr. Chairman, I would like to submit my full statement and say that I certainly hope the Tenn-Tom would be funded adequately. It really doesn't make sense to, in effect, stop a bridge when you have half built it. This project is half built. I would like to say I am well acquainted with this subcommittee, Mr. Chairman, Jamie Whitten, the dean; Lindy, I live up the road from her. The rest of the members of this subcommittee, we meet at prayer breakfasts on Thursday morning. John leads the singing sometimes. I have given the chairman, Mr. Bevill, a title. He is assistant to the assistant chaplain in the House of Representatives. I am the assistant to the chaplain. Tom Bevill follows me.

Mr. MYERS. Titles are pretty free, you see. We pass them out.

Mr. MONTGOMERY. I am worried about this project so I will let you make a report more often this year at the prayer breakfasts than I have in the past.

Mr. BEVILL. I have held that position for ten years. He has never let me speak but once or twice. He always pulls rank on me.

Your statement will be made a part of the record, Congressman Montgomery.

[The statement of Mr. Montgomery follows:]

PREPARED STATEMENT OF CONGRESSMAN GILLESPIE V. MONTGOMERY

Mr. Chairman, I appear before you this morning, as I have many times before, to speak in support of the Tennessee-Tombigbee Waterway. This Subcommittee has in the past years been cognizant of the merits of this Project and has provided sufficient funding for construction to proceed smoothly. I am hopeful that this year will be no different.

When complete, the Tennessee-Tombigbee will be a 232 mile channel connecting 16,000 miles of mid-American inland waterways with ports in the Gulf of Mexico. The Waterway will provide users access to a much shorter than currently available route to the Gulf, saving shippers from the Tennessee River systems alone as much as 839 miles.

Mr. Chairman, among the most important areas of concern for this 97th Congress are energy and our economy. The Tennessee-Tombigbee will impact favorably on both, and, in fact, would not be justifiable in these days of budget tightening were this not true. There is no doubt that the total outlay for the Tenn-Tom is high, but the benefits are great and are already being felt along the channel route with completion still four or five years away.

In the nine years of construction to date, the Tennessee-Tombigbee has done much to introduce economic confidence into an area that has historically had none. Employment opportunities along the Waterway have flourished allowing persons in very economically depressed areas to experience, in many cases for the first time in their lives, livable personal incomes. Most of the resultant economic growth has been a direct result of construction activities, with the stimulus coming from the new jobs and the purchase of supplies, material and equipment from local businesses. Once construction is complete, the potential for industrial development along the channel will allow the higher living standard to continue. I am very enthusiastic about the potential this Project has for my state and the Southeastern United States, where the growth rate has for far too many years lagged behind the national average.

Commerce moved along the channel will be largely coal and agricultural, and the advantage of a considerable reduction in the distance traveled for existing barge

movements of these products will result in the Tenn-Tom becoming immediately one of the busiest waterways in the nation. Over 28 million tons of commerce will move on the Waterway in the first year of operation. Consider, if you will, the navigation benefits. The shorter route will result in an average savings of $2.97 per ton of commerce. A typical coal movement will cost $7.54 per ton on the Tennessee-Tombigbee channel vis-a-vis $10.52 for the next cheapest form of transportation. Not only will the shorter and cheaper route save money, it will also save fuel. It is estimated in the first year of operation alone 25.4 million gallons of diesel fuel will be saved by barges using the Tenn-Tom.

The location in and around much of the most productive farmland in the country are key considerations for the project. Already five million bushels of soybeans have been shipped on the channel's limited navigation route. The more direct connection with the Gulf of Mexico for many agricultural shippers will encourage this amount to increase many times over when the Waterway is completed. The advantages provided the transportation industry should have a very positive influence on our balance of trade, especially since the benefits provided are to major United States exports.

Although the Tenn-Tom has come under environmental attack construction has been very mindful of environmental needs. It has been carried out under the stringent environmental regulations of the NEPA, and all designs and construction work has been reviewed and approved by a nationally known environmental board. Large numbers of game fish have already been stocked in secondary lakes and game and wildlife preserves have been planned as an adjunct to the Project. I am very proud of the environmental awareness that has gone into the planning of this Waterway.

Progress on the construction of Tenn-Tom has moved along at a remarkable pace. Nine of the ten locks are either already complete or under construction. The entire project is approximately 60 percent complete and there is now limited navigation occurring south of Columbus, Mississippi through Alabama to the Gulf of Mexico. The anticipated industrial development has already begun to appear; the future prospects are very exciting.

Mr. Chairman, I ask this Committee to carefully consider the serious need for the Tennessee-Tombigbee as you decide the level of funding for the 1982 fiscal year. I am aware of the special constraints we have on the next few Budgets, and in keeping with President Reagan's plans, I ask that you consider the outstanding merits, accomplishments and fine future this Project has and support a level of funding that will meet with the President's goals while allowing the construction to continue uninterrupted.

Thank you.

Mr. BEVILL. I see my good friend and next door neighbor, Congressman David Bowen of Mississippi who has always been a strong supporter of the Tennessee-Tombigbee.

STATEMENT OF CONGRESSMAN BOWEN OF MISSISSIPPI

Mr. BOWEN. Thank you, Mr. Chairman.

I will just leave my testimony. So many good things have been said about the Tennessee-Tombigbee that I will speak briefly.

I do want to thank you and Jamie and John, Lindy.

Mr. BEVILL. I might say when Dave was running for Congress over there in Mississippi, they were asking him, it it was true that he went to Oxford. "Oh," he said, "Yes, I went to school at Oxford, Oxford over here." They thought he was talking about Oxford, Mississippi. He got elected but now he confesses he attended Oxford.

Mr. BOWEN. My Mississippi State supporters just said be sure they know that was Oxford, England. [Laughter.]

You could get in real trouble if they thought otherwise. I want to thank this committee for the hard work that you have put in on this project over the years. Eight appropriation measures have been passed through here. This project, as we all know, is going to make a major contribution to the waterway system of this Nation. It has been in the courts 12 times, I think. Everybody has come up

with just about everything they could think of to raise an objection to it. They have all been stricken. I see no reason why this project should not move forward to make the kind of contribution that I know we all feel that it will make to the country.

In an age of energy crisis, we ought to keep in mind that one gallon of diesel fuel will move one ton of coal 50 miles by truck, 180 miles by rail, but 300 miles by barge. This is going to save almost $3 a ton on coal moved through the Tennessee-Tombigbee. It is going to shorten the waterway by something like 839 miles total, and save approximately $100 million a year in costs of operation.

You know, I was just mentioning some of the committee members a moment ago. John, Eldon, some of the minority members. Although they are part of the minority in the House, they are part of the majority down at the White House. We are pleased President Reagan has endorsed this project and come out strongly for it. I am confident that will carry a great deal of weight on both sides of this Capitol buiding.

I just want to thank you all for inviting us to appear here before you and commend you for your fine work.

I think in years to come we will all be proud of what we are doing here despite the criticism that we get. It is something to be expected in politics. It is part of what we have to put up with in order to do what we believe is right. I am confident what we are doing for the Tennessee-Tombigbee waterway is right.

Thank you, Mr. Chairman.

[The statement of Mr. Bowen follows:]

STATEMENT OF HON. DAVID R. BOWEN OF MISSISSIPPI

Mr. Chairman, and other distinguished members of this Committee, I am honored that you have allowed me a few moments to discuss with you a project which is headquartered in the district I am proud to represent. The Tennessee-Tombigbee Waterway is a 232-mile navigation channel connecting mid-America's 16,000 miles of inland waterways to deepwater ports. Tenn-Tom is the most studied and restudied water project ever built, under close scrutiny by the Congress since 1946, by the courts, and by several Federal agencies. Tenn-Tom has been endorsed by the last five U.S. Presidents, and I am pleased to say that completion of this national waterway has been endorsed by President Reagan.

Thanks to your support, construction of the Tennessee-Tombigbee Waterway, which began in 1972, has made remarkable progress. The entire project is nearing the two-thirds completion mark with over 74 percent of the project already committed to construction contracts and the Corps of Engineers completing about one percent of the remaining work each month.

Overall, 61 percent of the necessary 308 million cubic yards of materials have been excavated. The Divide Cut, a 40 mile section of the waterway, lacks only an 11 mile segment of work, of which 50 percent is complete, and for which the remaining work is contracted. The canal section, which is 44 miles in length, has 81 percent of its navigation channel completed. Less than 55 miles of the 148 mile river section remain to be excavated, and most of this is under contract. All four of its major facilities, the locks and dams, are virtually complete.

Also, bridge relocations, costing $130 million in state and federal funds, are complete or underway in Mississippi and Alabama.

Even in the face of double-digit inflation and a two-fold increase in fuel costs, estimates for the Tenn-Tom have increased only 20 percent from 1977 to 1981, while the average cost estimates for heavy construction have increased 30 percent over the same time period. Keen competition among contractors has been instrumental in holding down the total cost of the project. Most contracts have been below government estimates for the proposed work.

The waterway will begin full operation in the mid-1980's with as much tonnage movement as now exists on the Tennessee River. As this tonnage increases, some 14 states will benefit from the $105 million annual transportation savings that will result from the shorter Tenn-Tom route. Over 28 million tons of commerce are

expected to move on Tenn-Tom the first year of operation at a savings of about $3.00 per ton. Principal commodities forming that first year traffic will be coal, metallic ores, chemicals and farm products.

About 73 percent of the commerce projected to move on the waterway is coal, of which about one-fourth is for export. Coal is the nation's best available resource for solving our energy supply problems, and the Tenn-Tom will offer the cheapest, most efficient mode for moving Appalachian coal not only for domestic consumption, but also for export, which will help reduce the nation's critical balance-of-payments problems.

The opening of the Tenn-Tom Waterway will also greatly expand the market opportunities for agricultural products, the export of which is the leading positive contribution to our nation's balance of trade. Exports presently account for approximately one-third of our agricultural economy, and cheap and efficient transportation of these products will result in significant savings for our agricultural shippers and further improve the competitiveness of our goods in export markets. Soybean and grain producers have already taken advantage of less expensive barge transportation on the Tenn-Tom and have shipped over 5 million bushels of soybeans and grain at a savings of 10–15 cents per bushel since limited navigation.

When computing the annual navigation benefits of a project, the Corps of Engineers is restricted by regulations to include shipments only from existing companies or those which have announced plans for location in the waterway area. Therefore, new industrial development that will take place in the future under normal growth conditions or that induced by the waterway have not been given any consideration in arriving at the estimate of transportation benefits for the waterway. For this reason, the navigation benefits for the Tenn-Tom are very conservative, since the Tenn-Tom region is one of the fastest growing areas in the nation.

For example, in 1975, a Department of Commerce study said that counties on the waterway would see $2.9 billion in industrial development by the year 2000. Last year, waterway counties in Mississippi and Alabama recorded industrial investments of approximately one-half billion dollars, creating 4,123 jobs, while the waterway region of Tennessee saw record-setting capital investments of $1,610,740,000. From the beginning of waterway construction in 1972, the total industrial investment in Mississippi and Alabama waterway counties alone is approximately $4 billion. These figures are certainly far above the original estimate by the Department of Commerce.

Historically, traffic for practically all waterways has exceeded the estimate originally made by the Corps. For example, the Gulf Intra-coastal Waterway was originally projected by the Corps of Engineers to generate a total of some 7 million ton-miles of commercial freight a year. It was on that basis that the Corps decided it was economically feasible, and, in 1979, the waterway generated not 7 million ton-miles, but more than 100 million ton-miles of commercial freight. The Summersville Reservoir in West Virginia, the Michael J. Kirwan Dam and Reservoir in Ohio, and the Buttermilk Channel in New York are all public water projects that clearly indicate the tendency by the Corps to underestimate benefits, and the list goes on. Not counting future growth, the tonnage that potentially could move on the Tenn-Tom is nearly twice the ultimate capacity of the waterway. The question then is not whether the waterway will be utilized, but how soon will it become operational.

Mr. Chairman, while the future looks very bright for the Tenn-Tom and with Mississippi resting at the bottom of the list in per capita income, this waterway also holds a ray of hope for greater economic development and a better life for the people of my State. But Tenn-Tom is not a local and regional project—it is a national investment. More productive States and localities—particularly those that are historically underdeveloped—contribute to a more productive nation.

I am personally very disturbed by the assumption implicit in some comments about this project, expecially in the notion expressed that it serves merely to shift resources from one area to another. This to me indicates a no-growth, fixed-pie philosophy—a philosophy, I must note, that runs directly counter to that of increasing economic growth espoused by the President and his administration. In fact, in endorsing the completion of the Tenn-Tom, President Reagan has said that it would be much worse to stop it now than to continue it, as there would be a waste of $1.25 billion of federal funds invested in the project to date; there would be additional necessary funds for termination of the project at around $130 million; there would be untold billions of dollars invested in port or waterway-related facilities and private capital investments wasted; and there would be an unconscionable breach of faith to the potential beneficiaries of the project in some 23 States.

A business that looks only to the short-term and fails to make needed capital investments in areas offering great potential for significantly increased returns in the long run is, I submit, not a very wise business. The same holds true for a

national government. At a time when we are earnestly seeking to increase private investment, it does not make sense to destroy the mechanisms that promote such investments precisely where they are needed most—and where the most is to be gained.

The investments by the government in Tenn-Tom are indeed attracting a much greater flow of private capital and are resulting in significant growth beneficial both to the area and to the nation.

I am strongly committed to cutting government spending so that we can restore sound fiscal policy to our country. However, I believe that we must carefully evaluate each program or project to ensure that the cuts will not drastically reduce or terminate those which have been of the greatest value in developing our economy and generating new tax revenues.

Mr. Chairman, it is important that we continue to fund this project at a level to maintain the 1985 completion schedule. To delay it would only mean a greater cost to our taxpayers. I urgently request your continued full support for the Tennessee-Tombigbee Waterway for fiscal year 1982.

Mr. BEVILL. Next I recognize our colleague and good friend, Congressman Bill Dickinson from Montgomery, Alabama. Bill has always, of course, been out front on the Tennessee-Tombigbee. He is the ranking minority member of the House Armed Services Committee and holds a very key position in the defense of our country.

Bill, we will be glad to hear from you.

STATEMENT OF CONGRESSMAN DICKINSON OF ALABAMA

Mr. DICKINSON. Thank you, Mr. Chairman.

I will be very brief. I would like to associate myself with the remarks previously made and file my formal statement to be included in the record.

This is the seventeenth time I have appeared before this distinguished group. As a matter of fact, not one of you was here when I started out.

I am just as enthusiastic about my support of these vital water projects today as I was when I first appeared. I appreciate the opportunity of speaking on behalf of not only the Tennessee-Tombigbee, but also of the Warrior-Tombigbee and the Alabama-Coosa River systems.

So we are very blessed in our State of Alabama in having these natural water systems. We are also very blessed by having the foresight in the Congress to go forward in the development of those systems for the benefit of the entire Nation.

Thank you for allowing our appearance here today and for the gracious reception we have always received here. I do appreciate the opportunity of inserting my remarks in full in the record.

Mr. BEVILL. Thank you very much.

[The statement of Mr. Dickinson follows:]

PREPARED STATEMENT OF CONGRESSMAN WILLIAM L. DICKINSON ON THE WARRIOR-TOMBIGBEE RIVER SYSTEM

Mr. Chairman, members of the subcommittee, I appreciate very much the opportunity to appear before you again this year to discuss the fiscal year 1982 budget request of the Corps of Engineers for maintaining, operating and improving the established and vital Warrior-Tombigbee River System.

The Warrior-Tombigbee serves a multitude of users to include—manufacturers; iron ore and steel; finished products; coal and petroleum; small and big business and private citizens.

Use of this system has boomed. Twenty-six years ago it carried three million tons a year. Today, its traffic is approximately 17 million tons.

We appreciate the improvements which have already been made to the system. All of the outmoded and inadequate locks have been updated except one—the William Bacon Oliver Lock and Dam at Tuscaloosa. Because it is less than standard width and length and smaller than the other locks on the system, it has become a bottleneck, and is stalling the orderly flow of traffic. Therefore, we are requesting $958,000 to support completion of the study dealing with Oliver Lock as well as continuing the study on other improvements in the waterway. This study would also determine the desirability of improvements in the upper reaches of the Warrior River for water supply, low flow augmentation, flood control and other factors.

I would also strongly recommend approval of $7,464,500 requested by the Corps of Engineers for operation and maintenance on the Warrior-Tombigbee facilities and channel within Alabama as well as a hard look at the Corps capability—the other area not covered by this budget request.

Mobile Harbor is one of the finest harbors in the entire world. It is vital to the economic prosperity of not only my District, but the state of Alabama and the entire southeast. Please approve $3,044,000 for operation-maintenance of Mobile Harbor Facility as well as $700,000 for the deepening survey of the Harbor.

I have highlighted some specific items above. Below I have a complete list of the U.S. Army Corps of Engineers Civil works budget request for Warrior-Tombigbee for fiscal year 1982, and request that you favorably consider each of these items:

Black Warrior and Tombigbee Rivers, Operation and Maintenance, $7,464,500.

Warrior-Tombigbee Rivers Alabama, General Investigation, $958,000.

Mobile Harbor Alabama, Operation and Maintenance $3,044,000; Deepening Survey, 700,000.

These are good projects, they are necessary projects and I urge the committee to fully fund the requests of the Warrior-Tombigbee development association.

Thank you, Mr. Chairman.

Mr. BEVILL. Next we have my good friend and colleague, Congressman Bill Nichols of Saltilo.

Bill, as you notice, is chairman of a very important subcommittee on the Armed Services Committee. He may not mind my telling this: He has also served as a member of the Board of Trustees of Auburn University.

Since the Governor is here, I thought it would be all right to say that.

Mr. MYERS. Is that close to Oxford? [Laughter.]

Mr. BEVILL. It is a great university.

STATEMENT OF CONGRESSMAN NICHOLS OF ALABAMA

Mr. NICHOLS. Thank you, Mr. Chairman.

I appreciate your introductory remarks.

If it is all right with your committee, I will just file my statements, both on the Tennessee-Tombigbee and the Coosa-Alabama for the record, if that is permissible.

Mr. BEVILL. That is fine.

[The statement of Mr. Nichols follows:]

PREPARED STATEMENT OF CONGRESSMAN BILL NICHOLS ON THE TENNESSEE-TOMBIGBEE WATERWAY

Thank you. Mr. Chairman, and distinguished members of this committee. I am pleased to appear before you today in support of the Tennessee-Tombigbee Waterway.

The Tennessee-Tombigbee Waterway is nine years into construction with all major installations on the project under contract or complete. This 232-mile navigation channel is now approaching the two-thirds completion mark with $1.3 billion already committed to construction. Nearly 75 percent of federal costs is committed to the project.

Millions of dollars in public and private capital investments in port and waterway-related facilities have already been committed. This new energy-way waterway which will move large quantities of coal and grain and other commerce will provide an incentive to dramatically increase foreign trade with our region.

Fifteen ports—public and private—are opened or planned because of the Tennessee-Tombigbee Waterway. This sort of development is an indication of the strong support given this project on the local level.

In fact, since 1975 over $4 billion in private investments have been made in waterway counties in Alabama and Mississippi. This is nearly double the projected $2.7 billion investment predicted to occur by the year 2000 in counties impacted by the waterway in the four-state area.

Such dramatic growth appears to bear out the experiences of other waterway developments when studies grossly underestimated the tonnage that ultimately moved on the waterway.

By regulation, the U.S. Army Corp of Engineers is not allowed to include in their benefit figure projections the future industrial and business growth along the waterway. Investment by private industry and business has already far exceeded the best expectations of forecasters for the Tennessee-Tombigbee Waterway.

Spin-off operations from development along the waterway will favorably affect Alabama and other parts of the Southeast. Related facilities are needed to support new waterside industries. Wood, wood chip products, metal, machine parts, copper, nickel, chrome plating operations, plastics, plastic forming and extrusion, ceramics production, and optical lens manufacturing are only the surface secondary operations needed in many areas.

With completion of the Tenn-Tom, the increased potential for waterborne commerce, coupled with Alabama's economic and industrial capabilities, opens the door for greater development of international trade.

The Tennessee-Tombigbee Waterway is important to Alabama. It is important to the nation. It is nearly complete. But it will not fully produce the promised benefits until the navigation is open and the link complete to allow shipment between the Tennessee River and the Gulf. I want to see this waterway completed as quickly as possible so this nation can begin reaping its full benefits.

Mr. NICHOLS. First, let me begin by thanking you, Mr. Chairman, and the members of the committee, who took their time to come down to Alabama and see the Tennessee-Tombigbee. My friends Mr. Watkins from Oklahoma; Mr. Fazio from California, and Mr. Myers from Indiana, who has such a great basketball team up there, each visited my State of Alabama.

Mr. MYERS. May I interrupt you? You extended just great hospitality to a Hoosier who visited Alabama last Thursday and Friday. I want to tell you you returned the hospitality by being very hospitable to us in Bloomington last Friday night. [Laughter.]

Mr. WATKINS. We appreciate Southern Alabama allowing Tulsa to go ahead and advance.

Mr. NICHOLS. Now that we have the sports out of the way, Mr. Chairman.

This is my fifteenth time, I believe, to come before your committee in support of these river projects.

For those of you with the Tennessee-Tombigbee who are wondering about my support, in particular those of you who come from the great State of Mississippi here, I want to tell you, Mr. Chairman, that I was born in Becker, Mississippi. Now there are not too many people that know where Becker is.

Mr. BOWEN. That is in my district.

Mr. NICHOLS. I still have a little of that prairie mud between my toes.

Seriously, I strongly support these projects, Mr. Chairman. I am very, very confident that you are going to get the support, the unified support of all of us from these joint States when you take this to the floor of the Congress.

It is a must. It needs doing, and I am pleased to strongly endorse it and support it and appreciate the Governors—particularly our own Governor, Governor James—who is here in support of this project.

Mr. BEVILL. Bill mentioned Becker. That is where the comedian Jerry Clough is from, isn't that right?

Mr. NICHOLS. A little south.

Mr. BEVILL. I knew you all were big buddies. Bill is also playing a big role in the defense of our Nation. He is in a key position for it.

We also have Representative Lott, Trent Lott, has walked in. He is part of the leadership here now. He is really moving up and we have to pay him more attention than we have in past years. He is up there now, the minority whip of the House. We are proud of the good work that he is doing, if he doesn't just whip us Democrats too much, it will be fine.

Mr. LOTT. Thank you very much.

Mr. BEVILL. We are glad to have you with us, Trent.

STATEMENT OF CONGRESSMAN LOTT OF MISSISSIPPI

Mr. LOTT. Thank you, Mr. Chairman.

The chairman of the full committee, distinguished colleagues that gave me this honor, I think, I felt more like the whippee than the whippor, Mr. Chairman. I like to think one of the things that helped contribute to my election as whip was the effort last year on behalf of the Tennessee-Tombigbee. I found it was necessary to get around and talk to a lot of members on the floor about what this project means to our State and to our entire part of the country, and I think the whole country. I am pleased to see the distinguished Governors of the State and the lovely Lt. Governor here this morning and all of our friends from the respective States that are here.

I do want to restate my support of the Tennessee-Tombigbee. I would like to ask my statement, which I have submitted, be made a part of the record.

Mr. BEVILL. It will be part of the record.

Mr. LOTT. My district is one that does not directly benefit from this project. As you know, I represent the Gulf Coast area. We are very anxious for this project to be completed, because we feel we will also benefit indirectly with our ports and our Gulf Coast Intercoastal waterway and what that will mean helping to move that commerce once it gets down to Mobile.

It is something that I believe is truly in the best interests of our country. I urge that it be continued, not be delayed. I think it is vital. I certainly am pleased to see the Administration endorsing and supporting this project also. I would like to urge my colleagues on this panel to do as they have always done with this project, treat us most fairly.

[The statement of Mr. Lott follows:]

PREPARED STATEMENT OF HON. TRENT LOTT

Mr. Chairman and other distinguished members of the subcommittee, thank you for allowing me to lend my support to continued full funding of the Tennessee-Tombigbee Waterway.

Construction of the Tennessee-Tombigbee Waterway has brought economic prosperity to a large section of my state. But, more importantly, it is opening up vast new avenues for long term socio-economic benefits. By 1990 the result is expected to mean 20,000 to 30,000 new jobs generated by Tenn-Tom in Mississippi.

The completed waterway is expected to generate annually more than $121 million savings in transportation costs, a nearly $3 per ton savings. Strong evidence of its

potential impact on industrial development can be seen by the recent dramatic increase in new and expanded industry in the state. Nearly $2 billion in industrial growth has been recorded for only the eight Tenn-Tom counties in East Mississippi since construction began on the project in the state in 1974–75. A total of just over $4 billion in private investment has been made in waterway counties in Mississippi and Alabama during that period. At that time, projected growth for all the Tenn-Tom impacted area parts of four states was estimated to only reach $2.9 billion by the year 2000. This, it seems to me, fully exemplifies the near impossible task of accurately assessing in advance the full impact potential of the Tennessee-Tombigbee Waterway.

With 132 miles of the waterway virtually complete and open to limited navigation, all of the locks are under construction or complete. With adequate funding, all the waterway could be opened to shipping by 1985 because, after the fiscal year 1982 appropriation, only about $340 million will remain to complete the project.

In preparation for the waterway, the State of Mississippi has obligated over $140 million in funds to construct bridges and other relocations along the waterway route. All but one of the bridges are under construction or complete. The final one will go to contract this summer. Millions of dollars are being invested by both public and private sectors, in port and other water-related developments along the Tenn-Tom in Mississippi. At least five public ports are under consideration or already obligated in Mississippi. A sixth, Yellow Creek Port, has been in operation for several years near the confluence of the Tennessee River and Tennessee-Tombigbee. Private developers have several other ports and waterside industrial parks underway.

The Mid-American Port Study shows Mississippi to have the fastest growing potential of all the 17 states studied. Tonnage handled by river ports in the state is estimated to quadruple by the year 2000.

Just to handle this anticipated tonnage increase will require the addition of the equivalent of 64 new port facilities. With the Tenn-Tom in place, Mississippi will have the unique distinction of being almost entirely surrounded by navigable waterways: the Mississippi River on the west boundary; the Tennessess River along part of the northern edge; the Gulf of Mexico with the protected Gulf-Intracoastal Waterway to the south; and, now, the Tennessee-Tombigbee tying it all toghether along the eastern part of the state.

Because of this unique navigation network, the long-range economic forecast of the potential benefits defy the imagination.

By far, the largest movement on the new waterway will be coal. The lower cost route will now make it feasible to mine lignite fields in Mississippi where as much as 5 billion tons of reserve are located. A pilot program to turn this vast lignite deposit into fuel at a coal gasification plant has begun through a multi-million dollar joint venture by the federal government and private industry. This has the potential of lessening our dependence on foreign oil because a ton of lignite can be converted to two barrels of fuel as an energy source.

Coal won't be the only important commodity to move on the waterway from Mississippi. Already soybeans and wheat have been shipped by Mississippi farmers on the new waterway to Gulf ports at a savings of 10 to 15 cents a bushel.

Shippers from 14 states, as far away as Minnesota, will derive significant benefits from using the Tennessee-Tombigbee Waterway link. The full impact from this waterway on the nation will not be realized until long years after it is completed and placed in operation.

With over one and one-third billion dollars from United States taxpayers and billions more in potential benefits, this waterway must be completed on schedule. To delay it in any way would produce disastrous economic results. It would also sharply inflate completion costs and stifle regional development. Any delay in completing this important project would be an unconscionable breach of faith to all its potential beneficiaries.

Thank you.

Mr. BEVILL. Next we have our friend and colleague Richard Shelby.

Richard, we will be glad to hear from you. Richard is on a key committee, the Interstate and Foreign Commerce Committee and many others. We appreciate the fine work that he is doing for Alabama and the Nation.

STATEMENT OF CONGRESSMAN SHELBY OF ALABAMA

Mr. SHELBY. Thank you, Mr. Chairman.

Mr. BEVILL. You may submit your statement if you wish.

Mr. SHELBY. I would like to submit my statement, Mr. Chairman, on the Tennessee-Tombigbee, the Warrior-Tombigbee, and also the Coosa-Alabama for the record.

I would like to say, briefly, the people of Alabama really appreciate Tom Bevill. You all know, as member of the committee, what he has done here.

This is my third appearance before this subcommittee, Mr. Chairman. I came two years ago and I believe we are going to finish this project that you all have started before I came to Congress. I think you have the right committee and the right people to push it along.

Thank you for letting me be here.

[The statement of Mr. Shelby follows:]

PREPARED STATEMENT OF HON. RICHARD C. SHELBY ON BEHALF OF THE TENNESSEE-TOMBIGBEE WATERWAY

Mr. Chairman, thank you for again giving me a chance to appear before you in support of the Tennessee-Tombigbee Waterway.

Construction of that portion of the Tenn-Tom which lies in my district in southwest Alabama is complete. Now people in the area are turning their full attention to developing facilities to take full advantage of this transportation route when it is complete and open to navigation.

The area of Alabama I represent is predominantly rural with a history of chronic unemployment and low per capita income. Agriculture represents a major portion of the income activity in the area. Farmers are already using the lower portion of the new waterway to move their grain. Since limited use of the waterway began about a year ago, over 5 million bushels of soybeans and wheat have been shipped at savings of 10 to 15¢ per bushel.

The importance of the Alabama grain export market enhanced by the shorter cheaper Tenn-Tom route is causing area farmers to increase production. Last year, the grain elevator at Mobile State Docks handled a record 78 million tons of grain.

A major river port/river park development is in planning stages to facilitate movement of barges. Fleeting areas and service centers will also offer additional opportunities for investors.

Commerce on the Tenn-Tom is expected to grow to 55 million tons well before the turn of the century with transportation cost savings reaching over $140 million annually.

Historically, traffic on most waterways actually exceed original estimates. Not counting future growth, the potential tonnage movement on the Tenn-Tom is nearly twice the ultimate capacity of the waterway. The question is not whether the waterway will be utilized but how quick can it be opened to full navigation.

Thank you.

Mr. BEVILL. Next we have our good friend and colleague, Congressman Carroll Hubbard of Kentucky.

STATEMENT OF CONGRESSMAN HUBBARD OF KENTUCKY

Mr. HUBBARD. Thank you, Mr. Chairman.

Mr. BEVILL. Carroll is one of our leaders here in the Congress. He has always been an outfront supporter of this Tennessee-Tombigbee. We will hear from you now, Carroll. You may submit your statement and summarize it or do it any way you wish.

Mr. HUBBARD. Thank you very much, Mr. Chairman.

It is a real pleasure to appear for the seventh time before your subcommittee to emphasize the importance of the Tennessee-Tombigbee Waterway authority and project.

Before I make my brief comments and submit my statement in full, asking that the full report be received, I would like to indicate how pleased I am to be with our distinguished Lt. Governor of Kentucky, the Honorable Martha Layne Collins. I have known her for many years, way back in our high school days and college days.

Mr. MYERS. She is not as old as you are.

Mr. HUBBARD. No. She is much younger than I am. You are right.

Mr. MYERS. Better revise and extend your remarks, Carroll.

Mr. HUBBARD. Her husband and I are the same age. In fact, her husband, Dr. Bill Collins, and I were college roommates and fraternity brothers for three years of our four-year stint at Georgetown College. It is a real joy to have Martha Layne Collins with us today, and she serves as Governor of Kentucky much of the time. We have a traveling Governor. Martha Layne is Governor more often than she is Lt. Governor.

Mr. BEVILL. Is that what you call junkets?

Mr. HUBBARD. We are very pleased to have Martha Layne here. I repeat, she is Governor more than she is Lt. Governor in our State.

I would also like to proudly introduce four of our Kentuckians who are board members of the Tennessee-Tombigbee Waterway Authority. I would ask them please if they would stand as I introduce them.

Mr. BEVILL. Let's have their names.

Mr. HUBBARD. Jack Paxton is the editor of the largest newspaper in my district, the Paducah Sun; Alex Chamberlain of Louisville, a retired distinguished businessman; Enix and Bill Fandrick, both of Murray, Kentucky, in my district. These four hopefully would stand.

Briefly, Mr. Chairman, you are familiar with my total support for the Tennessee-Tombigbee Waterway project. I represent western Kentucky, an area rich in coal deposits. The completion of the Tennessee-Tombigbee Waterway would allow cheap, efficient transportation of our coal to the ports in the Gulf of Mexico and the many points between.

I recognize we have a few unreasonable Members of Congress on the Senate and House sides who are opposing this project at this point, even though—just stopping it at this point would be very unwise in your opinion and mine as to the budget of our Federal Government in that we have put so much into this worthwhile project in the past that it would be tragic to stop it or to slow it down at this point.

I am going to close by saying simply the Tennessee-Tombigbee Waterway project is a vital necessary project. To allow it to die from lack of funding would be a real catastrophe. It must be completed as quickly as possible and I urge you to approve the Administration's request for $201.1 million in fiscal year 1982.

Thank you, Mr. Chairman.

We urge your continued support during this Congress.

Thank you for your support in the past.

Mr. BEVILL. Thank you for a very fine statement, Congressman Hubbard. You have consistently been a strong supporter of this project. A statement from Congressman Flippo follows that of Congressman Hubbard.

[The statements of Mr. Hubbard and Mr. Flippo follow:]

PREPARED STATEMENT OF HON. CARROLL HUBBARD, JR.

Mr. Chairman, thank you for allowing me this opportunity to appear before this distinguished panel to once again add my support to continued funding and eventual completion of the Tennessee Tombigbee Waterway Project.

As you know, I represent western Kentucky, an area rich in coal deposits. In fact, the only factor preventing rapid development of our coal as more uses are discovered for it is the deplorable lack of bulk transportation capabilities. Completion of Tenn-Tom would allow cheap and efficient transport of our coal to ports in the Gulf of Mexico and the many points between.

However, there are obstacles in the way. There are some who have fought Tenn-Tom since its inception. There are those in the Senate who have sought to cut its funding to the bone, saying such action is a cost-cutting one. I cannot agree with this view of the value of Tenn-Tom. To simply do away with over eight years of construction effort and the planning that went into that effort would be unconscionable. Even worse, however, is the fact that the project would not fulfill its original purpose and that the $1.25 billion previously spent on the project would be completely wasted.

Also, lest we foster the notion that only coal is to be transported on the waterway, we should remember that many agricultural commodities are transported by river barge and that the Central States and the South are some of the major agricultural areas of our nation. Other commerce expected to be moved on Tenn-Tom are limestone, chemicals and other basic raw materials.

But let us look more closely at the coal situation. As our national commitment to produce more coal began, we realized that production was only part of the problem. The coal must be moved to the location where it will be used or be shipped overseas, where its sale will allow us to close the gap on our trade imbalance. Indeed, Tenn-Tom has been criticized because the majority of commerce projected to be moved on the waterway is coal, one-half of which would be for export. At this time, and in the foreseeable future, however, coal is the best resource we have for resolving our energy supply and trade imbalance problems. The Tenn-Tom route can move coal at $2.57 per ton cheaper than existing modes of transportation, further lowering the cost to consumers. Additionally, Tenn-Tom will move coal to five steam-generating plants. An efficient method of transporting coal will lower projected costs of meeting electrical demand in the years ahead.

Information obtained direct from the coal industry indicates that completion of Tenn-Tom will result in an increase in coal production in the Ohio Valley. These data indicate a 14 percent increase in Kentucky alone, with Illinois increasing production by a whopping 42 percent, 32 percent in Indiana and a 26 percent increase in Ohio. Clearly, Kentucky is not the only state which would benefit from completion of Tenn-Tom.

Tenn-Tom is a vital and necessary project. To allow it to die from lack of funding would be a catastrophe. It must be completed quickly and I urge you to approve the Administration's request for $201.1 million in Fiscal Year 1982.

Thank you.

PREPARED STATEMENT OF CONGRESSMAN RONNIE G. FLIPPO OF ALABAMA

Mr. Chairman, it would be callous and ungentlemanly of me if I did not take this splendid opportunity to thank you, personally, for the tremendous job you do with this subcommittee.

My Fifth District, the entire State of Alabama, and this great Nation have you to thank for a job extremely well done. I just want to take a moment to say "Thank you".

Recently, I saw a sign in downtown Washington that said, "Don't even think about parking here."

That's my feeling about the Tennessee-Tombigbee Waterway. It would be unconscionable to even think "parking" this great project.

After ten years of construction, we can see the light at the end of the tunnel. We're scheduled for completion in just a few years.

We have already invested $1.25 billion in this project. More than 74 percent of the funds required for completion have already been committed.

We won't save one dime by slowing it down.

However, stopping it would waste over $2 billion and slowing or stretching it out will only make it cost more.

This project is going to help my district, perhaps more than any other project in our life time.

For ten years, we've labored, planned, held hearings, litigated and listened to the opposition. Five Presidents and one Congress after another have said, "build it."

Now, I propose that we do just that.

We only lack a small part of it.

The time for this project has arrived.

Let's get the job done.

I hope you'll support funding for Tenn-Tom sufficient to keep it on schedule in fiscal 1982.

Thank you.

Mr. BEVILL. Governor, we appreciate your patience here.

Now, Alabama Governor Fob James. You may proceed as you wish. We are pleased to have you with us and we appreciate what you have done for the waterways in Alabama, and, of course, all of our waterways. It is like they used to say: All roads lead to Rome. All waterways lead to Mobile, Alabama, including this one, the Tennessee-Tombigbee.

Governor James has just recently—as a matter of fact, I have never seen a bond issue go through and get the money as fast as he did this. I was talking to him about it one day and it seemed like just two or three weeks later that the State had not only issued the bonds, but Sid McDonald had been to New York and sold them. He got $100,000 down there that the State docks are going to spend. That means just the docks. That is $100 million. A $100 million bond issue and the State docks are paying this. I think that is really an example of the kind of support that he has given this waterway.

So we are pleased to hear from you, Governor.

STATEMENT OF GOVERNOR JAMES OF ALABAMA

Governor JAMES. Mr. Chairman, thank you.

I want to express the gratitude of all the people from your home State for your work on behalf of this project as well as your distinguished colleagues. We are very grateful that some of you came down. I appreciate your remarks thanking us for the little help at the various basketball tournaments and courts in your home States. There is another season coming up, a different sport in September.

Mr. MYERS. What is that? We do not play that in Indiana.

Governor JAMES. His name is Bear.

Mr. WATKINS. We play that in Oklahoma.

Mr. MYERS. We just played it at Notre Dame, I might add. Ask the Bear. He knows something about that. I shouldn't say that.

Governor JAMES. He is a guy that keeps up with his sports everywhere, I think. Thank you, Mr. Myers.

Mr. BEVILL. He keeps up with everything.

Governor JAMES. I better get back on the subject.

We are delighted to have Governor Alexander with us from Tennessee, Governor Winter of Mississippi, and Governor Collins from Kentucky. I would like to ask Governor Alexander now if he would make his comments.

[The statement of Governor James follows:]

PREPARED STATEMENT OF GOVERNOR FOB JAMES

Mr. Chairman and Committee members, it is a privilege for me to appear before you today as Governor of Alabama and also as Chairman of the Tennessee-Tombigbee Waterway development Authority.

First, I want to express the deep appreciation of the Authority and the citizens that we at this table represent for your continuing strong support for the Tenn-Tom. Without your support, we could not report to you today of the excellent progress being made toward completion of the waterway.

As you know, constuction has passed the mid-way point. The waterway will be nearly two-thirds completed by the end of this fiscal year.

The last installation, Lock E, has just been awarded at a cost of nearly $2 million less than the government cost estimate. Competitive bidding of this kind has been more the general rule than the exception for the Tenn-Tom.

Now all ten locks and dams are under contract as well as all of the excavation work in the Divide Cut section of the project. Nearly $1.2 billion of contracts are now underway or completed, leaving about $250 million of work remaining to be started. I mention this because I believe it is an excellent indication of just how far along the Tenn-Tom is toward completion.

The southern 115 miles of the waterway are now opened to limited navigation. It is being used, too. Over five million bushels of grain have been shipped although this portion of the waterway is not officially open for navigation.

However, the Tenn-Tom will be of little importance as a transportation artery until it is completed and becomes a through waterway. Then some fourteen states will be able to realize as much as $121 million in savings in transportation costs each year. The waterway is approaching two-thirds completion. Already 74 percent of the funding has been committed. To stop at this point would be a waste of the already spent funds.

Some states, such as Illinois, will realize more benefits from the Tenn-Tom than some of the state members represented here today. The widespread impact of the Tenn-Tom and its accessibility to potential users throughout Mid-America make it truly a project of national need and importance.

As Governor of Alabama, I am pleased to inform you that my state is preparing for the completion of Tenn-Tom. Last fall, I approved a $75 million expansion of the state docks facilities at Mobile. These plans are in addition to a $20 million expansions already underway. Much of the commerce shipped on the Tenn-Tom is expected to originate or terminate at the Port of Mobile. We plan to be ready for this economic growth opportunity.

My state has also met its obligations to the construction of the waterway. All the necessary highway bridge relocations have been accomplished.

Mr. Chairman, we realize the difficult decisions that this Committee and the Congress must make to hold down Federal spending. We must curb inflation and get our economy back on track.

Given the need to hold down the Federal budget, we are not requesting a specific level of funding for the Tenn-Tom for next year. Instead, we request that you give the waterway high priority in the allocation of funds within the overall budget constraints imposed on this Committee—as you have done so in the past.

Thank you.

STATEMENT OF GOVERNOR ALEXANDER OF TENNESSEE

Governor ALEXANDER. Thank you, Governor James.

Mr. BEVILL. Governor, we are delighted to have you with us. Your State has always been a strong supporter of this project.

Governor ALEXANDER. Thank you, Mr. Chairman, Mr. Whitten, distinguished members of the committee, fellow Governors, citizens. Governor James has been an effective leader as chairman of the Tennessee-Tombigbee Waterway Development Authority, and I appreciate his leadership and his allowing me to make a brief statement on behalf of Tennessee.

So many statements have been made over the years that it seems to me not necessary for each Governor and each Senator and each Congressman to review the whole picture. Let me make two or three comments, if I may, as to why Governors who normally do not appear in Washington—we leave that business to those of you

who are elected to do it—think it is important enough for us to not only devote our time to the development authority, but also to making our presence known and to try to add a little bit to the strong feelings that you have each expressed to the other Members of the House and the Senate.

In the first place, the reason this project has my attention is because it helps Tennessee with its biggest problem. Tennessee's biggest problem is that too many people are too poor. That is not an unfamiliar problem to the Governor of Mississippi and the Governor of Alabama and possibly even the Governor of Kentucky. We are 42nd in average family income in the country, and Governors ought to have priorities, I believe. My first priority far and away above everything else in our State is to do whatever I can to help raise family incomes. I cannot do it, but I can help do it as much or maybe more than anybody else.

In our State the General Assembly, the Governor, the citizens by and large, have finally recognized we will never be first, second, or third in teachers' salaries or public works or better roads as long as we are 41st, 42nd and 43rd in family incomes. We are seeking to change that and correct it.

This project, this development, will help immediately a part of our State which has traditionally been as poor as any other section in the country, and that brings me to my second point: Most Tennesseans when they hear of the Tennessee-Tombigbee Authority think that it is a west Tennessee project. We are, as most of you know, spread from Mississippi to upper east Tennessee, east Tennessee is closer to Canada than to Memphis, Memphis is closer to Houston than to east Tennessee. It is a wide, long State.

But the Tennessee-Tombigbee Authority is as important for the people in Knoxville and in the mountains and in east Tennessee, the area which is called Appalachia by many people, where there are still also many serious pockets of poverty because the Tennessee River wanders south through east Tennessee and then through Alabama and back up north through west Tennessee. And we understand the importance of this waterway to the eastern part of our State, and, therefore, the whole range of Tennessee across 600 miles.

The third comment I would like to make is this: I have spent most of my time since President Reagan's election in support of his program, because I believe in it. I believe that the most important thing he can do or that the Members of this Congress can do, I would respectfully suggest, is to reduce taxes, reduce spending, and hopefully then interest rates will go down and the economy will come back up. That is the single most important thing that can be done for any Tennessee family.

I have tried not to be hypocritical about this and support the President's proposals where they, in the short range, would appear to hurt Tennessee, because they deprived us of projects.

It gives me a great deal of pleasure, finally, to have the opportunity to testify in support of the President's program at a time when he is recommending in an extremely tight budget more than $200 million to help complete this proposal.

So it is a consistent proposal, one consistent with the national interest and the point of view of a president who is cutting the

budget and who comes from another part of the country. It is a project that helps not only west Tennessee, but our entire State as well as the entire region. Going back to the most important point, the first point, if our priorities are to attempt to raise average family incomes in Tennessee and in Mississippi and in Alabama and in Kentucky and in the regions where there are too many poor people, and if we do not have enough money to do it through Government, then the only way to do it is by creating structures that permit people to earn for themselves, and I believe this does.

Thank you for the opportunity to testify before you. I would like to submit for the record a few brief comments about the importance of waterway works in general.

Mr. BEVILL. Permission is granted.

[The statement of Governor Alexander follows:]

PREPARED STATEMENT OF HON. LAMAR ALEXANDER, GOVERNOR OF TENNESSEE

Mr. Chairman, I appreciate the opportunity to join my fellow Governors of the Authority here today in support the Tennessee Tombigbee Waterway.

Tennesseans have supported the Tenn-Tom for generations. Our state joined the Authority soon after it was established in 1958 to help promote the development of the waterway. After so many years of delays and setbacks, the dream of this project and its economic opportunities is beginning to come true.

When completed, the Tennessee-Tombigbee will provide our state and others a more direct access to the Gulf of Mexico. This shorter barge route will save as much as 832 miles in distance traveled for some shipments.

These distances of travel saved will not only reduce transportation costs for those commodities shipped on the Tenn-Tom but will conserve energy, too. About 9.3 millions of gallons of fuel are expected to be saved as a result of shipping on the Tenn-Tom during the first year of operation, alone.

A few have questioned the importance of the Tenn-Tom as a transportation link. We believe you only have to study its unique geographical location and its relationship to the already developed inland waterway system to realize the importance and potential of the Tennessee Tombigbee.

Other waterways were questioned by a few detractors when they were being built. Waterways, however, have proven that projections of potential commerce were grossly understated at the time the project was being built. For example, commerce shipped on the Tennessee River in 1978 exceeded 31 million tons or twice what was originally predicted in 1948 when it was opened to navigation. History will also demonstrate that the commerce on the Tenn-Tom will greatly exceed what is now predicted.

I am personally pleased that President Reagan has become the sixth consecutive President to support Tenn-Tom. This is especially significant in a time of federal spending reductions.

I do wish to emphasize that the President, through his overall budget cuts, has taken a giant step in the right direction. The best thing the President and the Congress can do for Tennessee families is to reduce taxes, cut spending and lower interest rates. All individual projects must be weighed against this overriding economic priority. We all must be willing to take our share of any reductions.

Even so, the Tenn-Tom has been recommended for substantial funding in the President's budget for next year. I support precisely that level of funding for the new fiscal year.

Thank you.

Mr. BEVILL. We are delighted at your fine statement, Governor.

Governor JAMES. Mr. Chairman, we have rearranged this schedule some to meet timetables of various parties.

Thank you, Governor Alexander.

Governor Collins.

Mr. BEVILL. Governor Collins, we are always delighted to see you. You help the looks of this delegation here. We appreciate you very much.

Lieutenant Governor COLLINS. Thank you.

Mr. BEVILL. Things are looking up in Kentucky, aren't they?

STATEMENT OF LIEUTENANT GOVERNOR COLLINS OF KENTUCKY

Lieutenant Governor COLLINS. Mr. Chairman, members of this distinguished committee, I and others from Kentucky are delighted and happy to have this opportunity to appear before you today representing Kentucky's continued support of the Tennessee-Tombigbee Waterway. We are anxiously awaiting the completion of the Tennessee-Tombigbee. At that time, our shippers and industries will be able to move coal, grain and other commodities to the southeast and eastern Gulf at considerably lower transportation costs.

Last year during Congressional hearings, a coal producer in Kentucky testified that he could realize an average of $2.90 per ton in transportation savings when the Tenn-Tom becomes available for coal shipment. This economical rate will stimulate the production of coal and alleviate the difficulties of coal producers in competing with foreign suppliers to markets in the southeast.

Kentucky is the Nation's largest coal producer, and because coal is a key to realizing our country's freedom from OPEC demand, if we, in fact, are serious that we want to become free from OPEC demands, then the Tenn-Tom supplies a vital link to establishing energy independence.

The Tenn-Tom will provide Appalachian and Western Kentucky coalfields direct access to the Port of Mobile where state-owned coal handling facilities are being expanded to accommodate 24 million tons of coal annually.

About 21 million tons of coal are expected to move on the Tenn-Tom its first year and will help meet the Free World demand for coal which is expected to double during this decade.

I have with me a statement from the Western Kentucky Coal Operators Association which I request be made a part of the record.

Mr. BEVILL. It will be made a part of the record.

Lieutenant Governor COLLINS. The Association statement points out the importance of the Tenn-Tom to these producers' ability to compete for coal markets.

Mr. Chairman, we recognize that you will be faced with many demands for the scarce Federal funds that will be available next year. However, we request that the importance of the Tennessee-Tombigbee toward increasing the use of coal as a primary energy source be given very careful consideration in the allocation of these funds.

Thank you.

[The statement referred to follows:]

PREPARED STATEMENT OF HON. MARTHA LAYNE COLLINS, LIEUTENANT GOVERNOR OF KENTUCKY

Mr. Chairman, I appreciate this opportunity to appear before you today, representing Kentucky's continued support for the Tennessee-Tombigbee Waterway.

We are anxiously awaiting the completion of the Tenn-Tom. At that time, our shippers and industries will be able to move coal, grain and other commodities to the southeast and eastern Gulf at considerably lower transportation costs.

Last year during congressional hearings, a coal producer in Kentucky testified that he could realize an average of $2.90 per ton in transportation savings when the Tenn-Tom becomes available for coal shipment. This economical rate will stimulate

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Thank you.

WEST KENTUCKY COAL OPERATORS' ASSOCIATION, INC.,
Madisonville, Ky., March 23, 1981.

Statement to U.S. House of Representatives, U.S. Senate Appropriations Committees Regarding Continued Funding of the Tennessee-Tombigbee Waterway.

Gentlemen: The West Kentucky Coal Operators' Association is comprised of small, medium and large coal producers in the Western Kentucky Coalfield. Our membership represents union represented workers and non-union workers. Our membership of 91 companies represents approximately 45% of the coal production of Western Kentucky.

As I am sure each of you are aware, in recent years mid-western coal has been plagued by marketing problems, as a result of the high sulfur content of our coal. In spite of those problems we are continually participating in the market place, in an effort to sell our product.

In the recent past, two large market areas have continued to grow and will continue in the future to increase. Those areas are A. the export markets and B. markets located in the Southern Region of the United States.

In both of these markets, transportation of our product is a crucial factor. Our primary concern in the transportation of our coal is cost. The completion of the Tennessee-Tombigbee Waterway will facilitate cost effective transportation of fossil fuels. This will ultimately translate to a savings for the users and for the rate payers who ultimately use the electricity generated from this coal. The savings as it would relate to export markets, would-encourage broadening and increasing the export market, as a result of the transportation savings.

If America is to become energy self sufficient, then we will do so as a result of projects such as this, that encourage increased use of our energy resources.

This Association is on record in support of this project.

Thank you.

STEPHEN JONES, *President.*

Mr. BEVILL. Very good.

We have about a third of the world's supply of coal in this country, as you know. We need to produce all the coal we can to export, to offset the costs that we are paying for expensive foreign oil as well as become energy independent, and we also need to produce all we can domestically to get away from importing foreign oil.

So, I think your statement is very timely and it is a very good statement.

Governor JAMES. Thank you, Governor.

Governor Winter of Mississippi.

Mr. BEVILL. Governor Winter, we are pleased to have you.

Speaking of the members who flew over it this weekend and looked at it, Governor Winter and I have also traveled over the

Tennessee-Tombigbee. We have taken several trips together. It is mighty good to have you with us, Governor Winter. I don't know of anybody who has supported this project more than you have. You have done a great job.

STATEMENT OF GOVERNOR WINTER OF MISSISSIPPI

Governor WINTER. Thank you, Mr. Chairman.

I was going to mention the fact that you and I had in fact just about a year ago taken that helicopter ride down from Tupelo down the Tenn-Tom waterway.

I want to express my appreciation to the members of the subcommittee for the opportunity to appear here today. I am particularly glad to be here in the presence of my Congressman, the distinguished chairman of the Appropriations Committee. He and I are from Cascilla, Mississippi. I don't know whether he mentions that up here or not.

Mr. WHITTEN. Always brags about it.

Mr. MYERS. All the time.

Governor WINTER. Indicative of the interests of the State of Mississippi and the completion of the Tenn-Tom project, I want to—I will not recognize all of them by name, but I do want especially to recognize the members of the Authority representing the State of Mississippi: Mr. Fred Bush, Mr. Jim High, Mr. John Stanley, Mr. Bennett Turner, and Mr. Ray Thornton. If those gentleman would stand back there.

Mr. BEVILL. Pleased to have you with us.

Governor WINTER. We have the members of the Tombigbee River Valley Water Management District here. I would like to ask them to stand.

Mr. BEVILL. Governor, if you will furnish the reporter the names so they can be in the record, we would like the record to show each of them are here.

[The list follows:]

LIST OF INDIVIDUALS APPEARING IN SUPPORT OF THE STATEMENT SUBMITTED BY TOMBIGBEE RIVER VALLEY WATER MANAGEMENT DISTRICT, TUPELO, MISS.

MARCH 23, 1981

Robert P. Cook, Vice President, Pontotoc, MS 38863.
Steven A. Patterson, Executive Director, Tupelo, MS 38801.
Robert L. Calvert, Secretary, West Point, MS 39773.
Larry M. Dillard, Administrative Assistant, Tupelo, MS 38801.
Jimmie Mills, Engineer, Tupelo, MS 38801.
O. E. Bostick, Director, Golden, MS 38847.
James Chatham, Director, Fulton, MS 38843.
Wayne Riley, Director, Fulton, MS 38843.
Mrs. Miriam Kirkpatrick, Director Amory, MS 38821.
Mike Sullivan, Director, Okolona, MS 38860.
Allen Harpole, Director, Columbus, MS 39701.
Glen Goodwin, Director, Booneville, MS 38829.
T. Charles Gower, Director, Baldwyn, MS 38824.
Charles Caviness, Director, Corinth, MS 38834.
Bob Marshall, Jr., Director, West Point, MS 39773.
Stanley Pulliam, Director, Houston, MS 38851.
James Hugh Ray, Attorney, Tupelo, MS 38801.
DeVan Dallas, Park Superintendent, Pontotoc, MS 38863.
Billy Davis, Guntown, MS 38849.
Mrs. Bob Cook, MS 38863.

Governor WINTER. Mr. Chairman, I want to associate myself with everything that my distinguished colleague from Tennessee, Governor Alexander, and Governor Collins of Kentucky have said. They have indicated the importance of the completion of this waterway to our State, our respective States, to our region and to the country for that matter.

I would like to address myself to a little different aspect of this, and that is the effect of not completing the waterway on my State of Mississippi.

You and I have known that area, Mr. Chairman. I believe several of the members of the subcommittee were there last week. You are aware of the great scar across northeast Mississippi. At 30,000 feet you can see Yellow Creek on the north and Columbus on the south. In between, miles and miles of raw earth, a ditch. Towns have been moved, highways have been relocated, railroads have been abandoned, people have given up their homes and their farms in the expectation that one of these days there would be this complete project that would add income to them, their families, their children, their grandchildren, living in the most depressed area of the State of Mississippi.

We cannot break faith with those people.

Orville Bostick from Tishomingo County back here cannot go back to Tishomingo County and tell those people who have given up their homes and farms that they are going to fill up that ditch over there or maybe they are not going to fill it up, that it will stay there as a raw scar on the land.

The State of Mississippi has already invested or committed out of meager highway funds $150 million to relocate roads and rebuild bridges over the waterway. The counties, the municipalities of the State of Mississippi have committed $4 million to $5 million. There has been about a billion dollars in new construction committed in that area with the expectation that the waterway was going to be completed. Over 1,000 industrial jobs already in sight, in place because of the expectation of the completion of this waterway.

Mr. Chairman, members of the committee, I don't see how at this stage we can entertain the thought of not completing this waterway. It will cost just about as much not to complete it as it will to complete it. That doesn't take into account the loss of face, the loss of faith in the United States Government by the citizens of my State who have looked forward to the completion of this waterway, who have been willing to give up their homes, give up their farms in order that they would have this complete project.

I hope that we may continue to see the funding of the waterway continued at the level recommended by President Reagan, at the level that will enable us on schedule to see added to the productive capacity of this country this very great facility that will mean much not to just northeast Mississippi, but to the south and the entire country for that matter.

Mr. Chairman, I have a formal statement that I would like to enter in the record along with a resolution from the state legislature.

Mr. BEVILL. Permission is granted.

[The statement of Governor Winter follows:]

PREPARED STATEMENT OF GOV. WILLIAM WINTER OF MISSISSIPPI

You have heard and will hear much testimony as to what the completion of the Tennessee-Tombigbee Waterway project will mean to the country. I support fully the predictions of very substantial economic benefits that will be derived from a completed waterway.

I desire, however, to emphasize what not completing the project will mean. I want you to consider the environmental catastrophe that would result from an abandonment of this undertaking at this stage of its completion.

1. A SCAR ON THE LAND

The present state of construction has left a massive scar on the land nearly one hundred miles in length. In its present state, this land could not be utilized for any other productive purpose, and it would also present a continual visual blight. Nature reserves and wildlife parks which are part of the complete plan for the waterway are not available as yet, so that the present scar would be almost totally destructive of wildlife.

2. COSTS TO FEDERAL AND STATE GOVERNMENT

A preliminary, tentative estimate of the cost of restoring the current construction area is something more than $300 million. If experience is any guide, this would prove to be an optimistic estimate. There can be little doubt that total restoration costs would approximate the estimated remaining costs of construction.

This estimate does not take into consideration the virtually insoluable problem of the disposition of the title to the land acquired for the project.

Costs of state and local government. The state of Mississippi has already spent or committed $150 million in bridge relocation for the canal. Overall road relocation costs already incurred by state and local government add $4 million to this figure. Virtually all of these costs would become a virtually useless expenditure if the project is abandoned.

3. PRIVATE INVESTMENT LOSS

More than $800 million has been privately invested in Mississippi industrial and commercial facilities in anticipation of completion of the project. More than one thousand jobs are involved. It is impossible to accurately estimate how much of this can be recovered, but there would obviously be heavy losses and liabilities. Railroad rehabilitation has been involved, separate from normal project relocation.

4. SUMMARY

I have dwelled on the catastrophe which threatens us in Mississippi because Mississippi would be in the unfortunate position of bearing almost the entire brunt of this ill-founded proposal of abandonment.

(Kentucky and Tennessee already enjoy the use of the thriving Tennessee River waterway system. Their loss from the abandonment of the Tenn-Tom is in potential use, although some of the industrial development in those states has resulted from anticipation of use of the Tenn-Tom in the future.) The Alabama portion of the Tenn-Tom is complete, but as an emasculated project it would provide only five percent of the projected navigation benefits of the full-scale Tenn-Tom.

We have photographs of the area under construction that presumably would be abandoned to nature by the plan of the Senate committee, but this is a situation impossible to fully visualize without actual personal inspection. (I was pleased that a number of members of the House committee had an opportunity to fly over the construction site this past Friday.) For members who have not yet had an opportunity, I would like to personally invite all members of this committee and its staff to come to Mississippi to allow me to personally conduct you in a flight over the nearly one hundred miles of land under construction. Only then can you fully realize the problem we would face.

Obviously, the only reasonable solution to this problem is to complete the project as soon as possible, and for private business and all agencies of goverment to join in promoting the fullest possible utilization. One example of the beneficial by-products of the project that offers great hope for the future of our State is the productive employment of black workers, drawn primarily from underemployed rural residents, in the construction work. The approximatley 1,000 black construction workers on the Tenn-Tom will be the core of a large segment of skilled minority employees in the industries and commercial enterprises which will be located on the waterway. During the last quarter of 1980, 30 percent of the man-hours worked

were provided by black construction workers. They symbolize greater opportunities for all of the people of Mississippi if we can avoid the currently threatened catastrophe of a shutdown of the project.

STATE OF MISSISSIPPI

HOUSE CONCURRENT RESOLUTION NO. 124

A CONCURRENT RESOLUTION MEMORIALIZING CONGRESS TO CONTINUE FULL FUNDING OF THE TENNESSEE-TOMBIGBEE WATERWAY PROJECT.

WHEREAS, construction of the Tennessee-Tombigbee Waterway began in December of 1972 with the commitment of federal and state monies to fund the project to completion; and

WHEREAS, this model partnership among governments at all levels and the private sector is estimated to be completed in 1986 at a total cost of $1.96 Billion, comprised of federal and nonfederal funds; and

WHEREAS, through the federal fiscal year ending September 30, 1981, $1.099 Billion of federal funds has been allocated to the project and $1.005 Billion of said funds has been obligated under contract or paid pursuant thereto; and

WHEREAS, construction of the Tennessee-Tombigbee Waterway project is approaching two-thirds completion; and

WHEREAS, the contract for the final major structure on the project, being Lock E in Mississippi, will be let by the end of March of this year; and

WHEREAS, the Tennessee-Tombigbee Waterway, which will link [illegible] different river systems to the Gulf of Mexico, will be beneficial to the Nation as it will provide an easily accessible, low-cost [illegible] efficient [illegible] system for [illegible] coal commodities; and

WHEREAS, during 1986, the first year of full operation of the Waterway, it is projected that 28,000,000 tons of commodities will be moved on the Waterway at an annual savings of $2.28 per ton in transportation costs; and

WHEREAS, the Tennessee-Tombigbee Waterway will provide a direct route for coal which will help the Nation realize its potential for energy self-sufficiency utilizing American coal rather than OPEC oil and will enable the United States to balance trade with other nations, resulting in a strengthened American dollar; and

WHEREAS, it is projected that 21.04 million tons of coal will be moved on the Waterway at an annual savings of $2.89 per ton in transportation costs; and

WHEREAS, it is projected that the average annual savings in transportation costs for all commodities moved on the Waterway in 1986 will be $105 Million and such average annual savings over a fifty-year period will be $121 Million annually; and

WHEREAS, on the completed portion of the Waterway between Aliceville, Alabama, and Mobile, Alabama, 111,420 tons of commodities, including 5,000,000 bushels of wheat and soybeans, were transported last year; and

WHEREAS, the Tennessee-Tombigbee Waterway, as a wise public investment of capital in an underdeveloped area of the Nation, has already won the approval of our free enterprise system as reflected by the investment of nearly half a billion dollars in counties bordering on the Waterway; and

WHEREAS, during peak construction periods, thousands of workers are employed along the Waterway; and

WHEREAS, untold dollars and man-hours have been committed to build new access roads, relocate utilities, and move families and businesses along the Waterway and if this public investment is terminated it will not only result in the loss of money but also will result in an intolerable burden on the people who have been directly affected by the project; and

WHEREAS, the United States will benefit from the economic development to result from construction of the Waterway and the several states of the Nation will benefit from reduced costs of transporting commodities:

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE STATE OF MISSISSIPPI, THE SENATE CONCURRING THEREIN, That we do hereby memorialize the Congress of the United States of America to continue to fully fund the Tennessee-Tombigbee Waterway which is, and has been since its inception, a worthwhile project for the public benefit.

BE IT FURTHER RESOLVED, That copies of this Resolution be forwarded to the President of the United States, the Vice President of the United States, the Speaker of the United States House of Representatives, and to the members of Mississippi's Congressional Delegation.

ADOPTED BY THE HOUSE OF REPRESENTATIVES
March 20, 1981

C B Newman

SPEAKER OF THE HOUSE OF REPRESENTATIVES

ADOPTED BY THE SENATE
March 26, 1981

PRESIDENT OF THE SENATE

Mr. BEVILL. We appreciate your fine statement, Governor.

Governor JAMES. Governor Winter, thank you.

I think Governor Winter certainly brought to mind a new view very pertinent to his State regarding this project.

Mr. Chairman, the only statement that I would make—and I want to add to a little bit of what Governor Alexander has to say—the President of the United States has recommended this project in a period of reducing Federal spending. I don't think it was a light decision. I think the President's staff, Mr. Stockman, and others must have looked at this very large expenditure very, very carefully and I think when they did and took a map, you saw this system extending from Montana across to Pennsylvania, touching the Great Lake States, and coming down through the midsection of America industrially and agriculturally, coming on down to where the cross roads of the Mississippi goes down to New Orleans and this new competitive system goes to the Port of Mobile.

I believe that is very consistent with Mr. Reagan's direction, which I concur totally that we must retool these United States. This is a capital expenditure that is right on target with the concept of retooling and generating increased productivity.

I believe these are the realities that the President recognized when he put the 200-odd million dollars into the budget. I am hopeful that the Senate and the House will recognize that this system encompasses dozens of States not just a few States.

Thank you.

Mr. BEVILL. Yes. This is so true, the point Governor Winter made is that there is $328 million, I believe, that the testimony has shown already that it would cost actually to stop the project when just a little over $600 million will complete it.

So there is not much choice if they really want to face reality and look at it as is, because this is not to really put the dirt back to where it belonged or put it back in its original condition. It is to take the steps that would be necessary to make it safe and cancel out all the contracts that are now in existence. It still would never look like it did before, Governor. There still would be a ditch there, as you say. Just to take the safety precautions, this is the explanation I have received on it—this was in our briefing Friday night down in Mobile, Alabama.

It is a very critical point that we have reached here, and I certainly appreciate the fine support and testimony that each of you has presented here.

This subcommittee, of course, has consistently supported Tenn-Tom, as has the entire Appropriations Committee, which is charged by Chairman Whitten—that is why he is called The Chairman; I am just a chairman. There are 13 subcommittees. He is the chairman of the House Appropriations Committee. He is doing a great job and we appreciate him very much. He has been so much out front in helping over the many years in getting this project under way.

Governor JAMES. Mr. Chairman, could I ask the members of the Tennessee-Tombigbee Waterway Development Authority to stand as a group and be recognized. They have done an outstanding job.

Mr. BEVILL. Yes, they have. We appreciate the job you are doing as chairman, too.

Would you all stand.

Governor JAMES. And staff. These are the people who do the work.

Mr. BEVILL. If you have a list of the names, we would like to have those in the record.

Governor JAMES. Yes, Mr. Chairman.

[The list follows:]

TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY MEMBERS PRESENT

Barbara Bobo, Millport, Alabama.
Gene Braswell, Birmingham, Alabama.
Fred Bush, Tupelo, Mississippi.
Alex Chamberlain, Louisville, Kentucky.
Doyle Conner, Tallahassee, Florida.
Harvey Cotten, Tallahassee, FL.
Z. C. Enix, Murray, Kentucky.
Herman Ewing, Memphis, Tennessee.
Jim High, Columbus, Mississippi.
Fuller Kimbrell, Fayette, Alabama.
Jim Loudermilk, Pensacola, Florida.
Richard Manley, Demopolis, Alabama.
Jack Paxton, Paducah, Kentucky.
John Stanley, Corinth, Mississippi.
Elton Stephens, Birmingham, Alabama.
Ray Thornton, Fulton, Mississippi.
Bill Thrash, Clanton, Alabama.
Bennie Turner, West Point, Mississippi.
John B. Waters, Sevierville, Tennessee.
Jim Yates, Shively, Kentucky.
Emmett Yeiser, Savannah, Tennessee.
Bill Stevens, Tallahassee, Florida (representing Secretary of State George Firestone).

TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY STAFF

Glover Wilkins, Administrator.
Donald G. Waldon, Deputy Administrator.
Darlene Scogin, Assistant Administrator and Director of Public Affairs.
Pat Broocks, Associate Director of Public Affairs and Director of Research.

Mr. BEVILL. They came 1,500–2,000 miles to attend this meeting. I think that is worthy of noting.

Mrs. BOGGS. I would like to say that the Port of New Orleans which has just been mentioned by the Governor is in full support of the project. We welcome the competition because we know it means that we are going to be more productive as a Nation, that we will help our balance of payments, give more jobs, activity to the people all over the United States.

In addition, it will, of course, shore up our national defenses. I would like also to say that we welcome competition, since we have been having such an athletic discussion. I think the time has come for me to say, "Yea, Tigers."

Mr. BEVILL. Thank you very much, Mrs. Boggs.

Governor JAMES. I would like to recognize Mr. Glover Wilkins, who heads this whole effort at this time, and turn this program over to him.

Mr. BEVILL. We are always pleased to have the Authority's Administrator, Glover Wilkins. We will hear from you now, Glover.

STATEMENT OF GLOVER WILKINS

Mr. WILKINS. Thank you, Governor, and thank you, Mr. Chairman and other members of the committee.

I am delighted to be here today. If I may, we have statements we would like to introduce for the record.

Mr. BEVILL. You may submit them for the record.

Mr. WILKINS. Congressman Edwards; Congressman Flippo of Alabama; Congressman Natcher's statement has already been turned in; Congressmen Beard, Duncan, Gore, Jones, Bouquard from Tennessee.

[The statements referred to follow:]

PREPARED STATEMENT OF GLOVER WILKINS, ADMINISTRATOR, TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY

Mr. Chairman, I am Glover Wilkins, Administrator of the Tennessee-Tombigbee Waterway Development Authority. I appreciate the opportunity to once again present this statement to the members of this Committee for consideration in your decision on appropriations for Tenn-Tom in fiscal year 1982.

I am pleased to report that giant strides have been made during the past year in construction of the Tenn-Tom. The waterway is now more than half-way completed. By the end of this fiscal year nearly two-thirds of the construction will be finished with about $250 million of work remaining to be contracted.

All of the major facilities or contracts have now been awarded. Of the ten locks and dams, five are complete or virtually complete. Of the remaining five major structures, two are more than 50 percent complete. Nearly three-fourths of the 150 million cubic yards of excavation work in the Divide Cut has been accomplished. The amount of excavated material already removed from this 27-mile reach of the waterway exceeds that amount excavated in the construction of the Suez Canal.

These construction activities have helped tremendously in dampening the impact of the current economic recession on the counties along the waterway. About 5,000 workers are employed on the project during peak construction. Over 80 percent of these workers are from the local area. This emphasis on local hiring has helped preclude the "boom and bust" conditions typical of most large construction projects in rural or sparsely populated areas.

During the period of July to September 1980, over 1.6 million work hours were performed on the waterway. Twenty-seven percent of this work went to minority workers, many of whom are now enjoying gainful employment for the first time. The payroll for this period amounted to about $13 million.

Small economically disadvantaged businesses in the local area have also benefited significantly from the waterway construction. Over $20 million of work have gone to these firms with even larger increases planned for the next three years.

Indications of the potential use of the waterway as an efficient mode of transportation are already evident. With the completion of the Gainesville and Aliceville facilities, the lower one-half of the waterway is now opened to limited navigation. From two to four barge tows can navigate as far north as Columbus, Mississippi or about 115 miles. The completion of on-going dredging and railroad bridge relocations is necessary before this reach will accommodate an eight-barge tow. Nevertheless, over 5 million bushels of wheat and soybeans have already been shipped from a private terminal near Aliceville, Alabama to Gulf ports for export.

With the waterway now less than five years away from completion, major companies and shippers are showing an increasing interest in the Tenn-Tom. This has been particularly true for coal producers and shippers.

Lack of adequate and efficient transportation is a serious impediment to major increases in coal production in the U.S. Demand is no longer a problem with all free world countries desperately trying to convert from exorbitantly priced OPEC oil to coal, a cheaper and more dependable source of energy.

Tenn-Tom will provide a shorter alternative route for shipping coal from producing areas in Appalachia to domestic markets in the southeast and for exports through eastern Gulf ports. For example, coal shipped by barge from eastern Tennessee will be able to save 830 miles or about 65 percent in total distance traveled when the Tenn-Tom is completed.

Tenn-Tom will provide direct access for these coal fields to the Port of Mobile, which is expected to become one of the leading coal exporters in the nation. Plans are now underway to expand the existing coal terminal to a capacity of about 24

million tons. In addition, planned private terminals will accommodate about 14 million tons.

Tenn-Tom is expected to move about 21 million tons of coal during its first year of operation at a total savings in transportation costs of over $60 million. Its early completion, therefore, is vital to our national energy needs.

The total transportation benefits of the waterway are estimated to average about $121 million annually, based on 1980 dollars. These benefits will accrue to 14 states. An example of the broad geographic impact of this waterway is that Illinois, although far removed from the project itself, will be the third most benefited state. This state will actually receive more transportation benefits than Mississippi.

These transportation savings are significant enough to help increase productivity of industries and users of the waterway, which, in turn, will help contribute to the improvement of our economy. The waterway will certainly make our goods more competitive with foreign suppliers.

With the waterway now reaching the two-third's completion mark, only insignificant benefits will be derived until the complete connection with other navigable waterways is made. After 1982 only a $340 million investment will remain to complete the Tennessee-Tombigbee Waterway. With the tremendous potential of benefits this completed waterway will bring, it would be unconscionable to stop the Tenn-Tom now.

It is very important that cooperative planning among the Federal, State and local interests be carried out if these potential economic benefits are to occur in a wise and orderly manner. Accompanying this statement is an agreement signed by the compact governors designating the Authority as responsible for coordinating all waterway related planning activities. This interstate cooperation will help ensure that the necessary planning and the implementation of these plans be accomplished, unnecessary duplication of these efforts be avoided, and more effective communication and cooperation among the public and private interests involved in the waterway.

The ongoing Tennessee-Tombigbee Corridor Study has been most essential in providing needed planning for the four states most directly impacted by the Tenn-Tom. This study is most unique in that it addresses water resources, environmental quality, economic development as well as human resource needs of the individual waterway-impacted counties. We request that this Committee continue funding this study at a reasonable level.

President Reagan has proposed a budget of $201.1 million for Tenn-Tom in fiscal year 1982. While his request is less than the Corps' construction capability of $220 million for the project, the President's recommendation does keep the project on schedule. We are delighted that Mr. Reagan has become the sixth consecutive President to support the Tennessee-Tombigbee.

We know that this Committee and the Congress will be faced with difficult decisions in allocating scarce Federal funds among so many competing programs. We further recognize that funding for some meritorious projects and programs may be slowed down or curtailed as a result of efforts to reduce Federal spending.

In view of the restrictive budgetary and fiscal policies, the Authority does not recommend a specific level of funding for the Tenn-Tom in 1982. Instead, it recommends that the waterway be given funding priority by the Committee, because of its degree of completion and its importance to coal transportation, within the total amount of funds made available for water resource development.

We greatly appreciate the strong support this Committee has provided to this great project. Without your leadership and resolve, we would not be able to report on the excellent progress made in the development of this waterway. Thank you.

Prepared Statement of Representative Jack Edwards on the Tennessee-Tombigbee Waterway

Mr. Chairman, I am pleased to appear before your subcommittee again this year in strong support of the Tennessee-Tombigbee Waterway. It has been gratifying to see this important waterway take shape in the last ten years and I look forward to its completion.

The Tenn-Tom is more than 50 percent complete and half of the 232-mile waterway is open to navigation from Columbus, Mississippi, southward; contracts have been let for four of five locks; and more than two-thirds of the entire project is committed.

The tremendous scope of the Tennessee-Tombigbee Waterway has created a great deal of criticism. The project has been studied endlessly but because of the full commitment of this Committee and other supporters, it has survived the controversies and made great progress. A 1976 lawsuit was decided in favor of the waterway

and we expect the decision will be upheld on appeal. Last year the Congress reaffirmed its support of the project and the Carter Administration initiated a program of rural development planning to benefit the people and Communities along the Tenn-Tom corridor. President Reagan has also endorsed the project.

The Tenn-Tom will have a great economic impact on the Southeast, but since most of its traffic will flow through the Port of Mobile, the State of Alabama and my Congressional District will benefit most substantially. Approximately one of every 11 workers in the State of Alabama is in a job directly or indirectly related to port activities. The Port of Mobile generates about $32 in revenues for every ton of general cargo, and tonnage through the Port of Mobile is expected to double when the Tenn-Tom is completed. The total impact of the waterway on private income through this century is estimated to exceed $4.5 billion. International interest in the Tenn-Tom is increasing as completion nears and the economic impact of that interest is well known.

One of the most important aspects of the Tennessee-Tombigbee Waterway will be its transportation benefits. Transportation savings are anticipated to be $34 million in the Tenn-Tom's first year of completion which is schedules to be in 1986. Those savings are expected to exceed $500 million by the year 2000. Many major commodities will be transported on the Tenn-Tom, including coal from Alabama and Appalachian coal fields, agricultural products, chemicals, and metallic ore. New public and private inland dock facilities are being strategically located to handle those products. A number of these facilities will be equipped with grain elevators for handling agricultural products. Swine, poultry, and cattle feeder lot operators recognize the potential the waterway's opening will have on production increases to meet growing consumer demands. The Waterway will allow more barges to bring feed directly to the farmers in our area. Transportation savings will benefit some 14 states. Those transportation savings along the Tenn-Tom also represent major energy savings. The nation's ability to reduce its dependence on imported oil and convert to other energy sources, including coal, depends largely on our having an efficient transportation system. Over 21 million tons of coal are estimated to move on the Tennessee-Tombigbee Waterway, at a savings of more than $54 million during its first year of operation alone—and waterway transportation is less energy intensive than any other major mode of transportation, including rail, pipeline, truck, and air cargo transportation.

The Tennessee-Tombigbee Waterway is not simply another water navigation project. It is also a regional development project. The Tennessee-Tombigbee Corridor Study, which I support, is being conducted to assess the needs of the 48 counties along the waterway in planning to take advantage of this development. The study will be completed in 1984 and will make recommendations for the use of water and related land resources, for economic development, for the development of human and minority resources, and for the enhancement of environmental quality.

The waterway is undoubtedly a major aspect of our national transportation system. Its growth will directly affect the economic status of all citizens living in its 14-state impact area. Each phase of construction has been highly successful and that success can continue with your support.

The President has requested $201 million in his fiscal year 1982 budget for construction on the Tennessee-Tombigbee and $7.32 million for maintenance. It is vital that this project be fully funded so that its progress can continue and so that construction will remain ahead of schedule.

PREPARED STATEMENT OF SENATOR HOWELL T. HEFLIN OF ALABAMA

Mr. Chairman, thank you for this opportunity to again appear before this Committee in behalf of funds for the Warrior-Tombigbee Waterway and Mobil Harbor.

The President's budget for the 1982 fiscal year calls for $7,493,000 in operation and maintenance funds for the Warrior-Tombigbee River system and $3,044,000 for similar activities at the Mobil Harbor. This request, of course, stems from the responsibility of the Army Engineers to keep Federal river and harbor projects. Mobile is Alabama's only seaport and is one of the nation's great natural seaports. The Port of Mobile is strategically located and for many years has ranked among the top ten ports in the United States. There is also in the Budget a request for $700,000 in survey money for the Port of Mobile. This study will address itself to the merits of deepening the Mobile ship channel.

I shall not dwell upon the subject at this time, but I would like to point out to the Committee that there is pending in Congress a bill providing for the dredging of Mobile to "super depth" so as to permit entry of new super tankers and bulk carriers. For the Alabama waterway system—and indeed, or entire inland waterway

system—to reach anything near full capacity, it is important that Mobile Harbor be improved to accommodate these huge carriers.

The Warrior-Tombigbee water is a vital commercial feeder to the Port of Mobile. The request for survey funds in the new Budget should expedite completion of the studies now underway to determine replacing the existing lock at the William Bacon Oliver Lock and Dam near Tuscaloosa with a modern 110 X 600 feet lock or well as the feasibility of providing duplicate locks at the locks and dams near Demopolis and Coffeeville. In the days to come, consideration must also be given to providing cut-offs at certain river bends and the widening and deepening of the channel. Approval of the items I have discussed will move us much closer toward the complete modernization of the great Warrior-Tombigbee River System.

Thank you.

PREPARED STATEMENT OF CONGRESSMAN RONNIE G. FLIPPO

Mr. Chairman, it would be callous and ungentlemanly of me if I did not take this splendid opportunity to thank, you, personally, for the tremendous job you do with this subcommittee.

My fifth district, the entire State of Alabama, and this great Nation have you to thank for a job extremely well done. I just want to take a moment to say "thank you".

Recently, I saw a sign in downtown Washington that said, "Don't even think about parking here."

That's my feeling about the the Tennessee-Tombigbee Waterway. It would be unconscionable to even think "parking" this great project.

After ten years of construction, we can see the light at the end of the tunnel. We're scheduled for completion in just a few years.

We have already invested $1.25 billion in this project. More than 74 percent of the funds required for completion have already been committed.

We won't save one dime by slowing it down.

However, stopping it would waste over $2 billion and slowing or stretching it out will only make cost more.

This project is going to help my district, perhaps more than any other project in our life time.

For ten years, we've labored, planned, held hearings, litigated and listened to the opposition. Five presidents and one Congress after another have said, "build it."

Now, I propose that we do just that.

We only lack a small part of it.

The time for this project has arrived.

Let's get the job done.

I hope you'll support funding for Tenn-Tom sufficient to keep it on schedule in fiscal 1982.

Thank you.

PREPARED STATEMENT OF REPRESENTATIVE WILLIAM H. NATCHER

Mr. Chairman, I want to thank you for the opportunity to again voice my support for the Tennessee-Tombigbee Waterway Project.

The sum of $201 million is contained in the Fiscal Year 1982 budget for the Tennessee-Tombigbee Waterway Project. The entire project is nearing the two-thirds completion mark and over 74 percent of the project is already committed to construction contracts. With approval of the $201 million proposed in the Fiscal Year 1982 budget, funding of the total cost of the Waterway will pass the 70 percent mark.

Today, on the Waterway, nine of ten locks and dams are complete or under construction. Shippers are now using the Waterway and with virtually 132 miles complete, there is limited navigation from Columbus, Mississippi, southward. Over five billion bushels of soybeans have been shipped on the Waterway since navigation began and coal producers and government officials are looking to Tenn-Tom to help the United States compete with foreign sources of coal.

The Waterway, a 232-mile navigation channel connecting mid-America's 16,000 miles of inland waterways with ports along the Gulf of Mexico, will produce many navigation benefits. Fourteen states will immediately realize $82 million in transportation savings, along with reduced transportation costs and increased productivity. In addition to navigation benefits, the Waterway is producing expanded job opportunities plus 13,000 acres of land and 40,000 acres of water for recreational purposes.

The Commonwealth of Kentucky will benefit in many ways by the Waterway. It is expected to influence the economy of much of Kentucky through construction activity, industrial development, public and private port development, recreation, increased activity of area-based tow and barge service and increased economic activity in the region brought about by the economics of water transportation. In addition, it is expected that there will be 21,000 new jobs above normal growth by the year 2000 and per capita income for west Kentucky workers by the same year will increase to $10,090 per year.

Our Nation's ability to convert from expensive imported oil to our most abundant energy source, coal, will depend on an efficient transportation network. About 2.5 million tons of Kentucky coal will be shipped the first year on the Tennessee-Tombigbee Waterway. Coal is our Nation's best available resource for resolving our energy supply problems. The Waterway will be able to move coal from producing areas to market at an average savings of about $2.57 per ton. To the extent Tenn-Tom will help facilitate the export of this abundant energy source and help reduce our Nation's critical balance-of-payments problems, this should be viewed as a significant benefit.

Mr. Chairman, I appreciate the opportunity to express my support for the completion of the Tennessee-Tombigbee Waterway Project and urge the sum of $204 million be approved for the project.

Prepared Statement of Hon. Robin Beard of Tennessee

Mr. Chairman, it is again my distinct pleasure to appear before this body in support of the Tennessee-Tombigbee Waterway.

When the Tennessee-Tombigbee Waterway is completed in about four years, the people of my area of Tennessee will be ready to put it to full use to increase employment and improve living standards.

While waterway construction has been going on, Tennesseans have not been sitting idle and waiting for its impact. They have been preparing for the long-term potential the project can bring. Some 44,000 new jobs are projected to be created by the Tenn-Tom impact on Tennessee by the year 2000 and Tennesseans are making ready for that growth surge.

The Tennessee-Tombigbee Waterway will connect the Tennessee River with the Port of Mobile and reduce the distance for barge shipments for some points in Tennessee by about 800 miles. The resulting savings to shippers was motive enough to encourage people in Hardin, Decatur, Perry and Wayne Counties, Tennessee to form a Four-County Port Authority to finance $26 million in port developments. Similar efforts are taking place throughout my district.

Studies confirm that Tenn-Tom will immediately become one of the busiest waterways in the nation with tonnage equivalent to that which passed on the Tennessee River in 1979. The inherent low-cost barge transportation and savings in distance for major commodities moving between the Gulf and Mid-America ports are why the Tennessee-Tombigbee Waterway is so critical to the nation's navigation system. This waterway will provide $121 million in savings annually in transportation costs. As an immediate result, it is a "drawing card" for industrial growth for Tennessee and much of the Southeast.

It is important to complete this waterway so that the initiative of people in the entire region will not be thwarted. It is also important to the future economic growth of much of Mid-America. I urge full funding to completion for this important project.

Prepared Statement of Hon. John Duncan

Mr. Chairman and members of the subcommittee, ever since construction really got underway on the Tennessee-Tombigbee Waterway, people in Tennessee have been reaping benefits from it because of the increased interest it has generated for us from international, industrial and business developers.

With the Tennessee-Tombigbee Waterway providing a much needed shorter route to southeastern deepwater ports from east Tennessee, a virtual parade of foreign investors have camped on the doorsteps of Tennessee. They quickly recognized the significance of this shorter and less costly transportation artery and are rapidly moving to take advantage.

For instance, two major Japanese manufacturing firms simultaneously announced multi-million dollar plants for Tennessee during one month last fall. Matsushita, which produces electronic components and will be located near Knoxville, said that

transportation and the close proximity to major markets led to their selection of Knoxville, which is in the district I represent.

It is obvious that the Tennessee-Tombigbee Waterway is stimulating development in my area because it will provide the necessary direct access to industrial and consumer markets in Alabama, Mississippi, Florida, and foreign ports.

In eastern Tennessee during 1969 at least 109 new and expanded industries announced investments of $312.5 million and the creation of 6620 new jobs. This dramatic record of capital investment by private interests during a period of economic recession is truly remarkable. With completion of the Tennessee-Tombigbee Waterway, I am confident this economic upsurge will continue to stabilize the economy of the State.

The present energy crisis seriously affects our daily lives and is fast becoming the single greatest threat to the security of our national economy. New frontiers must be opened to provide new ways to produce energy and reduce our dependence on foreign oil. Coal will be the largest single movement on the Tenn-Tom with more than 21 million tons expected to be shipped the first year. Much of that coal will come from Appalachia. The cheaper transportation route of the Tenn-Tom will lower shipping costs for coal and encourage the opening of marginal coal fields in Tennessee.

One major operation in east Tennessee has announced an expansion that will produce industrial chemicals from coal, changing the raw material source for a number of its products from petroleum-related materials. This advance technology will allow development of processes to make other chemicals for coal. It is a new frontier, an important step in America's move to reduce dependence of imported oil. This one development by this one company will save the equivalent of one million barrels of crude oil per year

We must improve our transportation system to move our new raw materials and commerce in a more efficient manner. Tenn-Tom is an important cog in the Nation's transportation machine.

Thank you.

Prepared Statement of Hon. Albert Gore of Tennessee

Thank you for this time before your Committee today to express my continued support for construction of the Tennessee-Tombigbee Waterway.

The American business community is being hampered by declining productivity and inflation fueled by rising energy costs. Businesses are finding it more difficult to hold down prices and remain competitive with foreign suppliers. The steel and auto industries are prime examples of this dilemma.

Increased fuel costs are making transportation an important factor in prices of U.S. goods and services. We must improve our transportation system to move raw materials and commerce in the most possible efficient manner.

The Tennessee-Tombigbee will be an efficient means of moving bulk-type commodities long distances. At the same time, a healthy rail and trucking industry is needed to complement navigation interests. Industrial development seeks ports and waterfront sites that are also served by rail and highway.

Tennessee is getting ready for completion of Tenn-Tom. Industry is moving to solve the dilemma it faces in competitive dealings with foreign suppliers by using the most economic transportation modes available.

Export/import trade is now a viable part of the Tennessee economy. That can be borne out by the announcement last winter of the location of the $300 million Datsun truck manufacturing and assembly plant in my home district in Tennessee. Their $40 million local payroll for 2,200 people does not include another 1,500 non-manufacturing jobs that will result. Less than 2 percent of the work force, all technical, will be from Japan. I was pleased to be on hand for this announcement which I believe portends the kind of industrial growth the area can experience in the future.

I am convinced that a sound transportation network is the cornerstone from which we must build our economic future. The Tennessee-Tombigbee Waterway is one important aspect that must not be overlooked. I urge its continued construction.

Prepared Statement of Hon. Ed Jones of Tennessee

Mr. Chairman, I want to add my voice to the others who support completion of the Tennessee-Tombigbee Waterway. This waterway will result in an annual savings of $121 million to shippers who use it and provide a shorter navigational route for goods being transported from Mid-America to deep water Gulf ports.

Maybe most importantly, it can play a vital role in increasing the export of American agricultural products from my area and Mid-America to foreign countries, a goal not possible in the past because of higher transportation costs.

Almost 2 million tons of food and agriculture products are expected to move on the Tenn-Tom at a savings of about $3 per ton. Tennessee growers can expect to profit from this savings. Backhaul will include fertilizer and other chemicals to grow soybeans, wheat and other foodstuff in Tennessee. Facilities are already located in my state and in other bordering states to move this grain. In the past we have not had the transportation capability to respond to the increased demand abroad for our foodstuff. This country must compete for export dollars in the sale of our agricultural commodities around the world to offset our vast outpouring of U.S. dollars to purchase foreign oil. To meet the demand, the projected volume for agriculture trade must increase by as much as 60 percent by the year 2000. There is no doubt that the additional capacity offered by the Tenn-Tom Waterway is essential to the orderly development of export markets for our agriculture products.

These are only a few of the many reasons why I urge full funding for construction of the Tenn-Tom Waterway.

Thank you very much.

PREPARED STATEMENT BY CONGRESSMAN ALBERT LEE SMITH, JR.

Gentlemen, the Tennessee-Tombigbee Waterway has been discussed and examined longer than most of us can remember. Finally, it is nearing completion, yet it is still being dicussed and examined from every conceivable angle. For more times than I want to count, this project has been put through expensive court actions and without exception every court in the land has approved the waterway. In numerous hearings before Congress, it has been examined inside and out and each time this waterway has proved its worth. Six consecutive presidents, including President Reagan, have funded the project. And, most importantly, at public hearings thousands at the grassroots level have turned out in vocal support for Tenn-Tom.

Meanwhile, contractors push forward with construction as work approaches the two-thirds completion mark. Shippers have begun using it, even before it is fully open. They moved 111,320 tons of the nearly complete lower 115 miles of the waterway last year.

On the local and state level millions of dollars in public, private and local monies have been put into port and waterway related facilities by a confident private sector. Untold millions more in private capital investments are dependent on the Tennessee-Tombigbee Waterway.

Plans, both large and small, now on drawing boards across the Eastern United States, would be disrupted and the confidence and good faith of thousands of U.S. citizens would be damaged or destroyed if the completion date of the Tenn-Tom were delayed. It would produce disastrous economic results and would stifle regional development activities that are so important to a productive economic recovery for the nation.

Worse yet, potential benefits in savings from lower transportation costs would be lost to the 14 states in the primary impact area.

I respectfully urge full funding without delay for the earliest possible completion of the Tennessee-Tombigbee Waterway.

PREPARED STATEMENT OF HON. MARILYN LLOYD BOUQUARD OF TENNESSEE

Mr. Chairman, I would like to express my support for the Tennessee-Tombigbee Waterway which is so vital to, not only my section of the country, but to the entire United States.

It will open up a corridor of our country to provide transportation to enhance our manufacturing capabilities and to move our vast coal resources. It is the American consumer who is going to benefit from this project. The overall benefit to the country, and particularly to the Southeastern United States, will exceed any water resource project, with the exception of the Mississippi River, ever approved by this Congress.

Some developing watefront industrial/port sites in Tennessee which were motivated by Tenn-Tom have been ranked 13th in potential of the 99 sites evaluated in the Mid-South.

In view of the world energy crisis, efficient navigation is imperative. With the U.S. responsible for providing over 2.5 billion tons of coal by 1990, a modern multimodal transportation system is needed. Tenn-Tom is an important link in the system.

Because of ready access to substantial coal reserves in Eastern Tennessee, a commercial port that can handle 500,000 tons of coal daily at the outset and up to one million tons in the future is planned in my district. This important step is only one of many in connection with the completion of the Tenn-Tom. The new waterway connection linking the Tennessee River with Gulf ports will reduce the distance for some Tennessee shippers by as much as 800 miles. This shorter overseas connection would provide an outlet for East Tennessee's high sulfur content coal. Ports such as the multi-million dollar planned facility near Harriman, Tennessee would revitalize the soft coal market of the area. Another coal related development in my district is a planned billion dollar coal gasification plant which will initially employ some 250 persons and open up a vast new market for coal liquefied into gasoline. These and other developments are linked to the anticipated completion of the Tennessee Tombigbee Waterway. Coal reserves in Tennessee are estimated at 965 million short tons. Much of that reserve has previously been inaccessible or uneconomical to mine. The shorter, cheaper route of the Tennessee Tombigbee Waterway is encouraging the opening of these substantial reserves to help alleviate the energy crisis.

With completion of the Tennessee Tombigbee Waterway still four years away, it is already opening up new vistas for people in my state. Industrial leaders are using the potential impact to showcase what the natural resources of Tennessee can mean to the nation and the world.

Efficient transportation is critical to the future of not only Tennessee, but the nation. The Tennessee Tombigbee Waterway is an integral part of an efficient transportation network and it must be completed in all due haste.

Mr. WILKINS. If there are any other statements for the record here, I would like to have them introduced. If not, Mr. Chairman, I would like at this time to present to you Mr. Benny Turner, who has a statement in behalf of Dr. Aaron E. Henry, President of the Mississippi NAACP.

Mr. TURNER. Mr. Chairman and committee members——

Mr. BEVILL. Come up and have a seat. We will be glad to hear from you. We are pleased to have you with us.

STATEMENT OF BENNY TURNER

Mr. TURNER. Thank you, Mr. Chairman.

I am Benny Turner from West Point, Mississippi, and I have a statement from Dr. Aaron Henry, President of the State Conference of NAACP. Copies of his statement have been mailed to you and I would like to offer this one in the record.

Mr. BEVILL. Permission is granted.

Mr. TURNER. It supports completion of the Waterway and encourages the committee to grant funding, recommend funding at a level as recommended by the President. And it supports Waterway as an employment project and from the standpoint of development effort.

Thank you very much.

Mr. BEVILL. Very fine statement.

[Statement of Dr. Henry follows:]

MEMORANDUM

To: Members, Subcommittee on Energy and Water Development, United States House of Representatives.

From: Aaron E. Henry, President, Mississippi State Conference NAACP.

Re: Appropriations for completion of Tennessee Tombigbee Waterway Project.

The enclosed letter to Chairman Bevill, is forwarded for your use and information, as we attempt to reiterate the dire need for completion of the Tennessee Tombigbee Waterway Project.

The Mississippi State Conference NAACP is vitally concerned and aware of the financial hardships that curtailment or a halt to this project will pose.

Please give this matter your utmost consideration.

NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF COLORED PEOPLE,
Clarksdale, Miss., March 19, 1981.

Hon. TOM BEVILL,
Chairman, Subcommittee on Energy and Water Development, U.S. House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I was unable to appear before you in person because of other commitments on my schedule, so, please accept this note as an indication of our support for the completion of the Tennessee Tombigbee Waterway Project.

We of the Mississippi State Conference of the NAACP feel very strongly that the Tennessee Tombigbee Project is a major employment project in Mississippi. It has a large number of Blacks employed that would be without obtainable employment should the Tennessee Tombigbee Project be curtailed or halted.

The Army Corps of Engineers has adopted a realistic affirmative action goal of 30 percent minority employee participation in the construction of the project and has made efforts, worthy of notice, in fulfilling the minimum goals for minority participation in many crafts employed in the construction of the waterway.

We feel also, that the project itself will serve a great deal in transportation as it connects the Tennessee and Tombigbee Rivers with the Gulf of Mexico. The benefits included in this project in that respect, are too numerous to detail herein.

It is for the primary reasons stated above that we of the Mississippi State Conference NAACP urge each member of this subcommittee to recommend that sufficient funds be appropriated so that the Tennessee Tombigbee Water Project can be completed.

Yours with concern,

AARON E. HENRY,
President, Mississippi State Conference NAACP.

Mr. BEVILL. You know the President has recommended $201 million for this year's appropriation. The Corps's maximum capability is $222 million. President Carter cut it down to $204 million in his budget and then President Reagan cut it down to $201 million in his amended budget. But that is still very good because you and I know we have to take our share of the cuts, because we have been advocating, as you know, getting the budget balanced for many years.

Certainly we are talking about investing money here, we are not talking about spending money, but still we want to be sure to take our share of the cuts on the water projects throughout the nation for that matter and this subcommittee supports the President on that.

Mr. WILKINS. I would like to introduce Mr. John J. Brown, Legislative Director of the International Union of Operating Engineers.

Mr. BEVILL. We are pleased to have Mr. Brown. He is well-known here on Capitol Hill. We are always glad to see him.

STATEMENT OF JOHN J. BROWN

Mr. BROWN. It is always a pleasure to apepar before you and your subcommittee.

Mr. Turner was called out of town, he was supposed to be here this morning. He asked me to present the testimony on his behalf.

Mr. Chairman and members of the committee, let me express my appreciation for being given the opportunity to appear before you this day. On behalf of the 425,000 members and officers of the International Union of Operating Engineers and the 4 million members of the Building Trades Department, AFL-CIO, we appear before you to submit our testimony in support for the Tennessee-Tombigbee Waterway.

The need to continue construction of this important waterway cannot be stated too lightly for the Tenn-Tom Waterway has given to this country a great opportunity for economic development, but also a greater opportunity for local employment, and it does so with wages covered under labor standards that were based on Davis-Bacon provisions.

If I may stay with my testimony, stay on the record and go off my testimony, I have submitted here to you for your review the list of 12 projects that are being constructed on the Tennessee-Tombigbee. Out of that 12 projects, only 4 were over on government-estimated bids and contractors' bids and they were all done, Chairman Bevill, under Davis-Bacon. It seems that Tenn-Tom and Davis-Bacon should be synonymous because there are those in Congress who seek to destroy both without realizing, I think, the many ways that we as working people benefit.

Mr. BEVILL. Put that in the record also. I think that would be good to have.

[List referred to follows:]

TENNESSEE-TOMBIGBEE WATERWAY

Project	Government estimate	Contractor's bid
Aberdeen Lock and Dam	$39,537,983	$36,288,142
Columbus Lock and Dam	45,759,714	45,972,307
Lock A	27,211,163	23,720,515
Aliceville Lock and Dam	49,272,000	47,274,207
Lock B	32,937,317	33,927,828
Lock C [1]	33,513,705	33,167,000
Lock D [1]	50,382,311	49,956,990
Divide cut section 3A	19,982,590	18,208,635
Divide cut section 4 and 2A	240,059,417	270,601,206
Bay Springs Lock and Dam	90,728,366	76,209,130
Gainesville Lock and Dam Spillway	14,331,339	14,151,922
Lock E [2]	50,121,900	48,505,439

[1] Blount International.
[2] Bid Feb. 26, 1981—Granite Construction Co.

Mr. BROWN. Governor Lamar Alexander of Tennessee said something, and I do not think he was thinking of Davis-Bacon when he stated it, but he stated there is nothing wrong with government supporting projects that take care of poor people. We say to this honored committee, there is nothing wrong with government thinking hard on prevailing wages and in support of prevailing wages that take poor people out of the poorhouse and actually give them the chance to earn decent wages for their skills as they develop them.

I will go back to my statement, Mr. Chairman.

The Tennessee-Tombigbee Waterway goes through some of the most economically-deprived areas of this nation. Many of the counties, some with greater than 50 percent minority populations, have had historical trends of high unemployment and underemployment and very low per capita incomes. Personal income in some counties is the lowest in the nation. The construction of the Tenn-Tom has provided many of these residents their first opportunity to be gainfully employed. These job opportunities did not occur by happen-

stance but from the cooperative efforts of the Corps of Engineers, the various trade unions, contractors and others.

First, a special bid provision was included in construction contracts, encouraging contractors to hire at least 80 percent of their labor force from the local area.

Secondly, an unprecedented affirmative action plan was adopted to encourage greater utilization of minorities in all trades and skills needed for construction of the waterway.

Thirdly, union-sponsored training programs and those by others have permitted many of the unskilled residents to enter into this job market. Training programs have been established for carpenters, ironworkers, laborers and operating engineers. Employment to run peak construction of the waterway is about 5,000. During the period of July-September 1980, over 1.6 million work hours were performed on the waterway. About half or 870,000 work hours went to operating engineers, my own craft.

During this period, 20 percent of the total work hours was performed by minority workers and about 6 percent was by female workers; total payroll during this period amounted to almost $13 billion. This additional employment and wages have also stimulated the local economy which, in turn, has created other nonwaterway job opportuniites for the area.

The waterway construction has had profound economical impact in the region and demonstrates the kind of social and economic benefit that can be generated from Federal investments in large public works projects. However, the job opportunities and the economic benefits of the waterway after its completion will far outweigh its construction impact.

The Appalachian Regional Commission estimates that as many as 135,000 new jobs will be created by the waterway in a four-state region by the year 2000, mostly due to new high-wage, highly skilled industries locating in this region because of the low-cost transportation advantages of the waterway.

An additional $2.9 billion of personal income and private investment will be generated as a result of this growth. The Tenn-Tom is truly a wise investment in the economic future of our country because of the jobs and economic growth it will foster.

Again on behalf of my own International Union and all the members and officers of the Building Trades Department, AFL-CIO, let me express my thanks for the consideration shown to me by the members of your committee.

Mr. BEVILL. Thank you, Mr. Brown. You do a very outstanding job in representing the working people of this country. We are always glad to see you and get to hear from you.

Mr. BROWN. It is always good to be part of your program, Mr. Chairman.

STATEMENT OF GLOVER WILKINS ON THE TENNESSEE-TOMBIGBEE WATERWAY

Mr. WILKINS. Mr. Chairman, I would like to submit a statement from the Authority by me that I would like to have inserted in the record.

Mr. BEVILL. It will be made a part of the record.

[Statement of Mr. Wilkins follows:]

TENNESSEE-TOMBIGBEE WATERWAY DEVELOPMENT AUTHORITY,
Columbus, Miss., March 24, 1981.

Mr. GEORGE URIAN,
Staff Assistant, Energy and Water Development Subcommittee of the House Appropriations Committee, Rayburn House Office Building, Washington, D.C.

DEAR GEORGE: Please find enclosed 15 copies of the Supplemental Testimony of the Mining and Reclamation Council of America and the National Dump Transport Industries Association statement written for the Tennessee-Tombigbee Waterway hearings before the House Energy and Water Development Appropriations Subcommittee which we would like included in the record of the hearings.

Thanking you in advance for your assistance in this matter and with warm regards and good wishes, I am

Sincerely,

GLOVER WILKINS, *Administrator.*

Enclosures.

STATEMENT OF WILLIAM T. JOHNSTON, CHAIRMAN OF THE BOARD, NATIONAL DUMP TRANSPORT INDUSTRIES ASSOCIATION, RANDOLPH, OHIO

ENERGY AND INFLATION "COMBAT" WITH WATER TRANSPORTATION SERVICED BY THE TRUCKING INDUSTRY

We represent a major industry whose services are related to energy. One of our main commodities hauled in semi dump trailers is coal. Our coal here in Ohio is of a high sulfur content. What we need is to get this coal to market, utilize the "Blending" process, and help with balance of world trade by exporting. In order for this to be feasible, we need water transportation to the Gulf from the Appalachian area.

The Tennessee Tombigbee Waterway is the solution to our problem, with one exception, the time element. We need the completion date to be as soon as possible and priorities put in their proper perspective.

The National Dump Transport Industries Association (DTIA) is prepared to service the 15 ports along the Tennessee Tombigbee Waterway. Our industry feels honored to service a feasible means of transportation such as water, but all modes of transportation are needed. We have to learn and want to work together to accomplish the complete network of transportation.

SUPPLEMENTAL TESTIMONY OF THE MINING AND RECLAMATION COUNCIL OF AMERICA

The Mining and Reclamation Council of America (MARC) is a national association representing the surface coal mining industry. Through its corporate membership and affiliated State and regional coal associations, MARC represents more than 3,000 coal operators and industry suppliers nationwide. Our member companies account for more than seventy percent of our nation's total coal production.

MARC supports the funding and construction of the waterway connecting the Tennessee and Tombigbee Rivers. This 232-mile waterway which will connect 16,000 miles of inland waterways, began in 1972 and is now almost 50 percent complete. Nearly 70 percent of the total costs of the project are presently under contract.

Cutting off funding at this point of Tenn-Tom's development would deprive the nation of the enormous benefits which this vital waterway would provide. Regional development, energy savings, an increased export trade for the United States and the creation of more jobs are among the benefits to be gained as a result of the construction of Tenn-Tom.

We must not be caught in the short-sighted trap of slashing spending to realize immediate savings. Cutting dollars from the Tenn-Tom budget now would also slash enormous economic growth potential in the future. This nation suffers the severe economic consequences of an unfavorable balance of trade and a dependency on inflationary imported oil supplies. The Tenn-Tom will directly address both of these crucial issues. During its first year of operation, it is estimated that 21 million tons of coal will be transported on the waterway. The projected savings for this movement is $61 million in transportation costs. By providing a cost-effective means of transporting America's vast coal reserves, the Tenn-Tom will be working to reduce our dependency on the foreign oil imports that have steadily fueled the inflation rate in this country. And, by opening vast new export opportunities for thousands of American firms and farmers, the Tenn-Tom will be working to bring back some of those dollars currently trapped abroad by our own export deficiency.

Mr. WILKINS. I introduce Mr. Steve Patterson, Executive Director, Tombigbee River Valley Water Management District, and ask he present his statement.

Mr. BEVILL. We are pleased to have you with us.

Mr. WILKINS. Mr. Chairman, he is the sponsor in Mississippi for the Tennnessee-Tombigbee Waterway. We kind of feel this is one of our brothers under the skin.

Mr. BEVILL. Good.

STATEMENT OF STEVE PATTERSON

Mr. PATTERSON. Thank you, Mr. Wilkins.

Thank you, Mr. Chairman, for allowing me just a few minutes to address this committee on behalf of the Tombigbee River Valley Water Management District in support of the Tennessee-Tombigbee Waterway.

The Tombigbee River Valley Water Management District is composed of those counties in Mississippi that will be most directly affected by the waterway. The district was created by act of the State Legislature in 1962, and is the local sponsor for the Corps of Engineers on the waterway in Mississippi.

Mr. BEVILL. Permission is granted.

Mr. PATTERSON. Thank you.

Our statement not only discusses the local benefits that will result from the construction of the Tennessee-Tombigbee Waterway, but also points out benefits to the State of Mississippi, the 14-state region of mid-America and to the nation as a whole.

In preparing our statement we found that it is simply impossible to speak of benefits in local terms alone. That is a natural progression of benefits radiating outward from the local level to the national scene.

As Congressman Boner stated earlier, annual savings in transportation costs alone will be some $121 million. The waterway will cut the distance for many major inland ports by more than 800 miles. The nation will incur related benefits in the areas of education, environmental quality and recreation.

In addition to this, an area, our area of the country that was once an economic liability may very well become an economic asset. It gives us an opportunity to pull ourselves up by our own bootstraps. Transportation savings in energy will mean more energy for national needs; savings on transportation of products will be passed on to consumers throughout the United States.

In short, Mr. Chairman, we have attempted to emphasize that the spirit of Federal cooperation can and does work as it should. Local support on the part of the Tombigbee River Water Valley Management District has taken the form of several million dollars in bond issues. We have moved forward on this with the Federal Government in a spirit of cooperation and a spirit of trust.

This committee has moved forward in a similar spirit in supporting this project in the past. It is our hope that this spirit will endure in the future. You made what amounts to an initial investment in the future of our area.

We are here to assure you that the return on this investment will be both a more economically productive local region and a stronger nation as a whole.

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Thank you, sir.

Mr. WILKINS. At this time I would like to ask that the record be held open for a reasonable length of time to allow submission of statements for the record that were not presented today.

Mr. BEVILL. The record will be held open for five days, Mr. Wilkins. So any statements that you wish to send in within the next five days, the record will be open and they will be made a part of the record.

Mr. WILKINS. We had a statement from the AFL-CIO that could not be here, they will present a statement. They had a conflict on hearings.

Mr. BEVILL. We certainly want that in the record.

[The information follows:]

PREPARED TESTIMONY OF J. C. TURNER, GENERAL PRESIDENT, INTERNATIONAL UNION OF OPERATING ENGINEERS, AFL-CIO

Mr. Chairman and members of the Committee, let me express my appreciation for being given the opportunity to appear before you this day.

On behalf of the 425,000 members and officers of the International Union of Operating Engineers and the 4 million members of the Building Trades Department, AFL-CIO, we appear before you to submit our testimony in support for the Tennessee-Tombigbee Waterway.

The need to continue construction on this important waterway can not be stated too lightly for the Tennessee-Tombigbee Waterway has given to this country a great opportunity for economic development but also a greater opportunity for local employment and it does so with wages covered under labor standards that were based on Davis-Bacon provisions.

The Tennessee-Tombigbee Waterway goes through some of the most economically deprived areas of the nation. Many of these counties, some with greater than 50 percent minority populations, have had historical trends of high unemployment and underemployment and very low per capita incomes. Personal income in some counties is the lowest in the nation.

The construction of the Tenn-Tom has provided many of these residents their first opportunity to be gainfully employed. These job opportunities did not occur by happenstance but from the cooperative efforts of the Corps of Engineers, the various trade unions, the contractors and others.

First, a special bid provision was included in construction contracts encouraging contractors to hire at least 80 percent of their labor force from the local area. Secondly, an unprecedented affirmative action plan was adopted to encourage greater utilization of minorities in all trades or skills needed for construction of the waterway. Thirdly, union sponsored training programs and those by others have permitted many of the unskilled residents to enter into this job market. Training programs have been established for Carpenters, Ironworkers, Laborers, and Operating Engineers.

Employment during peak construction on the waterway is about 5000. During the period of July-September 1980, over 1.6 million work hours were performed on the waterway. About one-half or about 870,000 work hours went to Operating Engineers.

During this period, 27 percent of the total work hours was performed by minority workers and about 6 percent was by female workers. Total payroll during this period amounted to about $13 million.

This additional employment and wages have also stimulated the local economy, which, in turn, has created other non-waterway job opportunities in the area.

The waterway construction has had a profound economic impact in the region and demonstrates the kinds of social and economic benefits that can be generated from Federal investments in large public works projects. However, the job opportunities and the economic benefits of the waterway after its completion will far outweigh its construction impact.

The Appalachian Regional Commission estimates that as many as 135,000 new jobs will be created by the waterway in a four-state region by the year 2000, mostly due to new high-wage highly skilled industries locating in this region because of the low cost transportation advantages of the waterway. An additional $2.9 billion of personal income and private investment will be generated as a result of this growth.

The Tenn-Tom is truly a wise investment in the economic future of our country because of the jobs and economic growth it will foster.

Again on behalf of my own International Union and all the members and officers of the Building Trades Department, AFL-CIO, let me express my thanks for the consideration shown to me by the members of your Committee.

Mr. WILKINS. Thank you very much.

Mr. BEVILL. Thank you very much, each of you, for a very fine presentation. We realize it is not easy for you to make these trips up here, but we do look forward to your coming and appreciate it. This is mine and Jamie Whitten's day, so to speak; Alabama and Mississippi and Tennessee and Kentucky delegations. We all look forward to this day.

This project is, of course, ahead of schedule. We are going to build it, but we would hate to have any delays.

You know, when we talk about spending, that is one thing, but when you are talking about investing money that is something else. You know, this is one of the 13 Appropriations subcommittees; each of us handle our own bill. This is Energy and Water as you know, but this is the only appropriation that for which it has to be proven that the benefits will exceed the cost. It is proven by professional engineers, United States Army Corps of Engineers, who make these studies.

I might mention that this Tenn-Tom is one of the most studied projects in the United States. They studied it for 200 years. It was advocated before this country became a country, the French advocated building this waterway.

The French didn't know some of the problems we were going to run into down the road, but it is well on its way, it is ahead of schedule. Even with the cuts—as I say, we will take our share of the cuts—it is a great project and so many people are owed so much and have contributed so much to this project because no one person could do it, it takes everybody.

In mentioning that, we don't have to worry about any problem as far as the White House is concerned on this project. As has been brought out here, the President is not opposing it. But we do need, for your information, and each of you has friends in other states and companies that you know, I hope that you will talk to them and call their attention to this project.

It has been interesting that with all the attacks, that have been made on this project by the news media, I have never yet found one of the media who has ever even seen the project. None have been there to see it, let alone ask questions and find out about it. They just write an article on it, "boondoggle, pork barrel projects." It is interesting so far—I might find somebody soon—I haven't found a single person who has looked into the project, knows anything about it, who has written these articles. I think that tells us something.

At this time I am delighted to recognize a man that has certainly played a key role in building this project from the very beginning, Chairman Jamie Whitten of Mississippi.

STATEMENT OF CONGRESSMAN JAMIE L. WHITTEN OF MISSISSIPPI

Mr. WHITTEN. Thank you, Mr. Chairman. I appreciate this opportunity to be here and to have our friends from this area make such an excellent record. I appreciate it all.

I am glad to see my governor here. His father was an outstanding Mississippian. When I was 21 years old I was in the Mississippi House and he was in the Senate. May I say our governor is following in his father's very excellent footsteps.

It is a real pleasure to be here. I want to take a little time to pay tribute not only to Chairman Bevill and members of this committee, but those who have preceded him and others back through history. You know this country is great because people did have the foresight to develop it. This subcommittee in all the years that I have dealt with it has been for all Americans, the whole United States, all 50 states.

If you will take our hearings, you can start from A and go through Z, take up projects one-by-one, they have evidence to support the investment. With all the things that we have worrying us today, they are financial, because the real wealth has been protected by the Congress on the recommendation of this subcommittee. I recall when the Tennessee-Tombigbee really got off the ground moneywise, Mike Kirwan of Ohio was chairman of the committee, John Rhodes was top man on the Republican side, and I of course hail from Mississippi.

Central Arizona project, Ohio project, and Tenn-Tom all came out at the same time. This is a part of a joint effort and this committee has, as I said, always distinguished between investment and productive spending and other types of spending. So whatever problems we have in this country, if we are going to handle them it is because of the recommendations of this committee back through history. They just never have let the country down.

You know I was pleased to see President Reagan include funds for this project. We had Secretary of Interior Watt before this committee and he was asked about the new President. He said it was a pleasure to work down there with the President who had some knowledge of the needs of water and irrigation. So whatever our problems are, they will be solved by reason of the fact that we continue to develop our country.

One of the things that hasn't been stressed too much here is that this benefits 22 states directly, from the studies. And the proximity to coal should lead to the development of heavy industry in an area that well can use it, not at the expense of anybody, but so that the United States may deal with its problems.

I do not know whether you read today's column; if you didn't, you ought to read it, in the Washington Post by Raspberry, a columnist who happens to come from Okolona, Mississippi, a black who is doing an outstanding job. But there is a whole lot of black judgment in the statement today. One of them is that we are in whatever fix we are and we have to level off. If we cut back, how are you going to pay a borrowed dollar with a hard-to-get dollar? The answer to our problems is increased production, increased development, make our country better.

I want to say to each and every one of you folks that you have made an excellent record which will be helpful. But you are talk-

ing to a very friendly committee because this is the committee that has made the recommendations under Tom Bevill's chairmanship. Not only here, but get the hearings and get the report, you will see it goes from A to Z, Alabama all the way down to Wyoming and other states. So I just want to thank you for making such an excellent record.

I happened to read recently a history of Presidents and you would be surprised the Presidents who happened to be in when they got the Erie Canal, when they got the St. Lawrence Seaway, Bonneville Power, irrigation in the West. When they wrote up in history the name of the Presidents, these constructive things that were done are listed as the outstanding actions of his day.

The Louisiana Purchase, I might mention, brought many problems to New Orleans but a whole lot of benefits. We worked very hard making certain that Lindy Boggs and Louisiana can handle all the water we send her from three-fifths of the country, this committee looks after all of the country.

I have every reason to believe they will do what they have done every year, that is go along with this developing the Southeast.

Tom, I appreciate your recognition of me at this time. I am finding out that as Chairman with 13 subcommittees I'm spread so thin they can almost see through you. But I couldn't have better folks to work with. I appreciate all of it.

I will mention names. John Myers, I have never seen him let the country down in all the years I have served with him. I can say that about others too. He is the ranking Republican. They can do something besides play basketball.

Mr. MYERS. Thank you, Mr. Chairman. The Tenn-Tom hasn't been hurt any, of course, by having the Chairman and Chairman Bevill, and I said that in Alabama the other day, but quite frankly, you wouldn't be here today if it weren't for Glover Wilkins. I mean that sincerely. All the work they can do, you never could have done it without them, and you people should recognize that really back home, Glover Wilkins has done more to carry your project than any other one individual I know.

Glover, when you have this built, I do not know what they are paying you, but we will up it. We have a place for you. We will teach you how to play basketball. Football is in Alabama; we will teach you how to play basketball too.

Mr. BEVILL. I see our good friend and colleague from Mobile, Alabama, Jack Edwards. He is the ranking member of the House Subcommittee on Appropriations on Defense, so he is in a very key position, and taking a leading role in supporting the President's efforts to get this country back on a strong basis. Jack does so many outstanding things, I won't try to name all of them.

Jack, we are glad to have you. You have already submitted your statement.

If you want to make a few remarks, we will be glad to hear you.

Mr. EDWARDS. Thank you, Mr. Chairman.

I am going to work with the Warrior-Tombigbee people in a minute. Maybe I will make a statement then.

Mr. BEVILL. Fine.

Congressman Watkins?

Mr. WATKINS. The folks from Tishomingo, Tupelo, and Pontotocs, who were mentioned the other day when we were flying over this area, if someone had called out these names, I would have thought they were in my district because the Choctaw Indians from Mississippi and that area came to my area in the State of Oklahoma. I am looking forward to having a project up there so I can help those Tupelos, those Wapanuckas and I come from Pontotoc County in Oklahoma. So I mention that and recognize that kinship.

Mr. MYERS. We Yankees have a time on this committee, as you can see. We carry a dictionary so we can translate.

Mr. BEVILL. You are going to Alabama this weekend. Congressman Fazio of California, Congresswoman Lindy Boggs, and others were down there as guests of Jack Edwards in Mobile for the night and then the next morning. We and John Myers flew over the Tenn-Tom in a couple of helicopters and saw first hand the progress being made.

Congressman Rudd is already scheduled to go next Friday and see it, then Congresswoman Smith is scheduled to go down on April 3. So this subcommittee has really put its heart into this Tenn-Tom. We appreciate them so much because they have their own projects to look after.

Mr. BEVILL. They have actually taken an active interest.

Mr. MYERS. I am working on it.

Mr. BEVILL. They have been so good to our section of the country. I appreciate all of them.

Congressman Myers, do you want to make a statement.

Mr. MYERS. No. I was just thinking a moment ago when we were told that the Governor of Kentucky would have a representative here and having never met the lieutenant governor before and having seen her at the desk, I just assumed it was the governor's wife that was here. I am proud to see that we have a pretty lieutenant governor too.

Kentucky is doing real well. We are pleased to have all of you.

Governor, once again, you too.

Mr. BEVILL. We are running a little behind schedule, about 25 minutes, as a matter of fact, but if any member of the committee wants to ask any questions or make any statements.

Mrs. SMITH. Mr. Chairman, I do not have any questions but I want to say how much all of us appreciate the great job you have done, all of you making the special effort to come.

Let me say in our chairman, Tom Bevill, you have the greatest, most dedicated, most effective promoter of the project. We all think Tom is the greatest chairman. We are all behind you. Thank you for being here.

Mr. BEVILL. We will extend your time, Mrs. Smith.

Thank you very much, you are very kind.

Mr. FAZIO. Mr. Chairman, I simply want to thank you and Congressman Edwards for the hospitality you and your constituents showed us last Thursday and Friday. It was a very friendly and courteous welcome. I particularly want to thank the people of Aliceville who had a luncheon for us. It was very, very good testimony given to us in terms of the impact a project like this can have on the long-term health of a region.

Certainly we in California have been in your debt for all the assistance we have had from the Federal Government for many years. I think it is only appropriate that we support you in the efforts you have made to try to improve the economic health of your region as well.

Mr. BEVILL. Congressman Watkins' district out there in Oklahoma, I went out there to visit his district and we flew into a rather remote rural are, but there were just hundreds of people there. We landed in this pasture where the meeting was held; little flags all along the barbed wire fence. You could just tell there were good solid Americans there.

We had two generals, two congressmen. Of course I thought they were coming to see me and Congressman Watkins thought they were coming to see him, each of the generals thought they were coming to see them. Congressman Watkins told me later after he went back and talked to the people, they all turned out to see those helicopters.

I will tell you though, this group that went down to Alabama Friday, they didn't go out to see helicopters, they turned out to see you all, and knew you were coming. That is why you got that good hospitality.

Mr. Rudd of Arizona?

Mr. RUDD. I am looking forward to seeing the tie-in of commercial development of Mobile Harbor, which I know is going on, and I am sure that my distinguished colleague Congressman Edwards will make certain that I get a chance at that. I hope he will, anyway. This is one of the things I am looking forward to seeing.

Mr. BEVILL. Any other comment.

Thank you very much.

MONDAY, MARCH 23, 1981.

COOSA-ALABAMA WATERWAY

WITNESSES

ROBERT F. HENRY, CHAIRMAN OF THE BOARD OF THE ASSOCIATION, MONTGOMERY, ALABAMA

GOVERNOR FOB JAMES, STATE OF ALABAMA

CHRIS B. HEINZ, PRESIDENT OF THE ASSOCIATION, SELMA, ALABAMA

MRS. MARY GEORGE WAITE, VICE PRESIDENT FOR ALABAMA, CENTRE, ALABAMA

BURGETT H. MOONEY, JR., VICE PRESIDENT FOR GEORGIA, ROME, GEORGIA

MR. BEBO KLYCE, PRESIDENT, GADSDEN METRO CHAMBER OF COMMERCE

C. R. CARLSON, EXECUTIVE VICE PRESIDENT OF THE ASSOCIATION

Mr. BEVILL. Next is the Coosa-Alabama Waterway.

The meeting will come to order.

Dr. Bob Henry, you are appearing here for the 25th time, once a year for the past 25 years, I understand. So we are pleased to have you and Mrs. Mary George Waite here, who is another leader on the Coosa-Alabama.

Statement of Governor Fob James of Alabama

[Statement of Governor James follows:]

State of Alabama,
Governor's Office,
Montgomery, Ala., March 23, 1981.

Hon. Tom Bevill,
Chairman, House Subcommittee on Appropriations for Energy and Water Development, House of Representatives, Washington, D.C.

Dear Mr. Chairman: Since becoming Governor of Alabama, I have seen the grass roots support in our state for maintaining the Alabama River navigation channel and extending that channel on to Gadsden, Alabama and eventually to Rome, Georgia. This waterway is not just important to our state but also to the region and nation as a whole. I have seen how our navigable waterways and the Port of Mobile are part and parcel of the greater national waterway system that is proving daily to be invaluable in our collective effort to beat the energy crunch and revitalize an economic and industrial base.

I fully support the recommendations of Chairman Robert F. Henry and the Coosa-Alabama River Improvement Association. They, like many other responsible citizens, have responded to the leadership of President Reagan and suggested ways that Federal expenditures on their part of the waterway system can be reduced. At the same time they have pointed up those facilities which must be maintained and improved if we are to continue the significant returns now being received from this investment both Federal, State and private.

Extending the present navigation channel from Montgomery to Gadsden, and eventually to Rome, Georgia is a sound investment and has high priority in our plans for the future. We also join our friends in Georgia in supporting investigations of a new multi-purpose reservoir near Dalton, Georgia. This lake could provide reserve water for navigation and other downstream uses on the Coosa-Alabama River System. I also encourage the Corps of Engineers to continue the necessary activities needed for deepening of the ship channel in Mobile Harbor to 55 feet to accommodate deep draft shipping. The $24.9 million recommendation for Operations and Maintenance was carefully considered. Much of this expenditure for Operations and Maintenance is returned to the Federal Treasury through the sale of power from the four hydro-electric plants involved.

I was a businessman until I was elected Governor a little over two years ago; I know from experience that you must maintain your facilities and stick with your capital investment program if you are going to show a profit and maintain a viable operation. On our waterways the profits come in reduced freight rates, significant energy savings, and an economical way to move bulk materials without punishing our deteriorating highway and roadbed systems. The funds requested for Fiscal Year 1982 represent good sound business practice.

Sincerely,

Fob James, *Governor.*

Mr. Bevill. Jack, are you going to handle the introduction?

Mr. Edwards. All these things drain right into Mobile. I didn't want Bill to sit up here by himself. I am going to introduce Sheldon in a moment.

Mr. Bevill. You want me to go ahead?

Mr. Edwards. Go ahead with Bill.

Statement of Congressman Bill Nichols of Alabama

Mr. Nichols. Mr. Chairman, I have a statement I would like to submit for the record. I thank the subcommittee for allowing me to present it.

Mr. Bevill. Thank you.

[Statement of Mr. Nichols follows:]

PREPARED STATEMENT OF CONGRESSMAN BILL NICHOLS ON THE COOSA-ALABAMA WATER PROJECT

Mr. Chairman, it is indeed a privilege and my pleasure to have been invited to appear before your committee to express my continued strong support of the Coosa-Alabama Rivers Waterway Project.

This has been an important project for many years, not only for the counties bordering these rivers, but for the economies of an entire region. The inexpensive hydroelectric potential alone during these years of energy consciousness speaks well for itself.

But more importantly, we should be mindful of the economies of the overall energy savings which will accrue from the development of this waterway. Allow me to remind the committee of these data: one gallon of fuel will move 50 tons of goods only one mile by truck, or 180 tons one mile by rail. But, it will move 300 tons the same one-mile by water! This is six times more weight of materials for the same one gallon of fuel.

The expanse of the waterway stretches diagonally across most of the state of Alabama, into northwest Georgia, and on completion, will cover 631 miles. The Alabama and Coosa Rivers cut through some of the most fertile and minerally rich land in the state, and this waterway will provide an excellant econimical outlet for the shipping of these products from this region.

The areas surrounding these rivers stand to gain tremendously from the completion of this waterway. It has been projected that more than 3,000 new jobs will be created directly from industrial expansion related to the completion of this project during the next 25 years. Over the next 50 years, employment expansion is expected to grow by 8,000 jobs.

Not only would this benefit our state, but the Port of Mobile, where this waterway terminates, is a major export point for our nation's economy. This waterway would provide additional increased potential for further increasing exports to assist in our country's balance of trade throughout the world. I would urge the Members of this Committee to approve funds for the Coosa-Alabama Waterway Project. Thank you.

STATEMENT OF CONGRESSMAN SHELBY OF ALABAMA

Mr. SHELBY. I have a statement also.
[Statement of Mr. Shelby follows:]

PREPARED STATEMENT OF HON. RICHARD C. SHELBY

Mr. Chairman, I am grateful for this opportunity to appear in behalf of the Coosa-Alabama River System, a system that has already meant much to the growth of Alabama and will continue to be one of the keys to future economic development of the state.

A total of $24,961,000 in operation and maintenance funds has been requested for fiscal year 1982 for upkeep and improvement of the system. These requests include $4,673,000 for the Coosa-Alabama River System as a whole, $3,615,000 for the Jones Bluff Lock and Dam, $5,569,000 for the Millers Ferry Lock and Dam, $5,044,000 for the Mobile Harbor, $4,050,000 for Allatoona Lake and $2,010,000 for the Carters Lake Navigation Project.

Two surveys, totaling $1.4 million have been requested. The first survey at Dalton Lake, Dalton, Georgia, on the headwaters of the Coosa, would provide information on needed storage water to maintain navigation depths on the lower Alabama River. The second survey at the Mobile Harbor is needed to see if it is feasible to take deep draft ships.

The amount requested to continue advance engineering and design on the Coosa River Navigation Project is $3 million. Total development of the Coosa River to its full navigational possibility will be a great boon to the State of Alabama. Preconstruction planning has been underway since 1978 toward a start date of March, 1983. By connecting Gadsden and Rome, Georgia, with the Gulf of Mexico, it is projected that the completion of all projects currently on line will make this waterway of service to more than one-half of Alabama's citizens directly. This project is a solid investment in future productivity and economic progress.

Recognizing and supporting the attempt to limit federal expenditures, no funding has been requested for the construction of recreation facilities on Allatoona Lake in Georgia and the Jones Bluff Lock and Dam in Georgia. This reduces the amount that could have been requested, as compared with the original budget, by $4,889,000.

I urge you to continue funding at the fullest possible extent and remind the committee that water navigation is the most energy efficient mode of transportation in a day and age when efficiency should be our primary concern.

Again, Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before this distinguished committee on behalf of the Coosa-Alabama River System.

Thank you.

Mr. BEVILL. All right.

Bob Henry, we are pleased to have you here again. So you may proceed as you wish.

STATEMENT OF DR. ROBERT HENRY

Mr. HENRY. Thank you, Mr. Chairman. It is a pleasure to appear before you again, and thank you for your courtesy and that of your colleagues.

We have just been doing fine on the Alabama-Coosa River, the second largest river system in the Southeast, 650 miles long. The Alabama portion has been completed for navigation.

I might remind you, sir, that when we broke the ground, the benefit-cost ratio was 1.08-to-1, very close. It is now 1.90-to-1 and growing very fast.

So that just falls right in line with the supply side economics. You have the product and then you can make a sale. If you don't have the product, you need the inventory. So a lot of people have come in, brought big payrolls to the area that we didn't know the names of, even. There are more to come.

Sir, we have a fine delegation here today and I would like to present the names of everybody for the record. We have statements.

[The statements referred to follow:]

COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION'S DELEGATION APPEARING BEFORE THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT HEARINGS

1. Dr. Robert F. Henry, Chmn. of the Bd., CARI Association, Montgomery, AL.
2. Honorable Fob James, Governor, State of Alabama, Montgomery, AL.
3. Gene Mitchell, Public Safety Dept., State of Alabama, Montgomery, AL.
4. Chris B. Heinz, President, CARI Association, Selma, AL.
5. Mrs. Mary George Jordan Waite, Vice Pres. AL, CARI Association, Centre, AL.
6. Burgett H. Mooney, Jr., Vice Pres. GA, CARI Association, Rome, GA.
7. Tom Brock Jordan, Commissioner, Cherokee County, Centre, AL.
8. Ellis Austin, Businessman, Wetumpka, AL.
9. Melvin Curlee, Commissioner, Elmore County, Wetumpka, AL.
10. Melvin Taylor, Commissioner, Elmore County, Tallassee, AL.
11. Leroy Coker, Sr., Commissioner, Elmore County, Tallassee, AL.
12. Mrs. Jeanette Barrett, City of Wetumpka Council, Wetumpka, AL.
13. Mrs. Glenn Rounsewell, Housewife, Falls Church, VA.
14. Sid Willingham, Insurance and Real Estate, Rome, GA.
15. Virginia Willingham, Housewife, Rome, GA.
16. G. T. Nelson, Vice Pres., Ind. Dev., AL Power Company, Birmingham, AL.
17. Jerry Martin, Mississippi Chemical, Pascagoula, MS.
18. Tom Wade Hampton, President, Cherokee County Commission, Centre, AL.
19. Harold Day, Commissioner, Cherokee County Commission, Centre, AL.
20. Joel W. Barfoot, Commissioner, Montgomery County Commission, Pike Road, AL.
21. David Stockman, Deputy Administrator, Montgomery County Commission, Montgomery, AL.
22. Hugh H. Williamson, Mayor, Pell City, AL.
23. Paul Turner, Mayor Pro Tem, Pell City, AL.
24. Forrest A. Walls, Councilman, Pell City, AL.
25. Barnett Lawley, Councilman, Pell City, AL.

26. Keith Porter, Councilman, Pell City, AL.
27. H. Edwin Holladay, Circuit Judge, 30th Circuit, Pell City, AL.
28. Carl Collins, Chamber of Commerce, Rome, GA.
29. Harold Hunter, Businessman, Rome, GA.
30. Jerry Dunwoody, City Commission, Rome, GA.
31. Marrion B. Rambeau, Mobile Area Chamber of Commerce, Mobile, AL.
32. Dr. James H. McClendon, Chairman, St. Clair County Commission, Ashville, AL.
33. Sheldon L. Morgan, Banker, Mobile, AL.
34. Jim Ludwig, Southern Services, Birmingham, AL.
35. Dick Fifield, Farm Bureau Insurance, Montgomery, AL.
36. Jerome Drummond, Drummond Coal Co., Birmingham, AL.
37. Tim Parker, Jr., Parker Towing Company, Tuscaloosa, AL.
38. Ed Hodder, Jim Walters Associates, Birmingham, AL.
39. Nick Barchie, Warrior & Gulf Navigation, Mobile, AL.
40. Robert M. Coleman, Radcliff Materials, Mobile, AL.
41. Otha Lee Biggs, Probate Judge, Monroe County, Monroeville, AL.
42. Kenneth B. Fairly, AL River Pulp Co., Inc., Monroeville, AL.
43. Jimmy Swanson, Monroe County, Monroeville, AL.
44. Bernard A. Reynolds, Selma & Dallas Co. Chamber of Commerce, Selma, AL.
45. John Thomason, Ideal Basic Industries, Cement Div., Mobile, AL.
46. Jasper Fielding, Probate Judge, Coosa County, Rockford, AL.
47. H. R. Winton, Insurance, Gadsden, AL.
48. Tommy Ford, Dir. of Development, Coosa River Action Council, Gadsden, AL.
49. Harold E. Johnson, President, Coosa River Action Council, Gadsden, AL.
50. George Sizemore, Commissioner, City of Gadsden, AL.
51. Michael Sizemore, Student, Gadsen, AL.
52. Jim Hopper, Hopper Telephone Company, Altoona, AL.
53. Joe Hopper, Hopper Telephone Company, Altoona, AL.
54. Floyd Beddingfield, Gadsden Airport Authority, Gadsden, AL.
55. A. S. "Bebo" Klyce, Gadsden Metro Chamber of Commerce, Gadsden, AL.
56. Linda Klyce, Housewife, Gadsden, AL.
57. Wendell Bryant, Commissioner, Etowah County Commission, Gadsden, AL.
58. Howard McCullars, Insurance, Gadsden, AL.
59. Marty McCullars, Housewife Gadsden, AL
60. Robby McCullars, Student, Gadsden, AL.
61. Barney Leach, Leach Manufacturing Company, Gadsden, AL.
62. Betty Leach, Housewife, Gadsden, AL.
63. Andrew Leach, Student, Gadsden, AL.
64. Bobby Baker, Banker, Gadsden, AL.
65. Max Smith, Businessman, Gadsden, AL
66. J. W. Griffith, Businessman, Gadsden, AL.
67. Ray Ford, Mayor, Ragland, AL.
68. Gary Daffron, Businessman, Gadsden, AL.
69. Bob Moman, AL Gas Corporation, Gadsden, AL.
70. Karen Brooks, City of Gadsden, Gadsden, AL.
71. Martha Elrod, City of Gadsden, Gadsden, AL.
72. Vic Giamalva, Holy Name of Jesus Hospital, Gadsden, AL.
73. Bill Summerlin, Hospital Executive, Gadsden, AL.
74. Roger Dreyer, Businessman, Gadsden, AL.
75. Frank Shew, Businessman, Gadsden, AL.
76. Larry Payne, Insurance, Gadsden, AL.
77. Tom Batey, Batey-Sanders Construction Company, Gadsden, AL.
78. Harry McLendon, American Nat'l Bank, Gadsden, AL.
79. W. A. Coleman, Mayor, Riverside, AL.
80. Mrs. W. A. Coleman, Housewife, Riverside, AL.
81. C. R. Carlson, Exec. Vice President, CARI Association, Montgomery, AL.
82. Ada W. Paravicini, Adm. Asst., CARI Association, Montgomery, AL.
83. J. W. Hampton, Businessman, Centre, AL.
84. Myra Hampton, Housewife, Centre, AL.
85. Irley Keener, Attorney, Centre, AL.
86. Kerry Newman, Republic Steel, Washington, D.C.
87. Dan Cleckler, Banker, Childersburg, AL.
88. Susie Clecker, Housewife, Childersburg, AL.

LIST OF LETTERS REQUESTING APPROPRIATIONS FOR FISCAL YEAR 1982 FOR PROJECTS ON THE ALABAMA-COOSA RIVER SYSTEM

1. Coosa-Alabama River Improvement Association, Inc., Montgomery, AL.
2. Governor's Office, State of Alabama, Montgomery, AL.
3. Alabama Development Office, State of Alabama, Montgomery, AL.
4. Department of Energy, State of Alabama, Montgomery, AL.
5. Mobile Area Chamber of Commerce, Mobile, AL.
6. Lt. Gen. Walter K. Wilson, Jr., (USA, Ret.), Mobile, AL.
7. Alabama Power Company, Birmingham, AL.
8. Ideal Basic Industries, Mobile, AL.
9. Warrior & Gulf Navigation Company, Chickasaw, AL.
10. Tenn-Tom Towing, Inc., Fairhope, AL.
11. Radcliff Materials, Inc., Mobile, AL.
12. International Paper Company, Mobile, AL.
13. Parker Towing Company, Inc., Tuscaloosa, AL.
14. Vulcan Materials Company, Birmingham, AL.
15. Mississippi Chemical Corporation, Yazoo City, AL.
16. Alabama River Pulp Company, Inc., Monroeville, AL.
17. Clarke County Commission, Grove Hill, AL.
18. Hammermill Papers Group, Riverdale Plant, Selma, AL.
19. Hardy-Heinz & Ellis, Insurance, Selma, AL.
20. DISCO Aluminum Products Company, Inc., Selma, AL.
21. The Selma Times-Journal, Selma, AL.
22. B. A. Reynolds, Dir. of Governmental Affairs & Community Relations, DISCO, Selma, AL.
23. Black Belt Tractor Company, Selma, AL.
24. Montgomery County Commission, Montgomery, AL.
25. City of Montgomery, Montgomery, AL.
26. Union Bank & Trust Company, Montgomery, AL.
27. Jim Inscoe Real Estate Agency and Insurance, Montgomery, AL.
28. Kinpak, Inc., Montgomery, AL.
29. City of Millbrook, AL.
30. Austin Apparel, Inc., Wetumpka, AL.
31. WETU Radio, Wetumpka, AL.
32. Coosa County Commission, Rockford, AL.
33. City of Childersburg, Childersburg, AL.
34. City of Talladega, Talladega, AL.
35. Monroe County Commission, Monroeville, AL.
36. Monroeville Area Chamber of Commerce, Monroeville, AL.
37. Gadsden Metro Chamber of Commerce, Gadsden, AL.
38. Etowah County Commission, Gadsden, AL.
39. The City of Gadsden, Alabama.
40. Etowah Expansion Association, Inc., Gadsden, AL.
41. St. Clair County Commission, Ashville, AL.
42. City of Pell City, Alabama.
43. Greater Pell City Chamber of Commerce, Pell City, AL.
44. Cherokee County Commission, Centre, AL.
45. Farmers & Merchants Bank, Centre, AL.
46. Floyd County Board of Commissioners, Rome, GA.
47. Rome City Commission, Rome, GA.
48. Rome & Floyd County, GA Industrial Development Commission, Rome, GA.
49. Rome News-Tribune, Rome, GA.
50. National City Bank of Rome, Rome, GA.
51. Willingham-Nelms Insurance Agency, Rome, GA.
52. Rome Area Chamber of Commerce, Rome, GA.
53. Rome Manufacturing Company, Rome, GA.
54. The May Realty Company, Inc., Rome, GA.
55. Southeastern Mills, Rome, GA.
56. First National Bank of Rome, Rome, GA.
57. Rome Bank and Trust Company, Rome, GA.
58. Goodyear Tire & Rubber Company, Gadsden, AL.
59. Citizens Federal, Rome, GA.
60. The Georgia State Bank, Rome, GA.
61. Home Federal Savings & Loan Association, Rome, GA.

ALABAMA COOSA RIVER SYSTEM
Congressman William L. Dickinson
Before The
House Committee on Appropriations
Subcommittee on Energy and Water Development
March 23, 1981

Mr. Chairman and Members of the Committee, thank you again for the priviledge of presenting my views to you regarding the development of the Alabama-Coosa River Waterway.

As you know, the state of Alabama is blessed with a great network of approximately 1,600 miles of navigable waterways. We need to continue the great work that the Congress has funded in the past that will in the futute connect all of those waterways with the Tennessee and the remainder of our inland waterway systems. I think it is noteworthy that the original budget needs for this project has been cut 24 percent to help accommadate President Reagan's spending cuts for the entire federal budget.

Specifically, I am before you today to recommend your approval of FY 1982 appropriations for the Alabama-Coosa river system that will continue ongoing work on that system. A study of the Coosa navigation project concludes that total benefits will far exceed total costs and that planning and construction on the Coosa River should go forward, to obtain the maximum benefit from the investment we already have in the system. The economic benefits of the Coosa Project clearly indicate that the sooner construction begins, the sooner the great economic and social benefits will be realized. Our near natural waterways, certainly including the Coosa, are the most energy efficient and least environmentally disruptive modes of transportation -- to the benefit not only of our nation, but to the entire nation.

As you know we now have a nine foot navigation channel open from Mobile to the lowermost Coosa River Dam, approximately 27 river miles above Montgomery. We have had commercial river traffic to Montgomery since the spring of 1972 when Jones Bluff Lock and Dam was opened.

Relatively small amounts of money are needed to carry forward the advanced engineering and design work now underway for the Coosa River Navigation Project. If this work stays on schedule construction can start in 1983.

The following requests for Fiscal year 1982 are shown by category and amount:

SURVEYS--A reservoir at Dalton, on the headwaters of the Coosa, would provide needed storage water to maintain navigation depths on the lower Alabama River. The Mobile Harbor must be prepared to take deep draft ships as soon as possible.

Dalton Lake, Dalton, Georgia	$700,000
Mobile Harbor Deepening	$700,000

ADVANCE ENGINEERING AND DESIGN--The Coosa Project will extend the navigation channel from Montgomery to Gadsden, and eventually to Rome, Georgia. Preconstruction planning has been underway since 1978 toward a start date of March 1983. This project is a solid investment in future productivity and economic progress.

Coosa River Navigation Project	$3,000,000

CONSTRUCTION--In recognition and support of the President's attempts to limit federal spending, construction of recreation facilities can be postponed. This reduces the amount requested (as compared with the original budget) by $4,889,000.

Allatoona Lake, Georgia	-0-
Jones Bluff Lock and Dam, Georgia	-0-

OPERATIONS AND MAINTENANCE--The first four projects involve navigation facilities. The funds requested are for the full capability of the Corps of Engineers to insure that these four energy efficient facilities are fully serviceable. Navigation is not involved directly at Allatoona and Carters Lake. The lessor amount for these last two projects (as compared with the original budget) is sufficient to operate and maintain these vital sources of hydro-electric power. This reduces the amount we would have requested for O&M by $2,857,000.

Alabama River, AL	4,673,000
Jones Bluff Lock & Dam, AL	3,615,000
Millers Ferry Lock & Dam, AL	5,569,000
Mobile Harbor	5,044,000
Allatoona Lake, Georgia	4,050,000
Carters Lake, Georgia	2,010,000

I would again like to use this opportunity to commend the excellent foresight, planning and work that has been carried on by the Corps of Engineers and the Coosa-Alabama River Improvement Association, Inc., chaired by my good friend, Dr. Robert F. Henry of Montgomery.

I earnestly urge the Committee to recommend this funding so that these important projects, which will one day greatly enhance the economy of our region and the entire nation, can continue.

#2

STATEMENT OF THE HONORABLE RICHARD C. SHELBY
BEFORE THE
HOUSE APPROPRIATIONS SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT
ON BEHALF OF THE COOSA-ALABAMA RIVER SYSTEM
MARCH 23, 1981

MR. CHAIRMAN, I AM GRATEFUL FOR THIS OPPORTUNITY TO APPEAR IN BEHALF OF THE ALABAMA-COOSA RIVER SYSTEM, A SYSTEM THAT HAS ALREADY MEANT MUCH TO THE GROWTH OF ALABAMA AND WILL CONTINUE TO BE ONE OF THE KEYS TO FUTURE ECONOMIC DEVELOPMENT OF THE STATE.

A TOTAL OF $24,961,000 IN OPERATION AND MAINTENANCE FUNDS HAS BEEN REQUESTED FOR FISCAL YEAR 1982 FOR UPKEEP AND IMPROVEMENT OF THE SYSTEM. THESE REQUESTS INCLUDE $4,673,000 FOR THE ALABAMA-COOSA RIVER SYSTEM AS A WHOLE, $3,615,000 FOR THE JONES BLUFF LOCK AND DAM, $5,569,000 FOR THE MILLERS FERRY LOCK AND DAM, $5,044,000 FOR THE MOBILE HARBOR, $4,050,000 FOR ALLATOONA LAKE AND $2,010,000 FOR THE CARTERS LAKE NAVIGATION PROJECT.

TWO SURVEYS, TOTALING $1.4 MILLION HAVE BEEN REQUESTED. THE FIRST SURVEY AT DALTON LAKE, DALTON, GEORGIA, ON THE HEADWATERS OF THE COOSA, WOULD PROVIDE INFORMATION ON NEEDED STORAGE WATER TO MAINTAIN NAVIGATION DEPTHS ON THE LOWER ALABAMA RIVER. THE SECOND SURVEY AT THE MOBILE HARBOR IS NEEDED TO SEE IF IT IS FEASIBLE TO TAKE DEEP DRAFT SHIPS.

THE AMOUNT REQUESTED TO CONTINUE ADVANCE ENGINEERING AND DESIGN ON THE COOSA RIVER NAVIGATION PROJECT IS $3 MILLION. TOTAL DEVELOPMENT OF THE COOSA RIVER TO ITS FULL NAVIGATIONAL

POSSIBILITY WILL BE A GREAT BOON TO THE STATE OF ALABAMA. PRECONSTRUCTION PLANNING HAS BEEN UNDERWAY SINCE 1978 TOWARD A START DATE OF MARCH, 1983. BY CONNECTING GADSDEN AND ROME, GEORGIA, WITH THE GULF OF MEXICO, IT IS PROJECTED THAT THE COMPLETION OF ALL PROJECTS CURRENTLY ON LINE WILL MAKE THIS WATERWAY OF SERVICE TO MORE THAN ONE-HALF OF ALABAMA'S CITIZENS DIRECTLY. THIS PROJECT IS A SOLID INVESTMENT IN FUTURE PRODUCTIVITY AND ECONOMIC PROGRESS.

RECOGNIZING AND SUPPORTING THE ATTEMPT TO LIMIT FEDERAL EXPENDITURES, NO FUNDING HAS BEEN REQUESTED FOR THE CONSTRUCTION OF RECREATION FACILITIES ON ALLATOONA LAKE IN GEORGIA AND THE JONES BLUFF LOCK AND DAM IN GEORGIA. THIS REDUCES THE AMOUNT THAT COULD HAVE BEEN REQUESTED, AS COMPARED WITH THE ORIGINAL BUDGET, BY $4,889,000.

I URGE YOU TO CONTINUE FUNDING AT THE FULLEST POSSIBLE EXTENT AND REMIND THE COMMITTEE THAT WATER NAVIGATION IS THE MOST ENERGY EFFICIENT MODE OF TRANSPORTATION IN A DAY AND AGE WHEN EFFICIENCY SHOULD BE OUR PRIMARY CONCERN.

AGAIN, MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE THIS DISTINGUISHED COMMITTEE ON BEHALF OF THE COOSA-ALABAMA RIVER SYSTEM.

THANK YOU.

STATE OF ALABAMA
GOVERNOR'S OFFICE
MONTGOMERY 36130

FOB JAMES
GOVERNOR

March 23, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Since becoming Governor of Alabama, I have seen the grass roots support in our state for maintaining the Alabama River navigation channel and extending that channel on to Gadsden, Alabama and eventually to Rome, Georgia. This waterway is not just important to our state but also to the region and nation as a whole. I have seen how our navigable waterways and the Port of Mobile are part and parcel of the greater national waterway system that is proving daily to be invaluable in our collective effort to beat the energy crunch and revitalize an economic and industrial base.

I fully support the recommendations of Chairman Robert F. Henry and the Coosa-Alabama River Improvement Association. They, like many other responsible citizens, have responded to the leadership of President Reagan and suggested ways that Federal expenditures on their part of the waterway system can be reduced. At the same time they have pointed up those facilities which must be maintained and improved if we are to continue the significant

returns now being received from this investment both Federal, State and private.

Extending the present navigation channel from Montgomery to Gadsden, and eventually to Rome, Georgia is a sound investment and has high priority in our plans for the future. We also join our friends in Georgia in supporting investigations of a new multi-purpose reservoir near Dalton, Georgia. This lake could provide reserve water for navigation and other downstream uses on the Coosa-Alabama River System. I also encourage the Corps of Engineers to continue the necessary activities needed for deepening of the ship channel in Mobile Harbor to 55 feet to accommodate deep draft shipping. The $24.9 million recommendation for Operations and Maintenance was carefully considered. Much of this expenditure for Operations and Maintenance is returned to the Federal Treasury through the sale of power from the four hydro-electric plants involved.

I was a businessman until I was elected Governor a little over two years ago; I know from experience that you must maintain your facilities and stick with your capital investment program if you are going to show a profit and maintain a viable operation. On our waterways the profits come in reduced freight rates, significant energy savings, and an economical way to move bulk materials without punishing our deteriorating highway and roadbed systems. The funds requested for Fiscal Year 1982 represent good sound business practice.

Sincerely,

Fob James

STATE OF ALABAMA
ALABAMA DEVELOPMENT OFFICE

FOB JAMES
GOVERNOR

REUBEN C. FINNEY
DIRECTOR

March 23, 1981

The Honorable
Tom Bevill
Chairman
House Subcommittee on
Appropriations for
Energy & Water Development
House of Representatives
Washington, DC 20515

Dear Congressman Bevill:

As director of the state agency charged by law with the development of Alabama's "human, economic and physical resources," I wish to reassert our unswerving support of the Coosa-Alabama River Improvement Association in its efforts to continue development of this vital southeastern waterway.

In view of the ever-worsening energy picture and our increasing dependence on imports of foreign petroleum products, I feel that immediate action is needed to make the Alabama and Coosa Rivers navigable from Rome, Georgia to the Gulf of Mexico. The significant energy savings to be realized by barge transportation in this region can only serve to enhance both industry and agriculture.

May I respectfully suggest that this waterway, when developed, will, through other waterways, connect this region with midwestern America as well as with South America and the world. This can only strengthen our nation.

In my opinion, waterways are among the most beneficial of all federal projects. This is because when the projects are completed and the public monies are all spent, the benefits to the people continue. How long have the Suez, Panama and Erie canals served mankind? Who can say with accuracy when the St. Lawrence Seaway will no longer serve the people of Canada and the United States? The development of the Alabama-Coosa system will surely benefit this country longer than any of us are capable of predicting.

During the period of national economic distress when the expenditure of every federal dollar must be carefully considered, I urge your committee to weigh the value of this project on the scales of long range benefits to the nation.

Sincerely,

Reuben C. Finney

Reuben C. Finney
Director

STATE OF ALABAMA
DEPARTMENT OF ENERGY
MONTGOMERY, ALABAMA 36130

FOB JAMES
GOVERNOR

JACK E. RAVAN
DIRECTOR

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

In Alabama we are keenly aware of the role the Alabama-Coosa waterway plays in easing the current energy problem. We are also aware of the potential of this river system once the navigation channel has been extended from Montgomery to Gadsden and Rome, GA. You and your committee members know the energy advantages of moving heavy cargo on a developed waterway and the valuable by-product of hydro-electric power.

As a staff agency of the State of Alabama, we join with the Coosa-Alabama River Improvement Association in their recommendation for Fiscal Year 1982 funding. For many years the Association has advocated improvement of the river in all its aspects. While a major emphasis has been on industrial development and extension of the navigation channel, the Association also reminds us of the obligation to maintain the facilities already in place. The $24.9 million recommended for Operations and Maintenance (O&M) includes elements of the waterway system from Mobile Harbor to the hydro-electric and reservoir storage facilities on the headwaters of the Coosa River in Georgia. I am reminded that the sale of power from the four hydro-electric facilities, Millers Ferry and Jones Bluff in Alabama and Allatoona and Carters Lake in Georgia, brought a direct return of $9 million to the Federal Treasury in FY 1980.

Extension of the navigation channel to Gadsden and eventually to Rome, GA, has high priority in Alabama. We urge appropriation of the $3.0 million needed by the U. S. Army Corps of Engineers to continue pre-construction planning for the Coosa River Navigation Project. Energy efficient water transportation will support and assist in expanding the industrial payrolls and job opportunities in Northeast Alabama.

Our Nation is fortunate that over the years the members of Congress have seen the value of investment in our waterway system. This investment is bringing important returns today. Mr. Chairman, the contribution of your subcommittee is greatly appreciated.

Sincerely,

Jack E. Ravan
Director

JER-r

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy
& Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

It is our request that you please recommend the Committee's approval for funding of the Coosa-Alabama Rivers development in the fiscal year of 1982 budget. The continued development of this important waterway is essential for Alabama's economic future, including the addition of new industries to provide jobs for our people. With the ever increasing energy crisis we also believe that it is vital to our national interest that hydropower and barge transportation be developed to the maximum extent. Barge transportation as we all know results in an increase in productivity in the transportation of bulk commodities and requires less fuel than other modes of transportation.

We particularly request your Committee's support for the funding of the Coosa River Navigation Project which funds are needed to maintain the schedule for commencement of construction in 1983. Since most of the waterway projects in Alabama flow to the port of Mobile, we also urge adequate funding for the authorization and initiation of deepening the Mobile Ship Channel from its present depth of 40' to 55' as recently recommended by the U. S. Army Corps of Engineers in their Feasibility Report on this project. The deepening of the Mobile Ship Channel is also a project of national interest and essential if our nation is to remain competitive in today's international market where larger vessels with deeper drafts are now commonplace.

Sincerely yours,

W. J. Hearin, President
Mobile Area Chamber of Commerce

WJH:sb
W. J. Hearin
PRESIDENT

Mobile Area Chamber of Commerce
P.O. Box 2187, Mobile, Alabama 36652, 205/433-6951

69 Kingsway
Mobile, AL 36608
March 23, 1981

Honorable Tom Bevill, Chairman
House Sub-Committee on Appropriations for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Last year in March, I forwarded to you, through the Coosa-Alabama River Improvement Association, Inc., a statement urging early initiation of construction of the Coosa River portion of the Coosa-Alabama River Navigation Project. I believe that my statement of last March is still germane, and I again urge early progress. But in view of the earnest efforts underway to turn the economy around, to subdue inflation, to pare government expenditures, and at the same time put more people to work, and furnish assistance by government to those unable to support themselves, I recognize that the Congress may find it necessary in view of the total picture to either delay initiating this project, or stretch out the program for the next few years or both.

However, I am sure that you will find, as you analyze the Coosa-Alabama River Project, that many of the goals of the project ultimately will support and reinforce the efforts mentioned above. I put my faith in the ability of the Congress to balance the pros and cons, to work out the timing and phasing, and before too long add the completed Coosa-Alabama River Project to the resources which make this Country the greatest in the World.

Sincerely yours,

Walter K. Wilson Jr.
Walter K. Wilson, Jr.
Lieutenant General, U. S. Army Retired
Consultant

sb
Enclosure : Letter of March 6, 1980

SOUTHERN INDUSTRIES CORPORATION
Post Office Box 1666 - Mobile, Alabama 36601

March 6, 1980

Honorable J. Bennett Johnson Jr.,
Chairman, Senate Subcommittee on Appropriations for Energy and Water Development
United States Senate
Washington, D.C. 20510

Dear Mr Chairman,

For many years I have watched development of the Alabama-Coosa River System and have participated in planning for and managing the construction of the major improvements since the late 1940's. Modern progress started with Federal construction of Allatoona Dam on the headwaters of the Coosa and was quickly reinforced private industry receiving permission from the Federal Government to develop major dams on the Coosa provided they would permit and facilitate development by the Federal Government of barge navigation through their power dams.

Since that step, the Federal Government has successfully developed the Alabama River, and provided for 9 foot navigation through Montgomery, and other Federal purposes, all beneficial to the State of Alabama, the region and the United States.

It is time to breach the Coosa dams and extend the 9 foot navigation capability Eastward to Gadsden and Northward to Rome Georgia. Study after study has validated the logic of this move. We should no longer delay, but promptly add the benefits of Coosa navigation and the impact this will have on use of the existing Alabama River development.

Particularly in this era of energy deficiency and of skyrocketing transportation costs, let us proceed to complete the whole Alabama Coosa River system.

Sincerely yours,
Walter L. Nelson Jr.
Lieutenant General, U.S. Army retired
Consultant

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 250-1000

G. Thornton Nelson
Vice President—Industrial Development

Alabama Power
the southern electric system

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I am Vice President of Alabama Power Company and Manager of Industrial Development with more than thirty years experience in industrial development work.

We continue to support the program of the Coosa-Alabama River Improvement Association toward making the Coosa River navigable from Montgomery, Alabama to Rome, Georgia through the construction of the necessary locks. In addition, to maintain a nine-foot draft on the Alabama River it is essential that necessary maintenance dredging be continued on a planned basis.

From the viewpoint of industrial development, a navigable Coosa River would provide sorely needed economic opportunities to the region since many companies would then be willing to consider the waterway as a location for an industrial facility. Fortunately there are many large tracts of land that qualify as good usable industrial sites on either side of the river that would have both barge and highway access.

Interstate 65 generally parallels the west bank of the Coosa from Wetumpka, Alabama to Calera, Alabama and Interstate 59 parallels the river from Springville, Alabama to just north of Gadsden, Alabama. Also, Interstate 20 crosses the Coosa at Riverside, Alabama. In addition, there are numerous major U.S. and State highways that provide access to the river. Rail lines are nearest the river on the west side and spurs can be extended for heavy industrial customers. Between Wetumpka and Gadsden, seven separate rail crossings provide additional access.

Providing navigation on the Coosa River should have an immediate positive effect on existing industries along the waterway. Some of the larger ones are Kimberly Clark at Coosa Pines and Goodyear and Republic Steel at Gadsden.

Consequently, we urge that funding for the Coosa River Navigation Project be continued so that construction can start in 1983, allowing the Coosa River Waterway to reach its potential.

Sincerely,

G T Nelson

G. T. Nelson

GTN/al

John C. Thomason
Assistant to the President
and Project Director

Ideal Basic Industries
Cement Division

576 Azalea Road—Suite 113
P.O. Box 9904
Mobile, Alabama 36609

205 661 1756

March 23, 1981

IDEAL

The Honorable Tom Bevill, Chairman
Subcommittee on Appropriations
for Energy & Water Development
U. S. House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

This statement is prepared pursuant to Appropriation subcommittee hearings for the fiscal year 1981 and, more specifically, in support of continued funding of the Coosa-Alabama River system for which testimony will be received on or about this date.

In substantiation of our interest in and dependency upon this waterway, Ideal Basic Industries is presently concluding construction of a $250 million cement plant south of Mobile and a $30 million supportive limestone quarry in Monroe County. Our plant is located in the Theodore Industrial Park (on the inland route of the Theodore ship channel, Mobile Harbor, some 12 miles south of Mobile) and is projected to be operational in June of this year. Our quarry (Marshall's Bluff, Mile 54, the Alabama River) is now in the start-up phase with limestone shipments in progress to the Theodore plant so as to build up a raw material stockpile. On an annual basis, our limestone shipments will approximate three million tons which is more than double that of currently prevailing traffic on the Alabama River.

The water link between Ideal's quarry and plant encompasses a distance of some 114 miles and includes segments of the Alabama and Mobile Rivers and Mobile Bay, approximately as follows: Alabama River, 53 miles; Mobile River, 45 miles; and, Mobile Bay, 16 miles. The Mobile River and Mobile Bay portions of this route pose no navigational problems for our company as these fall along a major traffic artery, maintained at authorized project depths on a year-round basis.

While the Alabama River has an authorized project depth of nine feet, and at this level would be sufficient for Ideal's barge movements of limestone from the quarry to the plant, this draft historically has been available to commercial traffic for only nine months of the year. In illustration, during the late summer and early fall, there typically is a 100 day period of "low water" when River depths are less than eight feet which, in turn, restricts usable barge drafts to about seven feet. Conversely, a "high water" period in the spring months produces swift currents on the River making navigation, with a loaded tow, difficult on several critical and narrow bends.

IDEAL

The Honorable Tom Bevill
March 23, 1981
Page Two

Ideal has committed to sizable capital and operating cost tradeoffs to become operational on the River in the near term, neither of which would have been necessary if the authorized project depth was available year round. Principal among these are: a Theodore plant design, incorporating a 400,000 ton (47 day supply) emergency limestone stockpile, to keep the plant operational during the seasonable low water period; and, the provision for a substantially larger marine flotilla (twenty barges and three towboats) than would be required were it not predictable that this fleet of vessels will be needed to sustain plant inventories during the months of September, October and November (i.e., our annual limestone movement could probably be accomplished with eighteen barges and two tugs at a nine foot draft, available over a full twelve month year).

The Corps' Mobile office is cognizant of the aforementioned problem facing commercial interests on the Alabama River and, within their discretionary authority, has instituted studies aimed at corrective alternatives. Possible short and intermediate term solutions being evaluated include: increased regulation of water discharges at the Claiborne Lock and Dam which should partially mitigate the seasonal low water problem; modified operational procedures for the Jones Bluff and Millers Ferry projects (up-river) to capture and harness all available water flows above Claiborne; and, additional dikes and "training" structures on the lower River to further confine water-flows, thereby increasing depths in critical reaches of the waterway.

Should these alternatives prove to be ineffective in solving this long standing problem on the Alabama River, the Corps has also indicated that it may be necessary to seek funding, in FY 1983 or FY 1984, so as to identify additional projects or authority needed from the Congress to increase the River's low-flows.

We respectfully request your concurrence and recommendation of funding being sought by the Coosa-Alabama River Improvement Association for the upcoming fiscal year.

Sincerely,

JCT

John C. Thomason
Assistant to the President
and Project Director

JCT/sat

WARRIOR & GULF NAVIGATION COMPANY

P. O. BOX 11397

CHICKASAW, ALABAMA 36611

N. J. BARCHIE, JR.
VICE PRESIDENT &
GENERAL MANAGER

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

Warrior & Gulf Navigation Company is the largest barge line operating in the State of Alabama. Our main office is located in Chickasaw, Alabama and we employ approximately 250 personnel. We presently operate 22 towboats and 270 barges both open and covered hopper types. As in the past, we again have been asked by the Coosa-Alabama River Improvement Association to express our view on continuing efforts to improve the Coosa-Alabama River System.

In 1980 we moved approximately 7.5 million tons of cargo of which 100,000 tons moved off the Coosa-Alabama River System. We are constantly receiving inquiries on movement of cargo off the Coosa-Alabama River System but we continue to be stymied in being competitive with other modes of transportation because of the widely fluctuating river stages and uncontrolled depths on the lower reaches of the Alabama River that restricts being able to load barges year round to an 8½ to 9 foot draft which is necessary to remain competitive with other modes. All other waterways within the state of Alabama and outside the state of Alabama allow for year round operation at 9 foot draft with some occasional exceptions.

The severity of the energy shortage in the world demands that wherever possible, conservation of energy is a must. It has been proven that water transportation is the most fuel efficient of all modes of transportation. In fact, studies show it is three times more efficient than railroads and ten times more efficient than trucks.

In closing, we feel it is evident that the area served by a practical year round navigable water system will reap benefits of commerce and trade that will far outweigh the cost of making needed improvements. We wholeheartedly endorse the funding requested for the Coosa-Alabama Waterway System in FY 1982.

Respectfully,

Nicholas J Barchie Jr

NJB/dej

POST OFFICE BOX 949
25 N. SECTION STREET
FAIRHOPE, ALA. 36532
TELEPHONE (205) 928-0230

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

At the request of Col. C. R. Carlson, Executive Vice President, Coosa-Alabama River Improvement Association, Inc., and as a member of this organization, we wholeheartedly support the Association's efforts to maintain and extend the Coosa-Alabama Waterway. We are presently using the waterway and have been transporting various products on the river for many years.

During the past twenty five (25) years, I have been associated with companies that have used the Waterway to transport sand, gravel, shell and petroleum products. At the present time we utilize the Waterway to transport petroleum products from the Gulf Coast area to one of the largest paper and pulp products plant in this area. During 1980 we moved approximately 100,000 tons of product to this industry.

Without the constant Operations and Maintenance, performed by the U. S. Corps of Engineers, we would not be able to supply our customer with the necessary fuel oils to keep their industry operating on a year-round basis. Only through proper maintenance and control of the Waterway will it be possible for the barge traffic industry to continue to be the most economical and energy efficient mode of transportation available today. It has been proven that the problems we face during both the low water season and high water season can be controlled, but the problems must be handled on a constant annual schedule.

Continued funding of this project can be put in proper perspective by comparing the Benefit/Cost ratio of 1.9 to 1 today, with the feasibility study of 1958, which reflected the anticipated B/C ratio of only 1.08 to 1. With the vital link of the Tenn-Tom Waterway System opening in 1985, the future for the Coosa-Alabama River and the development of the area it serves is unlimited.

We appreciate the opportunity of expressing our views on the Coosa-Alabama Waterway project and want to thank you for your cooperation in the past and continued interest for the future of the Waterway.

Yours very truly,

R A Guthans

R. A. Guthans
President

NWL/mmc

RADCLIFF MATERIALS, INC.
McDUFFIE ISLAND, MOBILE, ALABAMA 36601 POST OFFICE BOX 2068 PHONE 205-432-2651

READY - MIXED CONCRETE
RADMIX ASPHALT
SAND • GRAVEL
SHELLS • MORTAR
Radstone

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We respectfully request your consideration and approval of appropriations requested for the following fiscal year 1982. Operations and maintenance programs on the Coosa-Alabama River System:

Navigation channel maintenance - Alabama River
Operation and maintenance - Claiborne Lock and Dam
Operation and maintenance - Jones Bluff Lock and Dam
Operation and maintenance - Miller's Ferry Lock and Dam
Operation, maintenance and deepening - Mobile Harbor

Our company supports the testimony of the Coosa-Alabama Improvement Association and we join in the efforts of its membership to maintain and extend the waterway to make the benefits of low cost, energy efficient water transportation available to a broader economic base.

In the past year, Radcliff Materials, Inc., has invested nearly $12 million in new marine equipment for use on the Alabama River. This equipment consisting of 3 boats and 20 barges will be dedicated to transporting limestone raw material from a quarry site on the Alabama River near Monroeville, Alabama, to Ideal Basic Industries new cement plant at Theodore, Alabama. In addition, our company will invest another $6 million on new equipment this year to support our extensive sand and gravel operations on the Alabama River from Montgomery to Mobile, Alabama.

During the past year, low water conditions on the Alabama River, in the late summer, made navigation extremely hazardous and severely hampered our company's gravel operations. As a result,

RADCLIFF MATERIALS, INC.

we were forced to transfer our operations to an alternate site on the Tombigbee River. Should similar conditions occur again this year, it will not only severely affect our ability to deliver essential raw materials to Ideal's new cement plant, but also adversely affect other users of the river system. To avoid such a problem, we strongly urge your approval of the operation and maintenance budget to ensure that the Coosa-Alabama System will be available to offer its designed capabilities.

Your committee has always been most generous in its past considerations for projects in our area and we sincerely appreciate the committee's support of the great waterway systems of the State of Alabama.

Yours very truly

RADCLIFF MATERIALS, INC.

Carl A. Torbert, Jr.
President

/m

INTERNATIONAL PAPER COMPANY
P. O. BOX 1788, MOBILE, ALABAMA 36633

WOODLANDS & WOOD PRODUCTS OPERATIONS
REGION III

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

International Paper Company as a user of the Coosa-Alabama Waterway, is vitally concerned and dependant on subject waterway and joins wholeheartedly in the efforts of the Coosa-Alabama River Improvement Association, Inc., in its efforts to maintain and extend this waterway. The increased usage of the Coosa-Alabama Waterway coming on stream this year and firm plans for increased usage in the near term, clearly point to the confidence of industry as a whole in the importance of water transportation as the answer to cheaper, more energy efficient transportation, especially in the movement of bulk materials for conversion and manufacting.

Over the past several years, including 1980 we have averaged 250,000 to 300,000 tons of pulpwood and wood chips from points on the Alabama River. This not only represents a significant portion of our need to supply our mills but provides a market for pulpwood and chips purchased from independent wood suppliers, land owners and sawmills in the area.

Our company has operated its own tugs and a fleet of barges moving pulpwood from points on the lower Alabama River, including Claiborne and Dixie Landing, since the early 1930's. We now operate up the Alabama to a point above Millers Ferry Lock at Canton Bend, Alabama.

While our operations on the Alabama River are in the main satisfactory, we do have problems in seasons of extreme low water. We have shallow draft tugs and load our barges to six feet and under during low water. This, of course, affects our cost adversely, but perhaps more important are the delays and wear on the bottoms of the tugs and barges, when operation under these conditions. The nature of our operation are such that we must move our barges up and down this waterway every week throughout the year, as we are dependent on a constant supply of fiber for our mills. The sawmills and other suppliers are in turn dependent on a constant flow and market for their pulpwood and chips. Continued annual attention to shoaling and maintenance dredging is extremely important to operating conditions on this waterway as the Coosa-Alabama

is comparatively narrow requiring adequate channel depths across the entire channel in many places.

The continued improvment and extension of the Coosa-Alabama Waterway in addition to its importance to the growth and development of the adjacent counties and states directly involved transends into national importance in terms of the energy savings and our countries ability to compete in the export of manufactured products.

H. H. Knox
Supervisor Fiber/Transportation

HHK/aw

PARKER TOWING COMPANY, INC.
P. O. BOX 72 • TUSCALOOSA, ALABAMA 35402 • 205-349-1677

February 11, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
2305 Rayburn Building
Washington, D. C. 20515

Dear Congressman Bevill:

My name is Tim Parker, Jr., and I am Vice President of Parker Towing Company. We are a family owned and operated barge line that has moved barge traffic on the Coosa-Alabama for a number of years.

We believe that the Coosa-Alabama River Improvement Association is fulfilling a vital role in the economy of our state and we think the future of this waterway is excellent if it can continue to receive adequate funding.

Although we have moved dry bulk products on the Coosa-Alabama in the past, the bulk of our activity in 1980 was the movement of petroleum products. We averaged about one and one-half loadings (approximately 8,500 barrels of crude oil per loading) per month during 1980 and we anticipate at the very least the same schedule in 1981. The Coosa-Alabama River needs continued funding and support. We hope you will continue to fund the system at a level that will maintain an adequate channel and allow the Corps to make necessary improvements in the overall system.

Sincerely,

Tim Parker, Jr.
Tim Parker, Jr.

TPJ/i

Vulcan Materials Company
SOUTHERN DIVISION / P. O. BOX 7324-A • BIRMINGHAM, ALABAMA 35253

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Representative Bevill:

We strongly support the testimony of the Coosa-Alabama River Improvement Association. We feel that the water development from Rome, Georgia to Mobile, Alabama is vitally needed, not only for the economic benefits to the area involved, but also to take advantage of the more efficient barge transportation.

We feel that in these times of energy shortage and high-priced imported oil, we need to emphasize hydro-power plants. By taking advantage of our given resources, we can combine the benefits of water transportation and hydropower into one project. We feel that this project is an investment in the future prosperity of Alabama as well as the region and nation.

Sincerely,

Don L. Harrell, Jr.
Manager, Marketing
Administration & Analysis

DLH/el

Mississippi Chemical Corporation
We Make Things Grow
Post Office Box 388 · Yazoo City, Mississippi 39194 · Area Code (601) 746-4131 · Telex 58-5449

March 23, 1981

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We wish to voice our support for the Coosa-Alabama River Improvement Assn. in its efforts to maintain and upgrade conditions on the Alabama River. Please consider this letter as our testimony in a joint effort with other shippers and users, outlining Mississippi Chemical's dependence on this river system for the movement of its products.

Mississippi Chemical Corporation is a manufacturer and shipper of commercial fertilizers, with its plant located at Pascagoula, Mississippi on the Gulf Intracoastal Canal. Mississippi Chemical is a farmer-owned cooperative, with its production being for the use of its farmer owners.

In order to have fertilizers available for prompt service, in 1973 a 22,000 ton storage/distribution facility was established at Montgomery, Alabama on the Alabama River. A considerable freight savings is realized by being able to ship to this storage facility by barge as compared to other modes. These freight savings are passed on to the farmer-customers in the form of lower priced fertilizers.

Shipments through the Montgomery facility vary according to the conditions of the river and the availability of water for barge transportation. For the past six years, annual shipments have ranged from 30,000 tons to 43,000 tons. With year-round nine-foot navigation, this tonnage would be considerably higher.

A dependable supply and prompt delivery capabilities during the critical planting seasons is absolutely necessary, and without available navigation on the Alabama River, Mississippi Chemical as well as its thousands of farmer-stockholders would be severely hampered in the movement of its fertilizers. Mississippi Chemical is, therefore, vitally interested in the continued maintenance and improvements to the Alabama River. It is imperative that necessary monies be appropriated to maintain this valuable waterway, and your support and efforts in this regard are earnestly solicited.

Yours very truly,

James A. Pierce
Director of Transportation

JP/bs

ALABAMA RIVER PULP COMPANY INC.

P. O. Box 628
Monroeville, Alabama 36460
Phone: (205) 575-2000

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Sir:

Our Company is proud to participate in the efforts to improve the Coosa Alabama Waterway. As the Alabama River channel is improved, we will be expanding our barging operation as much as possible to achieve lower cost transportation for our outgoing product.

We produce bleached market kraft pulp, primarily for the export market. In 1980 we barged 22,638 gross short tons of pulp to the Port of Mobile. We estimate 160,000 gross short tons will be barged during 1981. In addition to barging pulp, we will begin barging fuels and raw materials. As estimation would be:

#6 Fuel Oil	- 200,000 barrels (42 gals/barrel)
Caustic Soda	- 35,000 tons
Sulfuric Acid	- 7,000 tons

As you can see by these figures, Alabama River Pulp will depend heavily on its barging operation. It is imperative that the channel be maintained at 9' on a constant basis.

We are very pleased to be located on the Alabama Waterway in Monroe County and look forward to the improvement of this vital waterway. We must all work together to conserve our energy resources in the most efficient manner possible.

Kind regards.

Yours very truly,

T.R. Tippy
Vice President

TRT/cb

cc: Mr. G. F. Landegger
Mr. George E. Boyhan
Hon. Otha Lee Biggs
Mr. C.R. Carlson
Dr. L. Terziotti

CLARKE COUNTY COMMISSION
COURTHOUSE
P.O. BOX 548
GROVE HILL, ALABAMA 36451
205/275-3507

Commissioners
Clarence Watters, District One
Penn Hall, Sr., District Two
Sam Shields, District Three
Thomas E. Deas, District Four

Fred L. Huggins
Judge of Probate and Chairman

John E. Adams, Sr.
Attorney

February 20, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The purpose of this letter is to re-affirm our long standing support of the waterway projects of the Coosa-Alabama River systems by the U. S. Corps of Engineers.

The Clarke County Commission and the citizens of Clarke County have long supported the navigation and related projects on the Alabama and Coosa Rivers. We again wish to re-new our plea to the U. S. Congress to provide funds for all Coosa-Alabama projects. We are particularly interested in seeing funds appropriated by Congress for advanced engineering and design on the Coosa River navigation project, and for operation and maintenance on the Alabama River.

We believe that waterway projects such as the Coosa-Alabama River projects are vital to the future of our country. These types of projects are not give-aways and handouts, but rather they are investments in America's future. We therefore, urge suitable and adequate appropriations for FY82 so these projects may continue on schedule.

Sincerely,

Fred L. Huggins
Fred L. Huggins
Judge of Probate and Chairman

FLH:et

Hammermill Papers Group

Division of Hammermill Paper Company
Riverdale Plant
Post Office Box 1409
Selma, Alabama 36701
205/872-3481
Osborne A. Marrow
Plant Manager

March 23, 1981.

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We heartily support the Coosa-Alabama River Improvement Association's position on this project.

We feel very strongly that the appropriations requested are vital for the continuing improvement of the entire Coosa-Alabama River System. The investment of these funds will further enhance the benefits from the large investments which have already been made in this project. It would seem just good business to complete projects which are already in progress, and which are needed for the prosperity of the regions affected.

The Coosa River Navigation Project money is needed to stay on schedule for the start of construction in 1983. The Alabama River money supports essential maintenance dredging, which is required to prevent delays. Money is needed for surveys: the deepening of Mobile Harbor and a multi-purpose dam at Dalton Lake, Georgia; for advanced engineering and design for the Coosa River Navigation Project; for construction of the Jones Bluff Reservoir Recreation Areas, and for dams and power plants.

Hydro-power and barge transportation are both vitally important during an energy crisis. Barge transportation will bring an increase in productivity, which is a requirement to fight inflation.

For these reasons, we earnestly submit that the appropriations requested are justifiable, and we urge your Committee's approval.

Respectfully yours,

O. A. Marrow

O. A. Marrow

OAM:fh

HARDY-HEINZ & ELLIS, INC.
INSURANCE

FRANK HARDY
CHRIS B. HEINZ
AUBREY D. ELLIS, JR

900 CHURCH STREET
P. O. BOX 883
SELMA, ALABAMA 36701
PHONE (205) 875-7261

February 9, 1981

Honorable Tom Bevill, Chairman
House, Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman:

We are again asking you for funds for construction, operations and maintenance on the greatest river system in our Nation, namely the Alabama-Coosa. This system was first promoted by our great Senator John Tyler Morgan in 1890. We know you, as another of our great, will continue to lend your support towards the completion.

This system, where completed, will give unbroken transportation to all parts of the World. It will save our natural resources which we know you are aware. We would like for it to go on record that we are in every way for this project.

With all good wishes, we are

Sincerely,

HARDY-HEINZ & ELLIS, INC.

By: Chris B. Heinz

CBH:ehi

DISCO Aluminum Products Company, Inc.

P.O. BOX 1019 • SELMA, ALABAMA 36701 • AREA CODE (205) 875-9283 • TWX: 810-744-3341

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

A delegation from the Coosa Alabama River Improvement Association is scheduled to appear before the House Subcommittee on Appropriations on Monday, March 23rd. They have carefully studied the amount of money being requested and have gone over these figures with the Corp of Engineers in Mobile. The Corp also approves that this amount of money is needed. We certainly hope that you and your committee will be able to approve these figures for us.

These monies will be needed for the Advance Engineering and Design of the Coosa Navigation Project and also for the surveys of deepening the Mobile Harbor and the multi-purpose dam at Dalton Lake, Georgia. The Coosa River Navigation Project money is needed to stay on schedule for the start of construction in 1983.

As you know, this project is an investment in the future prosperity of Alabama, the state and the entire nation. Hydro-power and barge transportation are vitally important during an energy crisis. Barge transportation brings an increase in productivity which is a requirement to fight inflation. It requires less fuel and less labor than other transportation modes.

The economic benefits of the Coosa Alabama Project have been clearly substantiated and the sooner construction starts, the sooner these benefits will be realized.

It is also good to point out that the waterways are the most energy efficient mode of transportation and the benefits are not only returned to the state but to the nation as a whole.

Yours Sincerely,

Bill Battle
President

/bp

The Selma Times-Journal ESTABLISHED 1827

Newspaper and Community - Partners in Progress

H. SHELTON PRINCE, JR.
President & Publisher

1018 Water Ave.
P.O. Box 611
SELMA, ALABAMA 36701
(205) 875-2110

March 23, 1981

Hon. Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Tom:

The purpose of this letter is to express to you my strongest support for the continued development of the Alabama and Coosa rivers.

A navigable waterway from Mobile, Ala., to Rome, Ga., would be, in my opinion, one of the greatest things to happen for the benefit of the people of this state and region. The development of these rivers, however, is going to take a great many dollars and the continued support of Congress for this project is essential.

Others will be testifying before you today on many of the specific needs so I won't attempt to go into that in this letter, but I want you to know that I personally support this project and I assure you that it is supported by the vast majority of the people in this region of the country.

Sincerely,

Shelton Prince

HSP/ra

DISCO Aluminum Products Company, Inc.

P. O. BOX 1019 • SELMA, ALABAMA 36701 • AREA CODE (205) 875-9283 • TWX 810-744-3341

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington ,D.C. 20515

Dear Congressman Bevill:

A delegation from the Coosa Alabama River Improvement Association is scheduled to appear before the House Sub-Committee on Appropriations on Monday, March 23, 1981. We respectfully request that you approve the amount of money requested by the Coosa Alabama River Improvement Association when they appear before you on this date. These amounts have been carefully studied and approved by the Corps of Engineers in Mobile. These monies will be needed for the Advanced Engineering and Design of the Coosa River Navigation Project, and also for the surveys of deepening the Mobile Harbor and the multi-purpose dam at Dalton Lake, Georgia. The Coosa River Navigation Project money is needed to stay on schedule for the start of construction in 1983.

As you know, this project is an investment in the future prosperity of Alabama, the region and the entire nation. Hydro-Power and barge transportation are both vitally important during an energy crisis. Barge transportation brings an increase in productivity which is a requirement to fight inflation. It requires less fuel and less labor than other transportation modes.

The economic benefits of the Coosa project have been clearly substantiated and the sooner construction starts the sooner these benefits will be realized. It is also good to point out that the waterways are the most energy efficient mode of transportation so the benefits are not only to our region but to the nation as a whole.

Yours sincerely,

Bernard Reynolds

B. A. Reynolds
Director of Governmental Affairs
and Community Relations

/bp

BLACK BELT TRACTOR COMPANY 2206 WATER AVENUE PHONE 874-4061 SELMA, ALABAMA 36701

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

If you will pardon the personal references, I should like to preface my requests to you by stating that I have been a farm equipment dealer in Selma, Alabama, Dallas County for over 30 years. I served as the initial chairman and later as a board member of the Craig Airport and Industrial Authority, fifteen years as president of the Selma City Council, and most recently, a year and a half as Mayor of the City of Selma. During most of this time, I served as an ex officio member of the Coosa-Alabama River Improvement Association, and as a board member for the past two years. The work of the Association has been an outstanding example of community leaders and their government counterparts working together to accomplish tremendous results and economic benefits for the entire Southeastern Area.

The Agricultural Revolution that accompanied the change from cotton to cattle, and then to soybeans in our area has demonstrated most vividly the need for timely, cheap water transportation to the port of Mobile. Rail transportation has often been unavailable when most vitally needed and very expensive.

The Airport Authority together with the City of Selma and Dallas County initiated a survey to determine the need for a local port. This study indicated that a port at Selma would greatly benefit not only the agricultural economy but would greatly enhance existing local industry and the development of the former Air Base to an Industrial Park. As a result, legislation has been proposed to allow these local groups to pursue this project, which is very depęndant on the continued development and support of the navigational requirements, including navigation depths of the river system.

We are also very supportive of the continued development of the Jones Bluff Reservoir Recreation Area which will greatly benefit the people of Dallas, Autauga, Lowndes, and Montgomery Counties.

Sincerely,

Carl Morgan, Jr.

A COUNTY OLDER THAN THE STATE

MACK MCWHORTER, CHAIRMAN

JOEL W. BARFOOT
FRANK A. BRAY
WILLIAM F. JOSEPH, JR.
JOHN F. KNIGHT, JR.

MONTGOMERY COUNTY COMMISSION
P. O. Box 1667
MONTGOMERY, ALABAMA 36192

ESTABLISHED 1819

H. W. SUDDATH, ADMINISTRATOR

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

The Montgomery County Commission continues to closely follow the development of the Coosa-Alabama River project which was originally authorized by the Congress in 1945. We believe that the benefits which accrue to the citizens of this region and to the nation fully justify the complete construction and operation of this economical waterway.

We need to continue the development of this project in order to maximize the benefits of the investment already made and to proceed toward achieving the full potential of the waterway system.

We fully support the testimony provided by the Coosa-Alabama River Improvement Association. For many years this group has represented us and they accurately reflect our feelings of support for this waterway project.

Of particular interest to us is the appropriations to support essential maintenance dredging in the Alabama River. These operation and maintenance funds should be adequate and timely so that we can avoid past problems we have had getting the dredging done soon enough during the year.

Also, we fully support the survey money being proposed to determine the feasibility of a new multi-purpose dam on the Conasauga River near Dalton, Georgia. Hopefully this project can be revised to include hydro-electric power and storage water to maintain navigational depths on the lower Alabama River.

We urge your favorable consideration of the recommended appropriations. Adequate funding as requested is necessary to ensure that progress is made for further development of the System and to properly operate and maintain the existing portion. Similar information has been sent to the Hon. Mark Hatfield, Chairman, Senate Subcommittee on Appropriations for Energy & Water Development, regarding this matter.

Sincerely yours,

Mack O. McWhorter

Mack O. McWhorter
Chairman

MOM/ck

cc: Mr. C. R. Carlson, Executive Vice-President
Coosa-Alabama River Improvement Assn., Inc.

City of MONTGOMERY Alabama

EMORY FOLMAR
Mayor

MONTGOMERY CITY COUNCIL

WILLIE D. PEAK, JR.-Pres.
LUTHER L. OLIVER-Pres. Pro tem
DONALD V. WATKINS
MARK GILMORE, JR.
LEWIS GOLSON
JOE L. REED
MRS. ALICE REYNOLDS
JOHN C. STARR, JR.
WILLIAM (BILL) NUNN, III

March 23, 1981

Honorable Tom Bevill
Chairman
Sub-committee on Appropriations
for Energy and Water Development
U. S. House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

On behalf of the City of Montgomery, I request your Sub-committee on Appropriations for Energy and Water Development consider favorably the Alabama-Coosa River System appropriation for Fiscal Year 1982. The Fiscal Year 1982 appropriation is necessary to insure programmed continuity for construction beginning in 1983.

While I support any and all efforts to reduce Federal spending, I would suggest to you and your committee that funding the Alabama-Coosa River System would be in order, consistent with other similar needs.

Your favorable action on these appropriations will be appreciated.

Sincerely,

Emory Folmar

Emory Folmar
Mayor

EMF/edm

P.O. BOX 1111, MONTGOMERY, ALABAMA 36192

UNION BANK & TRUST CO.
60 COMMERCE STREET
MONTGOMERY, ALABAMA
36104

HENRY A. LESLIE
PRESIDENT
CHIEF EXECUTIVE OFFICER

March 23, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Tom:

I am taking this opportunity to write to you in support for the testimony of the Coosa-Alabama River Improvement Association, Inc. I would like to be personally present but since I cannot, I did want to submit this statement on behalf of the aims and objectives of the Association.

There are a number of fine projects involved in the association's request for appropriations but I would like to mention the operation and maintenance on the Alabama River. This money will support essential maintenance dredging. I do consider that the Alabama River is really vital particularly in an energy conscious time because barge transportation is less expensive than other more conventional means of transportation. The barge transportation requires less fuel and less labor, consequently bringing about an increase in productivity. Also, the production of electric power from the various locks and dams on our river systems is extremely vital in this time of high fuel cost and inflation. Such production of electric power from our water resources is important at a time when we would of course like to get away from the use of oil in power plants, and conserve the use of coal. Oil is very expensive, coal is costly, but "water fuel" is free.

I hope that your committee will see fit to grant the request for appropriations and survey money by the Coosa-Alabama River Improvement Association, Inc.

Sincerely yours,

Henry A. Leslie
President

HAL/gb

JIM INSCOE
REAL ESTATE Agency AND INSURANCE

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Sir:

I regret I will not be able to personally attend your subcommittee hearings on Appropriations for Energy & Water Development. I do, however, wish to register my full support of the efforts of Coosa-Alabama River Improvement Association.

As a realtor, I have been able to see the economic improvement brought about by the development of the Coosa-Alabama system as far as Montgomery. In addition to the good things which have already taken place, there are many massive projects on the drawing boards which would not be possible without our river system.

I encourage your consideration of the Coosa River Navigation Project money which is needed to stay on schedule for the start of construction in 1983. This project is an investment in the future prosperity of Alabama, the Region and the Nation. As we face an energy crises in the United States, I think hydropower and barge transportation are vitally important for our future.

I send my best wishes for great success with your committee, and hope you will feel free to call on us whenever we may assist in any way.

Yours very truly,

Jim T. Inscoe

JTI/cb

HILL BUILDING
P. O. BOX 6001
MONTGOMERY, ALABAMA 36106
(205) 263-5714

KINPAK, INC.
2780 GUNTER PARK DRIVE, EAST • MONTGOMERY, ALABAMA 36109 • (205) 279-6550

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
For Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

Water transportation of finished goods and raw materials is achieving a role of greater importance as energy costs escalate upward. In fact, for some businesses water transportation is no longer just an attractive alternative to other transportation modes, but an absolute necessity if those businesses are to maintain a competitive position. Kinpak's venture is one that probably would not be viable without the excellent economies of water transportation. We at Kinpak recognize the vital importance of the Alabama River to the success of our enterprise and to the economic growth of the southeast region served by the river. Accordingly, we fully endorse the efforts and activities of the Coosa-Alabama River Improvement Association, Inc.

Kinpak began operating in Montgomery, Alabama in May of 1980 as a contract packager of antifreeze. During our start-up year of 1980, Kinpak received three barge movements, totalling about 900,000 gallons of ethylene glycol, the major ingredient of antifreeze. The glycol is shipped from petrochemical plants along the Louisiana-Texas gulf coast. In 1981, we are forecasting our ethylene glycol receipt to increase to 3,000,000 gallons or an equivalent of ten barge movements. The glycol is transferred from the barge into Kinpak's 1,200,000 gallon capacity bulk storage terminal which is located at the Alabama State Dock in Montgomery.

Our experience using the Alabama River has been favorable for the most part. We did encounter a significant delay and increased costs for the movement of one of our barges during August of 1980. Typically the transit time for a barge is about four days. The heavy 1980 spring rains caused shoaling which was aggravated by the summer drought's low water. The shoaling interrupted traffic at the river's low point, just downstream from Claiborne Lock and Dam, and delayed the barge for four days thus doubling the normal transit time. To realize the most efficient use of the river, it is important to all shippers that the working draft of the river be maintained at 9 feet. Kinpak is also hopeful that the river traffic expands in comming years, so our barge movements can be combined with the movements of other river users. This would permit the sharing of tow costs and a reduction in the unit cost for river transportation.

Individual consumers and business entities alike are engaged in a struggle against inflation. Because water transportation offers an opportunity to control rising shipping costs, everyone's interest is served by the Coosa-Alabama River Improvement Association, Inc.

Respectfully yours,

KINPAK, INC.

Craig L. Goodwin

Craig L. Goodwin
President

CLG/cab

City of Millbrook
P. O. BOX C
MILLBROOK, ALABAMA 36054

MAYOR
L. REGINALD MINTER

COUNCILMEN
MOSE ABRAM
ED ESSEX
RICHARD LONG
RALPH HULL
JOHN PRESLEY

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives

Dear Mr. Bevill:

We fully support Association testimony in Congressional Hearings and assure you that development and improvement of the waterway of the Coosa-Alabama River Improvement Association has citizen support in our area as well.

We would like to emphasize the operation and maintenance (O&M) for the Alabama River, Allatoona Lake and Carters Lake hydro-power plants and the Jones Bluff and Millers Ferry locks, dams and power plants.

There is no question but that the Alabama River money supports essential maintenance dredging; we know that problems arose last year getting the dredging done soon enough which caused many delays and partially loaded barges.

Yours very truly,

CITY OF MILLBROOK

L. Reginald Minter

L. Reginald Minter
Mayor

AUSTIN
APPAREL, INC.

POST OFFICE BOX 613
WETUMPKA, ALABAMA 36092

March 23,1981

Honorable Tom Bevill
House Subcommittee on Appropriations
for Energy & Water Development
House Of Representatives
Washington,D.C.

Dear Congressman Bevill:

I first want to express my thanks to you for giving The Coosa-Alabama River Delegation an opportunity to appear befor your Subcommittee on March 23rd. As you know this development was approved by Congress in 1945. At this time there were many who proclaimed this river system one of the greatest undeveloped systems in our nation. For ten years this projects remained dormant.In 1955 the Coosa-Alabama River Association was organized by a group of menwho could foresee the benefits which would come with this development.

For twenty five years we have appeared before the house Subcommittee on Appropriations for energy and water development.With the help from the U.S. Corps Of Engineers and our Congressmen,barges are now moving up and down the river from Mobile to Montgomery.Now more than ever we need this system completed. With the energy crisis facing us today we should exert every effort to make use of our great river system.

There are many other advantages which will come with the opening of the Coosa-Alabama River. It will mean more jobs,flood control,irrigation and recreational areas. In addition to these it will bring more industrial plants into our area.

Thank you again for giving us the priviledge of appearing before you on March 23rd. I know you and the members of your Subcommittee will help us to secure the funds which we are asking for.

Sincerely,

Ellis Austin

EA/tm

WETU 1250 ON YOUR DIAL

"All American Country Radio"

P. O. BOX 60
WETUMPKA, ALABAMA 36092
Area Code 205 / 567-4351

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Re: Coosa-Alabama Improvement Association, Inc.

Dear Tom,

Long time no see, however, Betty and I have been following your accomplishments and wish you continued success.

This nation needs your kind of dedicated leadership and we give daily thanks for you and your colleagues, who are devoted to providing the "Good Life" to all citizens of the United States.

Tom, I am a member of the Coosa-Alabama Improvement Association, Inc. and would appreciate your consideration concerning these points:

A. Survey money to determine feasibility of the new multi-purpose dam on the Conasauga River in the Dalton, Georgia area.

B. Funds to insure the Coosa River Navigation Project to stay on schedule.

C. Funds to support dredging of the Alabama River.

D. The energy crisis can be releived with hydro-power and barge transportation.

E. Barge transportation equals more productivity and requires less fuel.

Thanks for your personal commitment to supporting programs which will concern and develope our national resources and at the same time promote a better way of life.

Accept my best wishes for you and your staff and call whenever I may be of service.

"Best of Luck"

Martin

Martin J. Darity
President & General Manager

MJD:kh

Coosa County Commission
POST OFFICE BOX 5
ROCKFORD, ALABAMA 35136

JASPER FIELDING, CHAIRMAN
PHONE 377-4919

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Honorable Bevill:

The Coosa County Commission would like to take this opportunity to show it's support for the Coosa River Navigation Project.

Coosa County is a rural county with timber growing as it's main industry. Coosa County roads are inadequate to handle the heavy traffic and transportation needs.

The opening of the Coosa River for hauling and transportation will create many jobs in wood related industries.

The Coosa-Alabama River Improvement Association, Inc., has done an outstanding job in supporting and seeking funds for this much deserved project and the Coosa County Commission wholeheartly endorses their efforts as they lead us in this matter.

Your support in this matter will be greatly appreciated.

Sincerely,

Jasper Fielding

Jasper Fielding, Chairman
Coosa County Commission

JF/sma

City of Childersburg

February 13, 1981

COUNCIL MEMBERS
WILLIAM HILL
STEVEN MAHAFFEY
B. J. MEEKS
BILL MORGAN
RONALD SHOEMAKER

DR. IVAN R. SMITH
MAYOR

WARD A. ROGNELSON, SR.
CITY CLERK-TREASURER

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

We understand that appropriations for the Coosa-Alabama River System will be heard by your committee on Monday, March 23, 1981 and we wish to express our support for this waterway which is vital to the ecomonic growth of this area.

We feel that the planning and construction should be continued and assure you that the development of this waterway has citizen support.

Sincerely,

Ivan R. Smith
Mayor

IRS/eh

118 SIXTH AVENUE, S.W. • CHILDERSBURG, ALABAMA 35044 • PHONE (205)378-5521/378-5522

City of Talladega
LARRY H. BARTON, MAYOR

P. O. BOX 498
TALLADEGA, ALABAMA 35160
OFFICE (205) 362-8775
RES. (205) 362-7821

February 12, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, DC 20515

Dear Congressman Bevill:

Let me take this opportunity to let you know that our views concerning the Coosa River Navigation Project have not changed, and we feel this project is most needed and will be of great importance to all areas that will be affected. In this time of inflation, I feel a more urgent need than ever before for funding and completion of this project. I urge you to support this project.

Sincerely,

Larry H. Barton
Mayor

LHB/bn

MONROE COUNTY COMMISSION

MEMBERS

JERALD R. JORDAN
Place 1, District 1

ANNA RUTH MELTON
Clerk

Monroe County
JUDGE OTHA LEE BIGGS, President
Monroeville, Alabama 36460

ALLEN BIGGS
Acting County Engineer

March 23, 1981

MEMBERS

F. P. WILLIAMS
Place 3, District 1

F. S. STEELE
Place 4, District 2

DR. W. H. HINES
Purchasing Agent

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Monroe County Commission of Monroe County, Alabama, respectfully requests that the budget amounts as requested to continue the development of the Coosa-Alabama Rivers projects be approved.

The development of the Coosa-Alabama is already attracting industry creating many needed job opportunities in Alabama. But, the full economic impact will not be achieved until navigation is completed from Rome, Georgia to Mobile, Alabama. Two industries in Monroe County, Alabama, (the location of the Claiborne Lock and Dam) are dependent on barge transportation and maintenance dredging is essential to keep the navigation open for barging during low water months. Alabama River Pulp, Inc., barges pulp to the port of Mobile for export and Ideal Basics, Inc., has begun barging limestone from the quary site in Monroe County, Alabama to its new $276 million dollar cement plant at Theodore, Alabama, and will be barging 2,700,000 tons of limestone annually to support this new plant facility. Barge transportation brings an increase in productivity, which is a requirement to fight inflation, requiring less fuel and less labor than other transportation modes.

In addition to money requests for the Alabama River section of this waterway system, funding requests for the Coosa River Navigation Project is needed to stay on schedule for start of construction in 1983. This project is an investment in the future prosperity of Alabama, the Region, and the Nation.

Respectfully submitted,

MONROE COUNTY COMMISSION
MONROE COUNTY ALABAMA

By Otha Lee Biggs
President

Monroeville Area Chamber of Commerce

Old Courthouse
P. O. Box 214
Monroeville, AL 36460
Phone (205) 743-2879

March 11, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill,

The Monroeville Chamber of Commerce of the City of Monroeville, Alabama requests that the budget amounts, as requested to continue the development of the Coosa-Alabama River project, be approved.

The City of Monroeville and Monroe County has benefited greatly from the two industries located on the river, and we feel that their further development will be to the great advantage of this county and the state. We, in Monroe County, feel that we have a very real stake in the future of Alabama, and we also feel that we have a lot to offer as far as development is concerned.

Our Chamber of Commerce is very active, and we stand ready to support this project in every way. Please call on us for information and help.

Yours truly,

Anne W. Farish

Anne H. Farish, President
Monroeville Chamber of Commerce

"The Hub of Southwest Alabama"

GADSDEN Metro Chamber of Commerce GADSDEN Metro Chamber of Commerce GADSDEN Metro Chamber of Commerce GADSDEN Metro Chamber of Commerce GADSDEN Metro Chamber of Commerce GADSDEN

March 23, 1981

Honorable Tom Bevill
Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

On behalf of over 700 business and industrial members of the Gadsden Metro Chamber of Commerce, we strongly urge and support the appropriation of $3 million to continue the pre-construction planning for the Coosa River Navigation project; $700,000 for studies to investigate deepening the Mobile Harbor channel to 55 feet and $700,000 to study the feasibility of a new multipurpose dam on the headwaters of the Coosa River near Dalton, Georgia.

In addition, we urge approval of a total of $24,961,000 in operations and maintenance funds for six projects: Alabama River ($4,673,000), Jones Bluff Lock and Dam ($3,615,000), Millers Ferry Lock and Dam ($5,569,000), Mobile Harbor ($5,044,000), Allatoona Lake, Georgia ($4,050,000) and Carters Lake, Georgia ($2,010,000).

As you know, economic evaluations requested by the Congress and completed by the U.S. Army Corps of Engineers have justified the development of the Coosa River, and the requested appropriation is warranted. Under the Water Resources Act of 1976 and the criteria established, the Coosa River project is very feasible on the basis of the cost-benefit ratio, and the Chamber enthusiastically endorses that these advanced engineering and design studies be completed.

The Chamber applauds the desire of Congress to continue the development of the economic potential of our waterways and endorse the use of strict criteria and a businesslike approach to justify the development of water resources. The Coosa River project meets the standards and criteria of all existing laws and regulations and we encourage its development.

On behalf of the Gadsden Metro Chamber of Commerce, we look forward to your approval of the requested appropriations.

With best regards, I am,

Sincerely,

Tommy Ford

Tommy Ford
Director of Development

400 Walnut Street / P.O. Box 185 / Gadsden, AL 35902 / (205) 543-3472

ETOWAH COUNTY COMMISSION
GADSDEN, ALABAMA 35901
TELEPHONE 205/546-2821

ROBERT (BOOLEY) HITT
CHAIRMAN
JESSE MARTIN
CHIEF CLERK

ASSOCIATE MEMBERS
WENDELL BRYANT DIST 1
CURTIS O DELL DIST 2
LEE WOFFORD DIST 3
FLOYD STANLEY DIST 4

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

As Chairman of the Etowah County Commission, I would like to express my wholehearted support on the upcoming appropriations request for the Coosa Alabama River Project.

I strongly urge and support the appropriation of $3 million to continue the pre-construction planning for the project; $700,000 for studies to investigate deepening the Mobile Harbor Channel to 55 feet and $700,000 to study the feasibility of a new multipurpose dam on the headwaters of the Coosa River near Dalton, Ga.

In addition, the Commission urges approval of a total $24,961,000 in Operations and Maintenance funds for six projects: Alabama River ($4,673,000), Jones Bluff Lock and Dam ($3,615,000), Millers Ferry Lock and Dam ($5,569,000), Mobile Harbor ($5,044,000), Allatoona Lake, Ga. ($4,050,000) and Carters Lake, Ga. ($2,010,000).

It is my opinion that hundreds of industries located along these waterways could benefit tremendously should this river become navigable.

I would like to commend the efforts of Congress to continue this development and further look forward to your approval of the requested appropriations.

Sincerely,

Robert V. Hitt, Chairman
Etowah County Commission

RVH:ab

the City of Gadsden
BOX 267 / 35999 ALABAMA

STEVE MEANS Mayor
GEORGE SIZEMORE Commissioner
TONY REYNOLDS Commissioner

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

On behalf of the City of Gadsden, we would like to request your support of the upcoming appropriation hearings for the Coosa-Alabama river project. We feel that this will benefit all local industries and that it will encourage new industries to locate on the Coosa when it becomes navigable.

Thank you for your efforts in this most deserving project.

Sincerely,

Steve Means

Steve Means, Mayor

George Sizemore

George Sizemore, Commissioner

Tony Reynolds

Tony Reynolds, Commissioner

kb

ETOWAH EXPANSION ASSOCIATION, INC.
P.O. Box 271 - 400 Walnut St. Gadsden, AL 35902 (205) 543-9423

March 23, 1981

Honorable Tom Bevill
Chairman
House Subcommittee on Appropriations
for Energy and Water Resources
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Etowah Expansion Association, as this metropolitan area's economic development agency, wholeheartedly supports the upcoming appropriations request for the Coosa-Alabama River project.

It has already been determined that anticipated project benefits exceed total costs by a significant amount. Moreover, literally hundreds of industries proximate to the Coosa River could benefit from its navigability. Equally as important, new industrial development resulting from this project could have the effect of improving its cost/benefit ratio to an even greater extent.

In our estimation, it is imperative that the Coosa-Alabama River System be continually improved on a businesslike basis to obtain maximum benefits from the investment already made, and from investments to accrue in the future.

Very truly yours,

Michael B. McCain

Michael B. McCain
Executive Director

MBM:pc

RESOLUTION

WHEREAS, the St. Clair County Commission met in regular session the 24th day of February, 1981, at 9:00 A.M. in Pell City, Alabama, and having under discussion appropriations to be requested for the fiscal year 1982 for the Alabama-Coosa River System; and

WHEREAS, the Coosa River Navigation Project money is needed to stay on schedule for start of construction in 1983, which is an investment in the future prosperity of Alabama, the Region and the Nation; and

WHEREAS, hydropower and barge transportation are both vitally important during an energy crises, as barge transportation brings an increase in productivity - a requirement to fight inflation, and also requires less fuel and less labor than other transportation modes;

NOW THEREFORE BE IT RESOLVED by the St. Clair County Commission that the Commission supports Coosa-Alabama River Improvement Association, Inc. testimony to be given before the Congress of the Unites States, through its Sub-Committees on Appropriations for Public Works, and is hereby requesting appropriate funds for the following projects:

Surveys - Deepening Mobile Harbor and multi-purpose dam at Dalton Lake, GA
Advanced Engineering & Design - Coosa River Navigation Project
Construction - Jones Bluff Reservoir Recreation Areas
Operation & Maintenance - Alabama River, Allatoona Lake and Carters Lake hydro-power plants and the Jones Bluff and Millers Ferry locks, dams and power plants.

Adopted this 24 day of February, 1981.

ST. CLAIR COUNTY COMMISSION

James H McCleadon

Bill Franklin

M B Ferguson

Paul Manning

James E Ingram

CITY OF PELL CITY

1905 FIRST AVENUE NORTH
PELL CITY, ALABAMA 35125

HUGH H. WILLIAMSON
Mayor

BILLY L. CHURCH
City Attorney

BETTIE SCOTT
Clerk

March 23, 1981

COUNCILMEN
BARNETT LAWLEY
CHARLES LOCKRIDGE
KEITH PORTER
PAUL TURNER
FOREST WALLS

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We urge your favorable consideration of the testimony of the Coosa-Alabama River Improvement Association which the City of Pell City strongly supports.

Pell City is particularly concerned over the continued development of the Coosa River for navigation. This years budget request is for the Advanced Engineering and Design of the Coosa River navigation project. Through the years we have supported the development of the Alabama River since we realized that the project must of necessity start in the lower part of the system and gradually work up the river system to be benefical to our area. Money for the project is necessary to stay on schedule for the start of construction in 1983. This project is an investment in the future prosperity of Pell City, St. Clair County, the State of Alabama, the Southeast Region and the Nation.

Development of the river for hydropower and for barge transportation are both vitally important during our energy crisis. Barge transportation brings an increase in productivity; which is a requirement to fight inflation as it requires less fuel and less labor than other transportation modes.

We know that you are aware of the value this project to the future growth and development of our city and this area and request your assistance in the continuation on this worthwhile project.

Sincerely,

Hugh H. Williamson

Hugh H. Williamson, Mayor
City of Pell City, Alabama

GREATER PELL CITY
Chamber of Commerce

GATEWAY TO
LOGAN MARTIN LAKE

1905 1st AVENUE NORTH
PELL CITY, ALABAMA 35125
AREA CODE 205-338-3377

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

RESOLUTION
OF
GREATER PELL CITY CHAMBER OF COMMERCE

At the regular meeting of the Board of Directors of the Greater Pell City Chamber of Commerce, on February 12, 1981 the following Resolution was unanimously adopted and approved:

RESOLUTION

WHEREAS, The Greater Pell City Chamber of Commerce is vitally interested in the development of the Alabama-Coosa River System, and;

WHEREAS, The Greater Pell City Chamber of Commerce has been requested to submit written testimony for the Congressional Hearings before the Appropriations Subcommittees of the House of Representatives and the U.S. Senate to be held on March 23, 1981, and;

WHEREAS, The Greater Pell City Chamber of Commerce desires, to submit such written testimony, it is, therefore;

RESOLVED that directors, Keith Porter and Barnett Lawley, are, hereby authorized by the Board of Directors of The Greater Pell City Chamber of Commerce to submit written and verbal testimony expressing the Boards endorsement and support for the development of the Alabama-Coosa River System to the Appropriations Subcommittees of the House of Representatives and the U.S. Senate, and that the Greater Pell City Chamber of Commerce endorses this development in the belief it will contribute to the economic growth of Pell City, of Alabama, and of the United States.

John M. Thomas

Mr. John M. Thomas
President
The Greater Pell City Chamber of Commerce

CHEROKEE COUNTY COMMISSION

REGULAR MEETING 2nd & 4th MONDAY
CHEROKEE COUNTY COURTHOUSE ANNEX
205-927-3668
CENTRE, ALABAMA 35960

TOM WADE HAMPTON
President

MEMBERS
C. D. JORDAN, Dist. 1
HAROLD DAY, Dist. 2
C. L. ST. CLAIR, JR., Dist. 3
SIDNEY E. DAVIS, Dist. 4

CAROLYN SMITH, Chief Clerk
BARBARA O'NEAL, Clerk
MIKE NAUGHER, County Planner
AL SHUMAKER, County Attorney

March 3, 1981

Honorable Tom Bevill, Chairman
House Sub-Committee on Appropriation
on Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The Cherokee County Commission would like to request the Alabama Coosa River Navigation Project be given your every consideration. We are a strong agricultural and coal mining region and would definitely benefit from this project.

Thanking you in advance for your cooperation, I am,

Sincerely yours,

Tom Wade Hampton

Tom Wade Hampton
President
Cherokee County Commission

TWH/bb

Equal Opportunity Employer

77-001 O - 81 - (Part 9) - 8

Farmers & Merchants Bank
POST OFFICE BOX 220 - CENTRE, ALABAMA 35960
MRS. MARY GEORGE JORDAN WAITE, Chairman and President
205 - 927 - 3691

March 23, 1981

The Honorable Tom Bevill
Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

This letter is to respectfully request your consideration in supporting the budget requests for the Coosa-Alabama River Improvement. There are some specific needs in making the Coosa-Alabama Rivers navigable from Rome, Georgia to the Port of Mobile.

We also support survey money which was formally called general investigations to determine the feasibility of a new multi-purpose dam on the Conasauga River near Dalton, Georgia.

A. Our Coosa River Navigation Project money is needed in order to stay on schedule for beginning construction in 1983. Our county considers this a real investment in the future prosperity of Alabama, the entire Southeast Region, and our Nation.

B. The Alabama River money supports essential maintenance dredging.

C. Hydropower and barge transportation can provide real important energy during the energy crisis that we are all experiencing.

D. Productivity can be increased with barge transportation which we feel would help to fight inflation, less fuel and less labor are used for barge transportation than for any other transportation modes.

Being in the banking business, I feel strongly that the continued development of the Coosa-Alabama's waterway system would be an economic boost, would help lower costs, would provide job opportunities for our people, and would be an overall incentive for growth and progress.

Sincerely,

Mary George

(Mrs.) Mary George Jordan Waite
Chairman, President, and CEO
Vice President, Coosa-Alabama
River Improvement Association

The Heart of Gold
MEMBER FDIC

Floyd County
Post Office Box 946
Rome, Georgia 30161
404/291-9251

ANNE RIGAS
Chairman
C.T. "Buddy" BLANKENSHIP
Vice Chairman
GLENN JOHNSON
CHARLES PARKER
HOWARD SMITH

RICHARD L. McCULLOUGH
County Manager
SUE BROOME
Deputy Clerk

March 17, 1981

The Honorable Tom Bevill, Chairman
House Appropriations Sub-Committee on
Energy and Water Development

Dear Chairman Bevill:

The Board of Commissioners of Floyd County, Georgia wishes to express its wholehearted support for the objectives of the Coosa-Alabama River Improvement Association.

The Coosa River Navigation Project is of particular concern and we urge your favorable consideration of the U. S. Army Corps of Engineers fiscal '82 appropriation of Three Million dollars earmarked for this project.

The total O & M Appropriation for six important elements of the Coosa-Alabama River System is $24.9 million. Four of these elements include hydroelectric generating facilities.

The dollars appropriated to the Coosa-Alabama system represents a sound investment in this region and will pay liberal dividends in the future.

Your sub-committee's support of the '82 appropriations for the Coosa-Alabama system will be greatly appreciated.

Respectfully,

Anne Rigas

ANNE RIGAS, CHAIRMAN
FLOYD COUNTY BOARD OF COMMISSIONERS

AR:sp

Rome City Commission

COMMISSIONERS

TOM CALDWELL, CHAIRMAN
JERRY DUNWOODY
CHAIRMAN PRO TEM
WALLACE HANSON
JAMES H. HARRINGTON
GEORGE PULLEN
NAPOLEON FIELDER
MARTHA KENNEDY
MARTIN H. MITCHELL
LEON WADE

March 13, 1981

AL CRACE
CITY MANAGER
BRANSON GAYLER
CITY CLERK
P. O. BOX 1433
ROME, GEORGIA 30161

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Re: Coosa-Alabama River Improvement Projects

Dear Chairman Bevill:

On behalf of the citizens of Rome, Georgia and its citizens, we would like to file the following statement of support.

We believe that water based transportation is an essential and integral part of the national transportation system. It will have an increasing significance in future years because it requires less fuel and less labor per ton-mile when compared to other transportation modes. Additionally, major benefits such as hydroelectric power, stream level stabilization and water supply are highly important to the future of our community.

It is our view that these projects are not an expense to this nation. They are an investment in our economic development and future.

Therefore we would like to state our support for the following activities in the Coosa-Alabama River area.

SURVEYS: The multipurpose dam at Dalton Lake, Georgia and the deepening of Mobile Harbour need to proceed.

ADVANCED ENGINEERING AND DESIGN: The Coosa River Navigation Project cannot move forward without authorization for this task.

CONSTRUCTION: Jones' Bluff Reservoir Recreation Areas are ready to proceed.

OPERATION AND MAINTENANCE: Allatoona Lake, Carters Lake Hydropower Plants,

Jones' Bluff and Miller's Ferry locks and dams and power plants all need continuing operation and maintenance assistance.

DALTON LAKE: The City of Rome supports survey money for the proposed multi-purpose dam on the Conasauga River near Dalton. Stream stabilization is one of our primary concerns as well as hydroelectric power generation for this proposed facility.

We are particularly concerned that the Coosa River Navigation Project stay on schedule for the proposed start of construction in 1983

Additionally, maintenance dredging for the Alabama River needs further attention. Because of delays in 1980, operations of various barge traffic was delayed.

On behalf of the citizens of Rome we wish to thank you in advance for your consideration of the above matters.

Respectfully submitted:

ROME CITY COMMISSION

Tom Caldwell

Tom Caldwell
Chairman

TC:fd

Rome & Floyd County, Georgia
Industrial Development Commission

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

The Rome/Floyd County Industrial Development Commission recognizes the tremendous economic benefit for the Rome-Floyd County area that would result from the completion of the Coosa-Alabama Navigation Project from Mobile, Alabama to Rome, Georgia. We urge you and your sub-committee to support and continue the funding for this vital project. Please proceed with the engineering and design work for the Gadsden, Alabama to Rome, Georgia section of this project.

We, here in Rome, feel that this project is essential for the Rome area to realize its full development potential.

Thank you for your continued cooperation and support.

Sincerely,

M. Wayne Zeigler
Executive Director

MWZ/eh

Post Office Box 5591, Rome, Georgia 30161

OFFICIAL ORGAN OF FLOYD COUNTY AND CITY OF ROME

MORE THAN A CENTURY OF CONTINUOUS SERVICE

Rome News-Tribune

NEWS PUBLISHING COMPANY

THE ROME NEWS 1919—CONSOLIDATED 1923—THE TRIBUNE-HERALD 1843

ROME, GEORGIA 30161

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Sir:

Our newspaper has recognized for many years the vast potential that lies within the scope of the Coosa-Alabama River System. Completion of the system will directly enhance the economic well-being of countless thousands of citizens.

Your Sub-Committee has looked with favor upon this program in the past and all of us closely involved are grateful. We know that you are also aware that completion of the program as rapidly as possible is in the best interest of both the government and the people.

We specifically ask that you continue funding the project, within Corps. of Engineers capabilities, on the advanced engineering and design of the Coosa-Alabama River development, survey of the multi-purpose dam at Dalton, Ga. and deepening of Mobile Harbor. Also maintenance and operation monies for Alabama River, Allatoona, Carter's Lake, Jones Bluff and Millers Ferry dams and locks.

We earnestly solicit your continued support and urge that favorable consideration to be given to the total Fiscal Year 1982 request.

Sincerely,

B.H. Mooney, Jr.
Publisher

BHMjr:w

NATIONAL CITY BANK OF ROME

P. O. Box 1193 • Rome, Georgia 30161
(404) 291-9000

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
For Energy and Water Development
House of Representatives
Washington DC 20515

Dear Representative Bevill:

I should like to request again that your committee recognize the vital need in this growing area of our country for completion of an Alabama-Coosa River Project, authorized in 1945, and in which we, as citizens, have already made a substantial investment.

The area of Alabama and Georgia served by the Coosa River thrives in industry and agriculture, which would be greatly stimulated by the development of the Coosa. I urge you and your committee's approval of this most important project which is well within the Corps of Engineers appropriations for fiscal year 1982. I would also like to request your support for the following projects:

1. Surveys - Deepening Mobile Harbor and the development of multi-purpose dam at Dalton Lake, Georgia.

2. Advance engineering and design - Coosa River Navigation Project. The money for this project is needed to stay on schedule for the start of construction in 1983. This project is a substantial investment in the future prosperity of Alabama, the Region and the Nation.

3. Operation and Maintenance - Alabama River, Allatoona Lake and Carters Lake, hydro-power plants in the Jones Bluff and Millers Ferry locks, dams and power plants.

Thank you for your consideration of these projects.

Sincerely,

Lloyd L. Summer, Jr.
President

LLS,Jr/am

Willingham-Nelms Insurance Agency
428 BROAD STREET. P. O. BOX 164
ROME. GEORGIA 30161
291-6810 291-6490

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

As a strong supporter of the Coosa-Alabama River Improvement Association, Inc. for many years, I am asking you for your support in making the Coosa-Alabama River navigable from Mobile, Alabama to Rome, Georgia. A great deal has already been done from Mobile to Montgomery, Alabama, and I urge your support to complete this waterway all the way to Rome, Georgia as an investment to the economy of the area and also beneficial to the energy crisis.

There is much to be done as of this time when appropriations are made such as deepening Mobile Harbor and a multi-purpose dam at Dalton, Georgia, advanced engineering and design Coosa River Navigation Project to stay on schedule for start of construction in 1983. The hydropower and barge transportation are both vitally important during an energy crisis. The barge transportation above would bring in an increase in productivity to help fight inflation, and it also requires less fuel and less labor than other transportation modes.

I will personally be at the hearing as I have for many years at my own expense because I feel so strongly about the future of this waterway for the good of everyone in this area of our great country.

Yours truly,

WILLINGHAM-NELMS INS. AGCY.

By:

Sid Willingham

SW/ss

424 BROAD STREET • PHONE 291-7663 • ROME, GEORGIA 30161

ROME AREA CHAMBER OF COMMERCE

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

We enclose a resolution from the Rome Area Chamber of Commerce in the interest of the continuing development on the Coosa-Alabama River System.

We acknowledge, with sincere appreciation, the wholehearted support and appropriations that have made it possible to plan, begin, and continue construction on the following projects:

Alabama-Coosa Rivers
Allatoona Lake
Jones Bluff Lock and Dam
Carters Lake
Millers Ferry Lock and Dam
Mobile Harbor
Multipurpose Dam, Dalton Lake, Ga.

We hold this program to be a splendid example of cooperation between the federal government and private power company development for the benefit of the entire Southeast.

Sincerely,

Carl T. Collins
Executive Vice President

jw

Enclosure

424 BROAD STREET • PHONE 291-7663 • ROME, GEORGIA 30161

ROME AREA CHAMBER OF COMMERCE

- RESOLUTION -

WHEREAS, those counties lying within the basin of the Alabama River are experiencing continuous economic growth due to the current development program now underway on the river; and,

WHEREAS, many of the counties in the area of the Coosa River have also begun experiencing economic growth because of the Alabama Power Company's development program, and this, too, will accelerate when the Alabama-Coosa waterway is fully navigable from Mobile to Rome, Georgia; and,

WHEREAS, dynamic economic growth, increased hydropower and barge transportation facilities, and a more productive way of life, are but a few of the numerous benefits that will accrue when this great river system is developed;

THEREFORE BE IT RESOLVED, that the Rome Area Chamber of Commerce approves testimony by Coosa-Alabama River Improvement Association for support of appropriations on the following projects:

Alabama-Coosa Rivers
Allatoona Lake
Jones Bluff Lock and Dam
Carters Lake
Millers Ferry Lock and Dam
Mobile Harbor
Multipurpose Dam, Dalton Lake, Ga.

We strongly urge appropriations representing the capability of the Corps of Engineers for Fiscal Year 1982.

Approved and adopted this 23rd day of March, 1981.

Joel Sulzbacher, Chairman
WATERWAYS COMMITTEE

ACCREDITED BY THE CHAMBER OF COMMERCE OF THE UNITED STATES

15 YEARS ACCREDITED

Rome Manufacturing Company
P.O. Box 191 208 East Second Avenue Rome, Georgia 30161

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

Please support the appropriations requested by the Coosa-Alabama River Improvement Association for work on the Coosa-Alabama River System during the coming fiscal year.

All of the projects in the Association statement to your sub-committee are important to our region, but we are particularly concerned with the Coosa River Navigation Project which will be of great benefit to Rome and Northwest Georgia. Barge shipping and it's economies will help our existing industries to grow and prosper as well as attracting new businesses and plants to our area.

Sincerely,

Joel Sulzbacher
Chairman of the Board

JS:le

Call For COOSA Slacks at (404) 291-6970

THE MAY REALTY CO., INC.
POST OFFICE BOX 191
ROME, GEORGIA
30161

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C.

Dear Mr. Bevill:

Please give your subcommittee's support to the funding of the projects on the Coosa-Alabama River System as outlined in the statement submitted by the Coosa-Alabama River Improvement Association.

I know, of course, that the river system must be developed as one entity to be completely effective, but we are especially interested in the Coosa River Navigation Project and the multi-purpose dam at Dalton Lake, Ga. These two public works are close to home and would be of great benefit to our area.

Sincerely,

Joel Sulzbacher
President

JS:le

GOODYEAR

The Goodyear Tire & Rubber Company

Gadsden Plant

GADSDEN, ALABAMA 35902

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee Appropriations
For Energy & Water Development
House of Representatives
Washington, D C 20510

Dear Sir:

The Goodyear Tire & Rubber Company wholeheartily supports the development of the Coosa River Project. When this project is completed it will be very beneficial to Goodyear and the surrounding areas. We feel this is an investment in the Southeast which will continue for the next 50 years and not an expenditure.

Sincerely,

H F Medlin,
Traffic Manager

:sw

Citizens Federal
Main Office 701 Broad St. at Seventh Avenue Branch Office 601 Shorter Ave. P.O. Box 1313 Rome, GA 30161 Phone: 404-291-9772

March 20, 1981

Honorable Tom Bevill, Chairman
House Sub-Committee on Appropriation for
Energy and Water Development
House of Representatives
Washington, D. C.

Dear Congressman Bevill:

Citizens Federal Savings and Loan Association of Rome, Georgia wishes to express its wholehearted support of the objectives of the Coosa-Alabama River Improvement Association as we recognize the future economic impact that the river navigation project could have on our local economy and monies appropriated to the Coosa-Alabama system represents a sound investment for this area.

Your committee's support will be greatly appreciated.

Sincerely,

Kohn T. Sanders

Kohn T. Sanders
President

KTS:el

The Georgia State Bank
of Rome

March 17, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Chairman Bevill:

We, at Georgia State Bank, having sixteen (16) employees, nine (9) directors and six hundred twenty six (626) stockholders, would like to go on record in support of the Coosa-Alabama River Improvement Association, Inc.

We recongnize the future economic impact that the Coosa River Navigation Project could have on our local economy and we fully support the continual advancement and development of this project.

Yours truly,

Charles L. White
President

CLW:jb

P. O. DRAWER P. ROME, GEORGIA 30161 (404) 295-7700

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STATEMENT TO THE HOUSE AND SENATE COMMITTEES ON APPROPRIATIONS FOR THE DEVELOPMENT OF THE COOSA RIVER SYSTEM

Mr. Chairman:

We appreciate this opportunity to appear before this distinguished committee of the Congress of the United States, representing the people of Gadsden and Etowah County, Alabama. Speaking on behalf of the mayor of the City of Gadsden, the Honorable Steve Means; on behalf of the chairman of the Etowah County Commission, the Honorable Robert V. Hitt; and on behalf of the over 700 business and industrial members of the Gadsden Metro Chamber of Commerce, we enthusiastically urge approval of the requested appropriations for construction, operation and maintenance of the Alabama-Coosa River system.

We understand and appreciate the fact that there is not enough money to fund every project submitted; and as taxpayers, we appreciate the fact that before a water resource project can receive support, it must be declared feasible with a positive cost/benefit ratio and meet every standard established by the Congress.

Gentlemen, the Alabama-Coosa River project has passed these tests. We are proud of this fact. We have endured setbacks and time delays, yet our people come back each time with more enthusiasm and determination to see this most worthy project completed. The Coosa River project is feasible...the dams are already there thanks to private enterprise... and a developed Coosa River system would bring a tremendous amount of economic growth and stability to our area. The Coosa River project is important to our community's future.

Gadsden and Etowah County, as well as many communities along the Coosa River, have a great thing going...all we need now is a navigable Coosa River system. We encourage your support and approval of the requested appropriation.

On behalf of the City of Gadsden, Etowah County and the Gadsden Metro Chamber of Commerce, we would like to thank you very much for your consideration and leadership in helping us to develop the economic potential and quality of life of our community and our state. We will not let you down.

A.S. "Bebo" Klyce
President
Gadsden Chamber

Harold E. Johnson
President
Coosa River Council

Tommy Ford
Dir. of Development
Gadsden Chamber

400 Walnut Street / P.O. Box 185 / Gadsden, AL 35902 / (205) 543-3472

Home
FEDERAL
SAVINGS & LOAN ASSOCIATION

March 20, 1981

Honorable Tom Bevill, Chairman
House Sub-Committee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

We, the Officers and Board of Directors of Home Federal Savings and Loan Association of Rome, Georgia wish to go on record in support of the Coosa-Alabama River Improvement Association. We feel that the eventual development of the Coosa-Alabama Waterway System will prove of tremendous value to the future economic growth of Rome and Floyd County. Thank you for your support.

Sincerely yours,

William B. Primm

William B. Primm
President

WBP:mt

PREPARED STATEMENT ON BEHALF OF COOSA-ALABAMA RIVER IMPROVEMENT ASSOCIATION, INC., BY DR. ROBERT F. HENRY, CHAIRMAN

Thanks to you and your predecessors in the Congress the Alabama-Coosa River system has been improved in many tangible, productive ways. This is my twenty-fifth consecutive year to testify on behalf of the citizens of our region. The money which has been appropriated has been well spent. We now have commercial navigation on half of the waterway, with pre-construction planning progressing on a significant extension of the navigation channel to Gadsden, AL. While our primary emphasis over the years has been building the navigation channel, first from Mobile to Montgomery and now on to Gadsden and Rome, GA, we now give similar priority to protecting and maintaining what has been built. We must be good stewards of the facilities that are already on line and bringing much more than the anticipated return.

Our requests for fiscal year 1982 funding are listed below:

I. Surveys:	
Dalton Lake, Dalton, GA	$700,000
Mobile Harbor deepening	700,000
II. Advance engineering and design:	
Coosa River Navigation Project	3,000,000
III. Construction, recreation facilities:	
Allatoona Lake, GA	0
Jones Bluff Lock & Dam, GA	0
IV. Operations and maintenance:	
Alabama River, AL	4,673,000
Jones Bluff Lock and Dam, AL	3,615,000
Millers Ferry Lock and Dam, AL	5,569,000
Mobile Harbor	5,044,000
Allatoona Lake, GA	4,050,000
Carters Lake, GA	2,010,000
Total, operations and maintenance	24,961,000

We are well aware that our nation is attempting to steer a new course, a course which involves a significant reduction in Federal expenditures. We support this attempt and we have identified construction elements of the budget that can be deferred. At the same time, we are as convinced now as any time in our Association's 90 year history of the critical importance of these navigation facilities. Water transportation makes it possible to conserve scarce energy and efficiently move the basic, bulk cargoes which sustain our economy and way of life.

In our recommendations we give funding priority to navigation. For example, the amounts we recommend for Operation and Maintenance of the Allatoona and Carters reservoirs are reduced because they do not have a direct impact on navigation. The funds recommended are sufficient to maintain these vital hydro-electric facilities. In addition we recommend deferring construction of recreation facilities at Allatoona Lake and Jones Bluff. Deferring construction is a reduction of $4.889M from the carter budget amounts for these projects. Our not recommending the Corps capability figures for O&M at Allatoona and Carters adds up to $2.857M. This represents a total reduction of more than one-fifth ($7.746M) from what we would have otherwise recommended.

The Coosa River Navigation Project is the next immediate step in extending our navigation channel beyond Montgomery, AL. We support the Corps of Engineers' request for $3,000,000 to continue Advanced Engineering and Design. This aspect of pre-construction planning is well underway and the Corps of Engineers is still on schedule to be ready for construction in March, 1983. Design of the five locks is well along and we understand that the Environmental Impact Study (EIS) is also on schedule. This Coosa Project has the enthusiastic support of our citizens. Many of the members of our delegation with us today are located on the stretch of the waterway upstream from Montgomery, AL. Elected officials and private citizens alike testify to the priority given to this project in our region.

For Operation and Maintenance of the four projects that directly contribute to navigation (Alabama River, Jones Bluff, Millers Ferry and Mobile Harbor) our recommended funding is for the full capability of the Corps of Engineers. We must insure that these facilities are fully serviceable. Included in this category are funds for adequate maintenance dredging.

Dredging is an area which has caused trouble. We expected a period of adjustment might be needed after the Corps of Engineers lost their own dredges in the Mobile District. The Industry Capability Program which makes maximum use of dredging contracts has only been in operation for three years. Unfortunately we had

unusual low water and shoaling problems in two of those years, 1978 and 1980. While we support the concept of using private industry whenever possible, many users of our waterway are not yet convinced that the Corps can handle emergency situations without some in-house dredging capability. We are assured by the Mobile District that the funds we are supporting will be adequate but we will continue to keep a close watch on this maintenance dredging program.

As I said before, we recommend postponing construction of recreation areas at Allatoona and Jones Bluff. We do do this reluctantly. In 1980 Lake Allatoona ranked fourth in visitors among 426 Corps of Engineers lakes nation-wide with a total of more than 12 million visitor days. There is no question that these facilities are used and enjoyed. The Jones Bluff recreation projects are all that remain of the Alabama River Project which included three locks and dams and two generating facilities.

As additional support for our recommendations we bring with us letters and resolutions from a wide sampling of the membership of our Association. These statements are submitted to show the broad base of support and citizen awareness that development of these projects enjoys.

At the outset I said that this was my 25th consecutive year to come to the Congress to testify in support of this waterway. I had come many times before this current string of appearances started, going back to 1941 when I was in the delegation as a representative of the Montgomery Chamber of Commerce. Over this span of nine Presidents of the United States, President Reagan's is not the first administration to take a close look at Federal expenditures. While this administration has also proposed increased user charges to offset Federal expenditures, there has been no suggestion that water expenditures were not justified, as we had with President Carter's "hit list" four years ago. We are confident that this new administration will agree with my statement in last year's testimony, "The projects we support represent a capital investment, the kind of investment private industry, and a nation looking to the future, must make if they are to be productive."

The navigable waterway our predecessors visualized when they founded this Association in 1890 is even more urgently needed now. Ninety years ago they were proposing solutions to our present need for transportation efficiency.

"Supply-side" economic theory has been used as a basis for changing our nation's economic course. For those urging capital investment in our national waterway system this is good news indeed. Now we have an acceptable explanation of why the projected Benefit/Cost Ratios for waterway projects have historically been so conservative. It is just too difficult to anticipate all the ways a new waterway will be used until the "supply"—in our case a navigable channel—is in place and available.

Our Alabama River calculations are a good example. In 1958, before the navigation channel to Montgomery was started, the Corps of Engineers used the accepted methods to come up with a Benefit to Cost ratio of only 1.08 to 1.0. In 1979, only 6 years after the last lock, dam and generating plant went into operation, the B/C ratio was 1.9 to 1.0. We saw paper mills locate on the river that had not been there before, we saw new markets develop. Plants that were built to use other modes of transportation were modified to make use of the river once the channel was completed. In other words, once the product—the supply—was there the demand surfaced. Enterprising business men found innovative ways to use the river that even they had not anticipated until this new transportation option was a reality.

We understand that a main point of the supply side argument is that "whatever encourages greater human output is anti-infaltionary". (Wall Street Journal editorial, February 26, 1981). This thrust to increase productivity again supports the logic of investment in our waterways. The railroads report that 50¢ of every revenue dollar goes for labor costs while the comparable figure for the barge industry is 20¢. Our nation needs a strong and viable railroad industry but it also needs to make optimum use of the transportation modes, including the combinations of modes that are the most economical both in energy and manpower productivity.

There is some concern on our part that, in the surge of support for reduced expenditures, the role of water transportation in reaching other important national goals might be forgotten. For example, water transportation can encourage economic development of interior regions such as the Appalachian Region where our river system originates. Also, water transportation can sustain vital inland industries like the steel and rubber plants in Gadsden, AL with their large industrial payrolls. Another example is the role water transportation plays in our balance of payments equation by supporting an expanded and competitive export program of coal and farm crops. We feel confident that members and staff of this subcommittee understand but we want the record to reflect our concern. The contribution of commercial water transportation toward our total national strength must not go unnoticed.

This statement is made for an association—the Coosa-Alabama River Improvement Association—made up of both a public and a private sector. The public sector consists of eighteen counties along the waterway from Mobile, AL to Rome, GA (Floyd County) and nineteen municipalities. This pblic sector joins forces with a private sector in a way mindful of the "Partnership" theme in President Eisenhower's Administration. The private sector is made up of manufacturing, mining, financial and agricultural firms, shippers, tow and barge operators, chambers of commerce and other industrial development agencies, public utilities, media organizations and more than 100 private individuals.

On behalf of our membership and the citizens they represent I thank you for your consideration.

CALHOUN COUNTY CHAMBER OF COMMERCE
P.O. BOX 1087 / ANNISTON, ALABAMA 36202 / (205) 237-3536

RESOLUTION

WHEREAS: The Calhoun County Chamber of Commerce supports the work of the Coosa-Alabama River Improvement Association, and

WHEREAS: The continued improvement of the Coosa River is important to the industrial development of Coosa River Valley, and

WHEREAS: The Coosa River Navigation Project money is needed to stay on schedule for the start of projected construction in 1983, and

WHEREAS: This project is an investment in the future prosperity of Alabama, the region and the nation, and

WHEREAS: Money necessary for maintenance dredging is needed to prevent delays regarding the existing river traffic, and

WHEREAS: The energy needs of the nation will dictate the expanded use of barge transportation because of its energy savings and increased productivity aspect.

THEREFORE, LET IT BE RESOLVED: That the Calhoun County Chamber of Commerce supports the work of the Coosa-Alabama River Improvement Association and efforts to secure needed monies for the continued growth and maintenance of the Coosa-Alabama waterways.

Gerald Powell
Gerald Powell, President

Hulsey A. Bray Jr.
Hulsey A. Bray, Jr.,
Executive Vice President

ADOPTED THIS DATE:
March 23, 1981

THOMAS A. HAYES, Chairman
CHILTON COUNTY COMMISSION
P. O. BOX 557
CLANTON, ALABAMA 35045

COMMISSION MEMBERS
GERALD D. (BUCK) COST, Dist. 1
Route 2, Box 67-A, Jemison, Ala. 35085
QUINTON R. CUMMINGS, Dist. 2
Route 2, Box 238, Maplesville, Alabama 36750
CARY MULLINS, Dist. 3
Route 3, Box 221, Clanton, Ala. 35045
RALPH E. BRANNON, Dist. 4
P. O. Box 1106, Clanton, Ala. 35045

MARGIE E. HEADLEY, Administrator
H. RAY EDWARDS, County Engineer
JOHN HOLLIS JACKSON, JR., Attorney

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Chairman Bevill:

Our County is a member of the Coosa-Alabama River Improvement Association and is situated in the area served by the Coosa-Alabama river system. Our County very strongly supports the requested budget funding for the continued development of our system.

We feel that the Coosa river navigation project money is needed to stay on schedule for the start of construction in 1983. The Coosa river flows through Chilton County and we strongly support this project as an investment in the future prosperity of Alabama, our region and our nation. During an energy crisis such as the one which we are currently experiencing, hydropower and barge transportation are both vitally important. Barge transportation brings an increase in productivity which is a requirement to fight inflation. It requires less fuel and less labor than other transportation modes and would be readily available to our area.

In addition, we support the requested Alabama river money for essential maintenance dredging. There were problems getting the dredging done soon enough last year and many delays and partially loaded barges were the result. Also, we support survey money to determine the feasibility of a new multipurpose dam on the Conasauga River near Dalton, Georgia (Dalton Lake).

Yours very truly,

Thomas A. Hayes

Thomas A. Hayes
Chairman

rmm

Mr. HENRY. Colonel, would you please name some names?
Mr. BEVILL. This is Colonel Ray Carlson, for the record.

STATEMENT OF C. R. CARLSON

Mr. CARLSON. Certainly.

Mr. Chairman, we have a large contingent here, but some of our spokesmen are still on their way here. We have in this delegation four heads of county governments; Judge Biggs from Monroe County, will you stand, please?

Mr. BEVILL. Just everybody come on in. If you have to come up behind these chairs, around the walls, anywhere.

Mr. MYERS. We are going to have a revival meeting and we want you all here. We may sing.

Mr. BEVILL. Just tell everybody out there who is interested in this project to come on in.

Thank you.

Mr. CARLSON. Judge Biggs, Judge Fielding from Coosa County, Tom Wade Hampton from Cherokee County, Dr. McClendon from St. Clair. Then the other county officers.

Mr. BEVILL. Would those four stand? They are here.

Mr. CARLSON. Yes. We have several other county commissioners and officials. We have three mayors, Mayor Williamson, Mayor Coleman, Mayor Ford, and the other representatives. We have contingents starting with the head waters of the Coosa-Alabama going down, Rome/Floyd County, if you would stand, please.

Mr. BEVILL. They are interested in the wrong port.

Mr. CARLSON. Right. Center Cherokee County.

Mr. BEVILL. That is the center port.

Mr. CARLSON. Gadsden and Etowah County.

Mr. BEVILL. That is the Gadsden Port.

Mr. CARLSON. In that group is the president of the Chamber of Commerce, President Klyce. He will be one of our spokesmen. From Pell City/St. Clair County, Talladega County, Wetumpka Elmore County, Montgomery County, Dallas County, Monroe County, and Mobile County.

Then, sir, we have an interesting group of people who represent the users who make the jobs that this Association anticipated when we were first working on this starting 90 years ago.

As you well know, this Association has been working for some time. These users include Ideal Basic Materials, John Thomason; Radcliff Materials, Bob Coleman; Southern Services, Jim Ludwig; Alabama Power Company, Mr. Nelson; Mississippi Chemical, Jerry Martin; Parker Towing, Tim Parker; Warrior and Gulf Navigation, Nick Barchil; Alabama River Pulp, Ken Fairly and J. W. Swanson.

These are the folks that are making the things happen that we had anticipated, sir.

Mr. BEVILL. Thank you, Colonel. We are delighted to have each of you here.

Mrs. BOGGS. We know they are doing well because there are so many ladies among them.

Mr. BEVILL. Right, that is a good sign.

We are pleased to have my good friend Mr. Bebo Klyce here. We would be glad to hear from you. You may present your prepared

statement and then just summarize it or do it any way you wish. It would be all right.

Mr. KLYCE. Mr. Chairman, I looked at the list. I thought I would be the last one to talk but, since I am going to be first, should I stand or sit?

Mr. BEVILL. You just sit right there and say what you want to and we are going to listen to you.

Mr. KLYCE. Okay.

I am here to——

Mr. BEVILL. I might state, Mr. Klyce is a business leader of Gadsden, a very active civic leader, and he is also a leader in the Gadsden Metro Chamber of Commerce.

You hold so many positions I can't remember all of them. What is your position?

Mr. KLYCE. Mr. Chairman, I am president of the Gadsden Metro Chamber of Commerce. I think they possibly ran out of people to serve.

Mr. BEVILL. One of the most active chambers of commerce in the state and he is just being modest. You go right ahead.

STATEMENT OF BEBO KLYCE

Mr. KLYCE. I am here representing the City of Gadsden, Honorable Mayor Steve Means and the Etowah County Commission, and Commission Chairman Hill.

I was listening this morning at breakfast where we had for 90 years been coming up here; there have been some set-backs and delays but the people of our area feel that it has been proven that the cost-benefit ratio is there and we intend to keep coming up here. We know you can't possibly take all good causes and do something about them, but we feel we have proved ourselves.

What we have done is we have met every criteria that we think are required for funding of such a project. We certainly hope very much that you will consider our proposal.

Thank you.

Mr. BEVILL. Thank you, Mr. Klyce. Very good statement. Good to hear from you.

Who do you have next?

Mr. HENRY. Mr. Chairman, Chris Heinz is listed here.

Is Chris in the room? He is our president and we would like to hear from him at the moment.

STATEMENT OF CHRIS HEINZ

Mr. HEINZ. We are delighted to be here. We appreciate your time very much. You have been so kind to us for the last 25 years. We look forward to the next 25 years.

Thank you.

Mr. BEVILL. Thank you.

Mr. HENRY. You see, we are getting pretty concise in the interest of time. You have a full morning.

We would like to hear at this time from Mrs. Waite, Vice President of the Coosa-Alabama River Association for Alabama.

Mr. BEVILL. Mrs. Waite.

STATEMENT OF MARY GEORGE WAITE

Mrs. WAITE. We are just delighted to be here again this year. I speak for Alabama when I say thanks to you as chairman for all of your dedicated, untiring efforts that we know about and to this full committee because we appreciate you. We think that you have really had insight and you have had vision down through the years or we wouldn't be back here today.

I certainly would be remiss if I didn't say personally and on behalf of the people in the 4th Congressional District that we have the finest congressman up here, Mr. Bevill, and we are not prejudiced a bit.

But I feel strongly that this project—and so do the people in Alabama who are here—is one that is certainly important.

Mr. BEVILL. The $3 million will be put in the bill.

Mrs. WAITE. Good. Having sat in the previous hearing, I realize that this committee is very knowledgeable when it comes to sports. So we might just look at our group as being a team, because this is a team effort in the State of Alabama. We have a real good quarterback in Congressman Bevill, we have a good captain with Governor James, and the rest of us are playing first string, the ones in this room and all the others that we left back home that are just as concerned as we are and wish they could be here.

We know inflation is one of the key words of this age. We feel this project will help control that because it will reduce costs and these can be passed on to other areas, building the economy. We hear productivity every time. We think this will also help productivity. We see this as being a boon to unemployment because where I live we can give jobs to people, beginning with Rome, Georgia and coming on down.

We just thank you for everything. We know through the ages past we have not stayed overwhelmed and not stayed underwhelmed, we have just stayed whelmed.

Mr. BEVILL. Several years ago I tried to get Mary George—she had already served as president of the Alabama Bankers Association, president of everything—I wouldn't even attempt to remember all the things she has done—she is such a civic leader and state leader I tried to get her to run for governor and she just didn't have time, she was too busy. That is the reason she hasn't been governor of Alabama, she just hasn't had time.

All right, sir.

Mr. HENRY. Mr. Chairman, I believe it was last year that you told your committee, including Mr. Myers and Mr. Fazio and others, that this delegation didn't have an accent. You understand that now, Mr. Myers, don't you?

Mr. MYERS. What did he say.

Mr. BEVILL. I have to interpret for Mr. Myers.

Mr. MYERS. I have to defend myself against great odds all the time.

Mr. HENRY. Could we hear a word from Burgett Mooney, our vice chairman in Georgia?

STATEMENT OF BURGETT MOONEY

Mr. MOONEY. Thank you, Mr. Chairman.

We are at the bottom of the run, although we are at the top of the river. We appreciate what you have done so far to get us there. We are going to furnish the water. We want you to continue your good work and the work of the committee and get the locks in those lower dams so Rome can become the port that we have been looking forward to.

Thank you.

Mr. BEVILL. Thank you very much.

Mr. HENRY. Mr. Chairman, in the interest of time, we are going to say that we would like for you to accept our statements and the names that we stated and the statements we have from business houses and city and county governments in the river basin, all in favor of this situation. And then, if you will, your congressman, your colleague Jack Edwards here has a word.

Mr. BEVILL. We are always glad to hear from our colleague Jack Edwards.

Mr. MYERS. We don't have much choice. We have to.

STATEMENT OF CONGRESSMAN EDWARDS OF ALABAMA

Mr. EDWARDS. Thank you, Mr. Chairman.

First, I want to know what my Monroe County people did back there when Mary George said you were the best congressman around.

Mr. BEVILL. They said I was next to the best.

Mr. EDWARDS. I will take just a few seconds of the committee's time.

[Statement of Mr. Edwards follows:]

PREPARED STATEMENT OF REPRESENTATIVE JACK EDWARDS

COOSA-ALABAMA RIVER SYSTEM

Mr. Chairman, thank you for giving me this opportunity to appear before your Committee to testify in support of the fiscal year 1982 appropriations request for the Coosa-Alabama River System.

For operation and maintenance along the Coosa-Alabama River System, $24.961 million is needed in fiscal year 1982. That funding would be broken down into the following projects: Alabama River in Alabama ($4,673,000), Jones Bluff Lock and Dam ($3,615,999), Millers Ferry Lock and Dam ($5,569,000), Mobile Habor ($5,044,000), Allatoona Lake, Georgia ($4,050,000), and Carters Lake, Georgia ($2,010,000). The Administration has requested lower levels of funding for these separate projects for a total of $19.413 million. I seek your consideration of the funding level needed, however, since the Coosa-Alabama River System must be sufficiently maintained if we are to fully realize its economic and navigational benefits.

The Administration has requested funding for construction projects at Jones Bluff Lock and Dam and Allatoona Lake but that amount totalling $4,889,000 is no longer considered necessary for fiscal year 1982. No funds have been requested for construction of the Theodore Ship Channel, which has in the past received substantial appropriations, so that no appropriation will be sought for construction on the Coosa-Alabama River System in fiscal 1982. As you know, the fiscal 1981 construction funding request was for more than $20 million.

Another area of special concern is the Coosa-Alabama River Navigation Project. The Administration did not include this project in its budget request, but the Corps of Engineers has indicated its capability is $3 million to continue the Advanced Engineering and Design work currently underway on the project. The Coosa River Navigation Project will extend the navigation channel from Montgomery to Gadsden with construction scheduled to begin in 1983. In addition to this request, I also urge your full consideration of $700,000 for the survey of deepening Mobile Harbor and $700,000 for a survey of Dalton Lake, Georgia.

Mr. Chairman, I appreciate the Committee's past support for the Coosa-Alabama River System and hope for your continued support.

Mr. EDWARDS. We, of course, have completed the Alabama portion of the Coosa-Alabama. I think it is indicative of the kind of support that this system has that our folks on the Alabama continue to come here and continue to work to see the Coosaportion of this system developed. It s a very important waterway as far as the Port of Mobile is concerned and as far as the travel through the Gulf of Mexico is concerned.

I would urge the committee to fund it just as fully as possible to see that the Coosa portion is moving along and completed at the earliest possible date.

Mr. BEVILL. Very good. Very good.

Mr. HENRY. Mr. Chairman, I would like to say one thing about the figure that we are going to give you for the record.

Mr. BEVILL. All right.

Mr. HENRY. We had programmed a sum that we are now going to scale down by 20 percent and this is very worthwhile projects, including some recreation on the Allatoona Lake. The Allatoona Lake had one-fourth of all the visitors to the Corps of Engineers projects throughout the nation last year. But we want to do what we can. So we are going to cut out about 20 percent of what we originally were scheduled to ask for.

Mr. BEVILL. Very good, Dr. Henry, that is certainly in line with the thinking of the committee and the Administration and the Congress. So that is very good that you took the initiative to do that. We are very pleased to have you.

The record will be open, by the way, for five days if there are other statements, including those you are submitting today. We have a list here of everyone who is present that will go into the record to show that each of you were here and to show your interest in this project.

[The statements of Congressman Dickinson, Congressman Edwards, Congressman Shelby, Congressman Flippo, and Senator Heflin follow:]

PREPARED STATEMENT OF CONGRESSMAN WILLIAM L. DICKINSON ON THE ALABAMA COOSA RIVER SYSTEM

Mr. Chairman and Members of the Committee, thank you again for the privilege of presenting my views to you regarding the development of the Alabama-Coosa River Waterway.

As you know the state of Alabama is blessed with a great network of approximately 1,600 miles of navigable waterways. We need to continue the great work that the Congress has funded in the past that will in the future connect all of those waterways with the Tennessee and the remainder of our inland waterway systems. I think it is noteworthy that the original budget needs for this project has been cut 24 percent to help accommodate President Reagan's spending cuts for the entire federal budget.

Specifically, I am before you today to recommend your approval of fiscal year 1982 appropriations for the Alabama-Coosa river system that will continue ongoing work on that system. A study of the Coosa navigation project concludes that total benefits will far exceed total costs and that planning and construction on the Coosa River should go forward, to obtain the maximum benefit from the investment we already have in the system. The economic benefits of the Coosa Project clearly indicate that the sooner construction begins, the sooner the great economic and social benefits will be realized. Our near natural waterways, certainly including the Coosa, are the most energy efficient and least environmentally disruptive modes of transportation—to the benefit not only of our region, but to the entire nation.

As you know we now have a nine foot navigation channel open from Mobile to the lowermost Coosa River Dam, approximately 27 river miles above Montgomery. We have had commercial river traffic to Montgomery since the spring of 1972 when Jones bluff Lock and Dam was opened.

Relatively small amounts of money are needed to carry forward the advanced engineering and design work now underway for the Coosa River Navigation Project. If this work stays on schedule construction can start in 1983.

The following requests for fiscal year 1982 are shown by category and amount:

Surveys—A reservoir at Dalton, on the headwaters of the Coosa, would provide needed storage water to maintain navigation depths on the lower Alabama River. The Mobile Harbor must be prepared to take deep draft ships as soon as possible.

Dalton Lake, Dalton, Georgia	$700,000
Mobile Harbor Deepening	700,000

Advance engineering and design—The Coosa Project will extend the navigation channel from Montgomery to Gadsden, and eventually to Rome, Georgia. Preconstruction planning has been underway since 1978 toward a start date of March 1983. This project is a solid investment in future productivity and economic progress.

Coosa River Navigation Project	$3,000,000

Construction—In recognition and support of the President's attempts to limit federal spending, construction of recreation facilities can be postponed. This reduces the amount requested (as compared with the original budget) by $4,889,000.

Allatoona Lake, Georgia	0
Jones Bluff Lock and Dam, Georgia	0

Operations and maintenance—The first four projects involve navigation facilities. The funds requested are for the full capability of the Corps of Engineers to insure that these four energy efficient facilities are fully serviceable. Navigation is not involved directly at Allatoona and Carters Lake. The lessor amount for these last two projects (as compared with the original budget) is sufficient to operate and maintain these vital sources of hydroelectric power. This reduces the amount we would have requested for O&M by $2,857,000.

Alabama River, AL	$4,673,000
Jones Bluff Lock & Dam, AL	3,615,000
Millers Ferry Lock & Dam, AL	5,569,000
Mobile Harbor	5,044,000
Allatoona Lake, Georgia	4,050,000
Carters Lake, Georgia	2,010,000

I would again like to use this opportunity to commend the excellent foresight, planning and work that has been carried on by the Corps of Engineers and the Coosa-Alabama River Improvement Association, Inc., chaired by my good friend, Dr. Robert F. Henry of Montgomery.

I earnestly urge the committee to recommend this funding so that these important projects, which will one day greatly enhance the economy of our region and the entire nation, can continue.

Prepared Statement of Congressman Jack Edwards on the Coosa-Alabama River System

Mr. Chairman, thank you for giving me this opportunity to appear before your Committee to testify in support of the fiscal year 1982 appropriations request for the Coosa-Alabama River System.

For operation and maintenance along the Coosa-Alabama River System, $24.961 million is needed in fiscal year 1982. That funding would be broken down into the following projects: Alabama River in Alabama ($4,673,000), Jones Bluff Lock and Dam ($3,615,000), Millers Ferry Lock and Dam ($5,569,000), Mobile Harbor ($5,044,000), Allatoona Lake, Georgia ($4,050,000), and Carters Lake, Georgia ($2,010,000). The Administration has requested lower levels of funding for these separate projects for a total of $19.413 million. I seek your consideration of the funding level needed, however, since the Coosa-Alabama River System must be sufficiently maintained if we are to fully realize its economic and navigational benefits.

The Administration has requested funding for construction projects at Jones Bluff Lock and Dam and Allatoona Lake but that amount totalling $4,889,000 is no longer considered necessary for fiscal year 1982. No funds have been requestef for construction of the Theodore Ship Channel, which has in the past received substantial

appropriations, so that no appropriation will be sought for construction on the Coosa-Alabama River System in fiscal 1982. As you know, the fiscal 1981 construction funding request was for more than $20 million.

Another area of special concern is the Coosa River Navigation Project. The Administration did not include this project in its budget request, but the Corps of Engineers has indicated its capability is $3 million to continue the Advanced Engineering and Design work currently underway on the project. The Coosa River Navigation Project will extend the navigation channel from Montgomery to Gadsden with construction scheduled to begin in 1983. In addition to this request, I also urge your full consideration of $700,000 for the survey of deepening Mobile Harbor and $700,000 for a survey of Dalton Lake, Georgia.

Mr. Chairman, I appreciate the Committee's past support for the Coosa-Alabama River System and hope for your continued support.

PREPARED STATEMENT OF CONGRESSMAN RICHARD C. SHELBY

Mr. Chairman, I am grateful for this opportunity to appear in behalf of the Alabama-Coosa River System, a system that has already meant much to the growth of Alabama and will continue to be one of the keys to future economic development of the state.

A total of $24,961,000 in operation and maintenance funds has been requested for fiscal year 1982 for upkeep and improvement of the system. These requests include $4,673,000 for the Alabama-Coosa River System as a whole, $3,615,000 for the Jones Bluff Lock and Dam, $5,569,000 for the Millers Ferry Lock and Dam, $5,044,000 for the Mobile Harbor, $4,050,000 for Allatoona Lake and $2,010,000 for the Carters Lake Navigation Project.

Two surveys, totaling $1.4 million have been requested. The first survey at Dalton Lake, Dalton, Georgia, on the headwaters of the Coosa, would provide information on needed storage water to maintain navigation depths on the lower Alabama River. The second survey at the Mobile Harbor is needed to see if it is feasible to take deep draft ships.

The amount requested to continue advance engineering and design on the Coosa River Navigation Project is $3 million. Total development of the Coosa River to its full navigational possibility will be a great boon to the State of Alabama. Preconstruction planning has been underway since 1978 toward a start date of March 1983. By connecting Gadsden and Rome, Georgia, with the Gulf of Mexico, it is projected that the completion of all projects currently on line will make this waterway of service to more than one-half of Alabama's citizens directly. This project is a solid investment in future productivity and economic progress.

Recognizing and supporting the attempt to limit federal expenditures, no funding has been requested for the construction of recreation facilities on Allatoona Lake in Georgia and the Jones Bluff Lock and Dam in Georgia. This reduces the amount that could have been requested, as compared with the original budget, by $4,889,000.

I urge you to continue funding at the fullest possible extent and remind the committee that water navigation is the most energy efficient mode of transportation in a day and age when efficiency should be our primary concern.

Again, MIr. Chairman and Members of the Committee, I appreciate the opportunity to appear before this distinguished committee on behalf of the Coosa-Alabama River System.

Thank you.

PREPARED STATEMENT OF CONGRESSMAN RONNIE G. FLIPPO, ON BEHALF OF THE COOSA-ALABAMA ASSOCIATION

Mr. Chairman, I appear in support of the request by the Coosa-Alabama River Improvement Association, Inc. for funding in Fiscal 1982.

While this project does not serve my district, I am aware of the wide array of benefits this project has afforded to the people of Alabama.

I note that the Association has reduced its original funding request by $7.7 million. This attitude is highly commendable, since the Congress and the Adminstration will be wrestling with the largest budget cuts in the history of this country.

Again, I commend the officers and members of the Coosa-Alabama Association for their vision and diligence in serving the people of Alabama, and support their request for funding in the coming budget year.

PREPARED STATEMENT OF SENATOR HOWELL T. HEFLIN OF ALABAMA

Mr. Chairman, I am happy to have the opportunity to agains speak in support of funds for the continued development of the Coosa-Alabama Waterway.

I should like to point out that the request for funds for the Coosa-Alabama River system includes projects located either in Alabama or in our sister State of Georgia where the headwaters of this mighty, river system have their genesis.

The largest single budget expenditure proposed for the next fiscal year may be found under the heading of "Operation and Maintenance." They are:

1. $10,309,000 for operation and maintenance activities by the U.S. Army Engineers on the Alabama River Channel, at the Millers Ferry Lock and Dam and at the Jones Bluff Lock and Dam. These funds are needed so that navigation may be carried on in this particular reach of the river system. Spokesmen for the Coosa-Alabama River Improvement Association will request additional operation and maintenance monies for these projects which will be the full capability of the Army Engineers. I urge the Committee's careful consideration of their request.

2. $6,060,000 to operate and maintain the power operations located at Allatoona Lake, Georgia and Carters Lake, Georgia. These requests, I believe, are right in line with the Administration's budget proposals.

The President's budget also contains a request in the amount of $3,000,000 in construction funds for recreational facilities in the vicinity of the Jones Bluff Lock and Dam on the Alabama River in Lowndes and Autauga Counties, Alabama. The Coosa-Alabama River Improvement Association, however, has requested that in keeping with the drive to cut back government spending this project be delayed. I endorse the recommendation of the Association.

The Association has requested approval of an unbudgeted item in the amount of $3,000,000 for advanced engineering and design work in connection with the Coosa River Navigation Project. As the Committee knows, extension of navigation on the upstream portion of the Coosa-Alabama River System is the vital "missing link" in this waterway. Unless and until this 280 mile navigation channel becomes a reality, the people of the watershed will be unable to enjoy the benefits assured by the comprehensive development of the river system.

This river basin has all the natural and human resources essential for economic progress. When the Coosa River is improved for navigation, nearly one-half of Alabama's citizens will be directly benefited. I strongly urge the committee's approval of this important item.

Thank you.

TUESDAY, MARCH 18, 1981.

WARRIOR-TOMBIGBEE WATERWAY

WITNESSES

HONORABLE JACK EDWARDS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA
SHELDON MORGAN, PRESIDENT, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION
OFFA S. NICHOLS, JR., EXECUTIVE VICE PRESIDENT
N. J. BARCHIE, JR., MEMBER OF THE BOARD

Mr. BEVILL. The next we have now will be the Warrior-Tombigbee Development Association.

Sheldon Morgan, we will hear from you at this time.

Mr. MYERS. Sheldon, good to see you here today.

Mr. MORGAN. Good to see you.

Mr. BEVILL. At this time now, we will take up the Warrior-Tombigbee Waterway and we will hear from our good colleague Congressman Jack Edwards.

STATEMENT OF CONGRESSMAN EDWARDS OF ALABAMA

Mr. EDWARDS. Thank you, Mr. Chairman.

First, if I may, Mr. Chairman, I would like to thank the members of the subcommittee for coming down to Mobile and thank our colleagues Mr. Rudd and Mrs. Smith for their future visits.

It is extremely important I think for members of this committee to see as much as they can of the projects that they are called on to make decisions about. We really do appreciate the fact that all of you came down there and trust your visit was successful.

Mr. BEVILL. It was, and we all appreciated your good Southern hospitality down there in Mobile.

Mr. EDWARDS. I understand my statement on the Tenn-Tom has already been made a part of the record.

[Statement of Mr. Edwards follows:]

PREPARED STATEMENT OF REPRESENTATIVE JACK EDWARDS

BLACK WARRIOR, WARRIOR, AND TOMBIGBEE RIVER SYSTEM

Mr. Chairman, it is good to come before your Committee today to again testify in strong support of the fiscal year 1982 funding request for the projects included in the Black Warrior, Warrior, and Tombigbee River System.

I am offering separate testimony endorsing the projects in the Mobile area, including the Mobile Harbor, the Theodore Ship Channel, Dauphin Island Bay, Perdido Pass, and the Gulf Intracoastal Waterway.

The President has requested $7.493 million for operation and maintenance on the Black Warrior and Tombigbee Rivers for fiscal year 1982. The bulk of this budget request is intended for use in routine dredging, snagging, upkeep and repair of locks and dams. We have kept the system in good operating condition and have replaced outmoded locks and dams, and traffic has grown from about 2.5 million tons in 1952 to about 17 million tons in 1979—a growth of 600 percent. The movement of coal by water is expected to double in future years, adding to the traffic level on the Warrior-Tombigbee River System. I would like to see the approval of the full budget request for operation and maintenance.

In addition to operation and maintenance funds, the President has requested $958,000 for General Investigations on the system in 1982. These funds will be used to continue a study to determine the feasibility of replacing the William Bacon Oliver Lock and the possible duplication of the Demopolis and Coffeeville Locks to accommodate the increased volume of traffic expected in coming years. Traffic congestion remains a problem on the river system, especially at the Oliver Lock, because its dimensions are smaller than those of other locks. The problems at the Oliver Lock have affected the maximum use of other locks and have created serious delays in commodities shipments. We have experienced a number of lock and maintenance closures along the system in the past several years, and traffic congestion has made it very difficult to plan wisely for these needed periods of maintenance. The General Investigations budget request represents the Corps' full capability, and I urge the Committee to approve the entire request.

Mr. Chairman, I am truly appreciative of your Committee's support for the Black Warrior, Warrior, and Tombigbee River System in the past. It is important that we continue to adequately fund the system, and I look forward to the Committee's approval of the full budget request for fiscal year 1982.

Mr. EDWARDS. Before I introduce Mr. Morgan, I would like to also put in the record my statement on what I generally over the years have referred to as the Mobile Bay area projects.

I think Mr. Morgan may want to comment on that as well. So if it would be in order, I would put that statement in the record at this point.

Mr. BEVILL. It may be made part of the record.

[Statement of Mr. Edwards follows:]

PREPARED STATEMENT OF REPRESENTATIVE JACK EDWARDS

MOBILE BAY AREA PROJECTS

Mr. Chairman, I am glad to be here to request appropriations in fiscal year 1982 for a number of important projects in my Congressional District in the Mobile Bay

area. This request includes funding for a study of the deepening of Mobile Harbor as well as the critical operation and maintenance activities for Bayou La Batre, Dauphin Island Bay, the Dog and Fowl River project, the Mobile Harbor, and others.

The Administration has requested $700,000 to continue engineering and design work on plans to deepen and widen Mobile Harbor to prepare the port for deep draft vessels. This Committee is aware of the Corps of Engineers recommendation to establish Mobile Harbor as a deep water port by deepening and widening the channel to 55 by 700 feet. That plan has progressed favorably and this additional funding is essential for the future development of Mobile Harbor. I urge your approval of this item in the budget request.

In past years I have come before this Committee to support the Theodore Ship Channel project. Because of your help, contracts have been let on the Theodore Channel and no additional funding is being requested for fiscal 1982. The Theodore project will expand deep-draft port facilities in the Mobile Harbor area and will stimulate the Theodore Indsutrial complex. This project will be the culmination of cooperative efforts among Federal, State, and local authorities as well as private industry to provide substantial economic benefits to the Mobile area and the entire Southeast. I appreciate the Committee's past support of this important project.

The majority of the Administration's requests for funding for the Mobile area are for important ongoing maintenance activities. Our major industries in the Mobile area, as well as commerce from other areas of the nation are dependent on an efficient waterway system for transportation of goods. Commercial and recreational fishermen depend on having access to fishing areas in authorized channels, in Mobile Bay and in the Gulf, and they depend on having reliable access to safe harbors. These are just a few reasons why these maintenance activities are so vital.

For Bayou La Batre, the Administration has requested $108,000 for operation and maintenance. Bayou La Batre is an economically distressed fishing community with severe congestion problems in its harbor. The Corps has been studying possible improvements to the harbor, but in the meantime, it is essential that the area is adequately maintained. I urge your approval of full funding for this project.

The President's budget includes $154,000 for operation and maintenance for Dauphin Island Bay. $244,000 has been requested for the Dog and Fowl River project and $127,000 has been requested for Perdido Pass. The budget calls for $3.04 million for Mobile Harbor operation and maintenance and $2.52 million for the Gulf Intracoastal Waterway.

I appreciated the Committee's assistance last year in including funds for two unbudgeted projects in my District: dredging work on Bayou Coden and the Bon Secour River. That work was critically needed because of the effects of Hurricane Frederic on Bayou Coden and the delayed sponsorship of the Bon Secour project. Maintenace is still essential for these projects, and I am pleased to know that the Administration has requested $114,000 for Bayou Coden and $239,000 for Bon Secour operation and maintenance. I trust these requests will be approved.

Mr. Chairman, I would like to close my remarks by expressing my awareness of the budget constraints under which we are operating. Obviously, many of the important water and navigation projects in Alabama and my District actually require funding in addition to those requested by the President, and I would certainly prefer full funding of the Corps' capability on each project. But I am committed to the President's economic goals and I support his budget figures.

Thank you, Mr. Chairman, for allowing me to provide my views.

Mr. EDWARDS. Mr. Chairman, Sheldon Morgan is certainly known to this committee and the fact that I am introducing him is not necessary in that sense but in the sense of having an opportunity to say something nice about a hard-working good friend, why I am delighted to be here and do it.

Sheldon Morgan probably knows more about the waterway projects of all types as they affect the Mobile Bay area than anybody else I know. He is also President of the Warrior-Tombigbee Development Association and has particular interest in that system, which has been around a long time but is undergoing growing pains, and the chairman will recall that we have met on several occasions on some of the problems on that particular waterway.

It is a pleasure for me to introduce to the committee Mr. Sheldon Morgan, and also Mr. O. S. Nichols, the new Executive Vice President of the Warrior-Tombigbee.

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I will turn this part of it over to Mr. Morgan and submit my statement for the record.

Mr. BEVILL. Yes. We certainly appreciate Sheldon Morgan and have observed him over the years, and we realize that he is one that comes up here and tells it like it is. Always glad to hear from you.

STATEMENT OF SHELDON MORGAN

Mr. MORGAN. Thank you.

I appreciate very much the opportunity for being here.

Thank you, Jack and members of the committee. We thoroughly enjoyed having you all in Mobile last Thursday evening.

Mr. BEVILL. We appreciate your hospitality, you and the Association.

Mr. MORGAN. I want to speak as President of the Warrior-Tombigbee Development Association but, before I do that, I also want to speak as Chairman of the Ports and Waterways Committee of the Mobile Chamber of Commerce.

It has been stated here already that all of these systems we are talking about today flow into the Port of Mobile. We want to support the items in the budget for the Port of Mobile Harbor, which are before you, $3.044 million for operation and maintenance, and $700,000 for deepening survey. We want to support that request.

Also, I want to introduce members of the Executive Committee and Board of Directors of the Warrior-Tombigbee Develpment Association.

So that you will know the geography, most of you flew this last week; the Warrior-Tombigbee is a confluence of the tributary involved with the Tennessee-Tombigbee. The Warrior leaves Demopolis and goes to the Birmingham region, the coal region of Alabama. So the system reaches all the way from the head waters near Birmingham south to Mobile.

It is an old system, it dates back to the 1800s. It has been navigable with commerce since the Civil War and even in 1970 they began a series of constructing certain training dikes and locks, that were subsequently replaced with a more modern system that now has one artifact remaining that I want to get into in a moment.

I would like to introduce aside from Mr. Nichols our Executive Vice President, members of our board, N. J. Barchie, Bob Coleman, Jerome Drummond, James Ludwig, G. T. Nelson, and Tim Parker, Jr., who are all users and operators on this system that is moving some 16 million tons a year.

This is a system then that has grown old, it is a mature system. Now in this era of energy and the problems we have, we find increasing demands on an older system to deliver today's standards.

We have certain problems that we have brought to the attention of your committee, Mr. Chairman, and that of the Corps of Engineers with respect to completing the modernization program that began in the Forties. The primary problem is the remaining bottleneck, Oliver Lock near Tuscaloosa.

It is imperative that this problem be approached, because it is forecast that coal out of the Warrior Basin is going to increase 7 million tons in the next 48 months. This coal coming out of the Warrior Basin is going to increase our tonnage to nearly 25 million tons moving on the system. This lock at Tuscaloosa, the Oliver Lock, can't lock more than 25 million tons a year, so we are going to be facing serious problems there.

We also have this demand placed upon us for domestic deliveries. Most of the coal I mentioned there—about 25 million tons—is for export.

Now we have heard about Tennessee Tombigbee and the demands it is going to place on the port of Mobile, but that doesn't come until 1986. Between now and 1986, all the coal exported through the port of Mobile will come out of the Warrior Basin in Alabama and move on the system that we are speaking of. So we are going to have to keep our eyes on this system to keep it functional, to be aware of the problems of maintaining the depths.

We have had problems with flooding. Last year we had serious flooding problems. We were going into this contract for dredging. Becoming acquainted with contract dredging mechanics and implementation and the flooding all happened at the same time, creating chaos on this system. So we bring that to your attention and ask you to work with us.

We know we can count on the committee's support to continue. Coal is not the only item. Soybeans are increasing in this area. Iron ore tonnage going to Birmingham all comes through this system; oil, chemicals, paper, all of this moves on this system.

In addition to the items requested, an O&M budget of $7,494,000, there is an additional capability on the part of the Corps.

I realize the budgetary constraints and we all support them this year.

If it becomes possible, though, in the study and evaluation of this total overall budget that you feel as a result of flooding, the problems we had last year, that the Corps has not properly covered this, make sure that we have the funds there. They need another $2,882,000—not the full capability—to cover any emergency situation that we could have.

Right now it doesn't appear we are going to have floods. In fact, we may not have enough water, but the problems could arise with regard to flooding, and if they did, the Corps would be short emergency funds to handle this problem.

Then there is $958,000 in the budget to cover the studies necessary to replace these old locks, this one old lock we are talking about, and improving the channel dimensions and shoulder.

The Corps of Engineers had done an intermediate and long-range study to try to handle the problems of shoaling in this river. Of course, the environmental studies have to be made and a number of other evaluations so they have $958,000 in there for surveys to try to get this Oliver Lock replaced.

Our concern is that the Corps not put this into a time frame of 1984 or 1985. We need that lock, that study completed as promptly as possible. We would request that your attention be given to that and that you help us attain that and get it done as quickly as possible.

This completes our statement, Mr. Chairman. We appreciate very much your continued support and support of the committee.

Mr. BEVILL. Very good statement.

Mr. MORGAN. If you have any questions, we have experts who are shipping the coal and the commodities behind us here on the committee.

Mr. BEVILL. We appreciate your calling this to our attention.

I remember you, Mr. Edwards, and I have met and discussed this a few months ago.

Mr. MORGAN. In September, yes.

Mr. BEVILL. I am very, very concerned about that situation. I hope that we can expedite that study and get the show on the road there on that lock.

Mr. MORGAN. I must say that the Corps is meeting with us regularly and giving us reports, and they are moving along on it. We want to stay on top of it as best we can.

Mr. BEVILL. I am going to check with them too to see if there is any way we can speed that up.

I agree with you, it needs to be done.

Mr. MORGAN. We don't know whether we have to go back to authorization to replace that lock or what. All of this has to be determined.

Mr. BEVILL. Yes. There are several questions that need to be answered.

Okay. By the way, after we left you Thursday night, we flew over a good portion of the Warrior-Tombigbee. There were a lot of favorable comments from the group there about the number of barges on that river, on the Black Warrior River, pointed out there.

Mr. MYERS. Did you line them up especially for us? Have a show for us?

Mr. BEVILL. I told some of them we just had that show put on for them.

Mr. WATKINS. I was really pleased to see that much traffic on it. I think that much tonnage of coal going out, what we see on the Tennessee Tombigbee that will be opening up from Kentucky and Tennessee fields and all, I think we can see it balancing a lot of trade.

How much—I am assuming that that Venezuela iron ore that is coming up through there, how much tonnage? How much is coming up Birmingham?

Mr. BARCHIE. Approximately 3 million tons a year.

Mr. NICHOLS. I would like to state that there are people back here who had over half a million tons of coal sold last year to foreign markets that they did not deliver because we could not get it to the port.

Mr. BEVILL. That is tragic. I don't know whether you were in here at the time, but I remarked that this country has nearly a third of the world's supply of coal. If there is anything we ought to be exporting, it is coal. We have more of it than we will ever use really in this country.

At the same time, we need to be producing all the coal we can to replace foreign oil, domestically.

So we have got to move this coal. The country is not going—nuclear energy and coal is all we have. I can tell you the Nuclear Regulatory Commission comes in here and they have issued two licenses in three years, it just comes down to coal. They are paralyzed. They can't issue licenses for some reason. They have all kinds of problems.

So they are the bottleneck. We have 13 nuclear plants in this country ready to go, but they can't get a license because those people are downtown shuffling papers.

They just are not doing their duty is what it amounts to. But this is getting critical because this is happening all over the country. This happened not long ago in Virginia. They had over a hundred ships sitting out there waiting on coal and had the coal there on the trains sitting there on the track. They didn't have all the facilities. They were not adequate. You see all these bottlenecks have to be moved. This country has to move. We have to get away from foreign oil. We have to become energy-independent. Coal is number one right now.

Mrs. BOGGS. Mr. Chairman, I would so much like to thank our hosts for inviting us last Thursday evening and to say how very important this program is.

We have to recognize that as the testimony has shown there are other products besides coal that are transported. They mean a great deal to the region, but the export of coal, which is a great and wonderful opportunity for this country, has not even been factored into a lot of the cost/benefit ratios.

I think we need to re-examine that and to put them into the ratio accounting because it would mean a great deal, I think, to the rest of the membership of the House. We are committed. We recognize it. I do think we could go back and refactor the export of coal into all these cost/benefit ratio systems.

Mr. MORGAN. That is a very good point in that our first study on the replacement of the Oliver lock in the early seventies was shelved, and it did not carry the coal that—in that study that we have today. We are confident that the restudy will make the benefit/cost feasible. None of that was calculated. That is a very good point.

Mr. BEVILL. Yes. Actually you are talking about—out of the Tennessee Tombigbee, 70 percent of the freight will be coal. Yet they haven't included coal in the cost/benefit ratio study.

I would say 70 percent would be coal on the Warrior-Tombigbee, wouldn't you?

Mr. MORGAN. Yes.

Mr. BEVILL. Thank you.

Mr. MORGAN. We have 21 other statements from various groups and individuals we have filed for the record.

I have a statement that I wanted to have filed for the record.

Mr. BEVILL. They will all be made part of the record.

[The statements follow:]

PREPARED STATEMENT OF SHELDON L. MORGAN, PRESIDENT, WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

My name is Sheldon L. Morgan. I am President of Warrior-Tombigbee Development Association. The membership of this Association consists of a cross-section of agricultural, commercial and industrial activities in the region comprising the War-

rior-Tombigbee basin in Alabama. It was formed in 1952 to bring about the re-development of the Warrior-Tombigbee Waterway System, consisting at that time of fifteen locks and dams. Construction of that system (originally 17 locks and dams) began in the late 1870's and culminated with the seventeenth lock and dam in 1915. The navigation system provided by these locks and dams gradually was permitted to fall into disrepair as a result of insufficient funds for maintenance and repair. By the middle of 1950, the annual tonnage on the system had levelled off to about 2.5 million tons per year due to the limited capacity of the obsolete locks.

Warrior-Tombigbee Development Association's objectives since its formation have been not only the replacement of the outmoded locks and dams and improvements in the Mobile Bay area, but also the appropriation of sufficient operational and maintenance funds to maintain the facilities in first-class condition. Congress generally has appropriated the necessary funds to make this possible. As a consequence, there are now only six locks to traverse the 400-plus miles from the head of navigation to the Port of Mobile, one of the nation's vital harbors. During the studies which resulted in this re-development, it was estimated that by 1980, the waterway would carry some 8 to 9 million tons. Records reflect these levels were reached about 1966, and it appears that approximately 18 million tons moved in 1980—a seven (7) fold increase over the beginning point in 1950, and a doubling of what had been expected from the improvements.

While in past years the waterway has operated in a generally efficient and reliable manner, we have now encountered a new set of circumstances. These new circumstances reflect not only the impressive growth up to now, but even more the immediate and increasing impact of the worldwide energy picture. Some estimates indicate that 10 percent of our nation's coal reserves are located in the Warrior Basin. According to a draft study by the U.S. Department of Agriculture, strippable reserves alone in the Warrior Basin are over 4 billion tons. We have a number of large and experienced mining operations in the area, as well as others capable of substantial growth. The development of these coal reserves, the skills and experience of our people, and the growing world-wide demand have created serious problems for the waterway. One of the older locks remains to be replaced—William Bacon Oliver Lock at Tuscaloosa. This lock, opened to navigation in 1940, with smaller dimensions than the other five newer locks, is a bottleneck; and is also subject to frequent suspension of traffic to permit repairs. Because this structure is a bottleneck, it is not possible for the five newer locks, the dimensions of which are 110 feet x 600 feet against 95 feet x 460 feet for Oliver, to be used to their maximum capacity.

To cite a single example of what is happening, let me relate just the export situation with two of our largest coal producers. In 1980 they exported over 4.5 million tons of coal through the Port of Mobile. Sales contracts existed for more than ½ million additional tons, but which were not fulfilled because they were unable to get the coal to the Port. Both firms are increasing their operations by nearly double over the next 24 to 48 months. Exports of 7 million tons are expected in 1981, with 1982 approaching 8 million tons, and further increases in 1983 and beyond. We are advised that substantially all of this coal is already sold, and there is the expectation of even higher sales if the necessary production and transportation facilities can keep pace.

I wish to emphasize that there are many other important commodities moving on the Warrior-Tombigbee Waterway, as well as large amounts of domestic coal for the utilities and other users. For instance, as more and more grain products are produced in our region, their timely and competitive movement becomes more important to our balance of payments. Fuel oil, crude, chemicals and aggregates comprise the other major movements.

On a positive note, the Alabama State Docks is moving ahead to be able to handle the impact of these increases on the Port of Mobile. One hundred million dollars in bonds have been sold, and that money is now available to support the needed expansion program.

With respect to the need for replacing the William Bacon Oliver Lock, we realize, of course, that authorization for its replacement must come via another committee. However, we emphasize this need because among other items, the proposed fiscal year 1982 Civil Works Budget for Alabama includes an item of $958,000 for surveys to fund the continuation of a study to determine the economic feasibility of the replacement of William Bacon Oliver Lock as well as the desirability of other improvements in the Waterway to accommodate the large volume of additional traffic expected to be generated by the completion of the Tennessee-Tombigbee System. Because of the immediacy of the problem at William Bacon Oliver Lock, that portion of the study is being expedited, and is expected to be finished early in 1982. Pending replacement of the lock, we must look at non-structural alternatives

to keep the pressure off. That will work for only a short time. The $958,000 requested represents the amount needed for the Corps of Engineers to proceed at their capability in order to meet this 1982 study completion date. Early completion of this study could help forestall the development of emergency situtions and consequent escalation of costs and loss of world markets. The study further embraces a review of potential additional sites for water supply for low flow augmentation, industrial and other uses and bringing up-to-date the economic profile of the area as reflected in an earlier study.

We are encouraged that the Congress may be considering port improvement legislation which has been identified with the term "Fast Track," with the purpose being to reduce the long and drawn out period required for navigation improvements. We support this concept and urge that its intent and application be broadened to include the inland wateways where bottlenecks exist to the movements of the basic commodities requiring such deep water ports.

Because of the unprecedented flooding and shoaling which occurred in 1979 and 1980, we are less confident of the O and M situation than we have been in the past. The requested amount of $7,494,500 is substantially short of the Corps' capability of $10,826,500. While the requested figure could prove adequate under earlier circumstances, it may not be should we again experience the flooding and shoaling of the last two years; or should it turn out that this severe flooding has caused changes in the basic characteristcs of the rivers. The Corps has scheduled a 32 day closure period for lock maintenance and repair on two locks beginning July 15. Full capability effort toward O and M may not be possible for the remainder of the year. Of the $3,332,000 capability not included in the budget request, some $2,882,000 relate to items having a direct bearing on the efficiency, reliability, and safety of the waterway. These are items such as additional dredging, snagging, engineering, and improvements in the lighting, gates and mitering at two locks. A detailed breakout of this unbudgeted capability is attached hereto.

Included in the budget which this Committee is now considering are the following items bearing directly on the needs of the Warrior-Tombigbee Waterway:

Black Warrior and Tombigbee Rivers:	
Operation and maintenance	$7,494,500
Warrior and Tombigbee Rivers, Alabama:	
Surveys	958,000

Other needs allied to the Black Warrior-Tombigbee include:

Mobile Harbor:	
Deepening survey	$700,000
Mobile Harbor, Alabama:	
Operation and maintenance	3,044,000

We fully endorse and seek the approval of these items. I, as President of the Warrior-Tombigbee Development Association; Offa S. Nichols, Jr., our Executive Vice President, and our other officers; our Board of Directors and membership appreciate the consideration the Chairman of this Subcommittee and its predecessor and the members and staff have shown us in past years.

We value our relationship with the Committee. It is our policy to make no unreasonable requests and to avoid needlessly taking up the Committee's time. This we have practiced over the years.

We are submitting additional written statements of support representing a cross-section of business, industry and the public.

Thank you for your consideration.

A witness list and list of supporting statements are attached hereto.

WITNESSES APPEARING BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE U.S. HOUSE AND U.S. SENATE IN SUPPORT OF THE CORPS OF ENGINEERS BUDGETED ITEMS RELATING TO WARRIOR-TOMBIGBEE AND MOBILE AREA IN ALABAMA—MARCH 23, 1981

The Honorable Bill Dickinson—Member of Congress—Alabama
The Honorable Jack Edwards—Member of Congress—Alabama
The Honorable Ronnie Flippo—Member of Congress—Alabama
The Honorable Bill Nichols—Member of Congress—Alabama
The Honorable Richard Shelby—Member of Congress—Alabama
The Honorable Albert Lee Smith—Member of Congress—Alabama
The Honorable Howell Heflin—Member of Senate—Alabama
The Honorable Jeremiah Denton—Member of Senate—Alabama
Mr. Sheldon L. Morgan—Chairman-President, Warrior-Tombigbee Development Association

Mr. Offa S. Nichols, Jr.—Executive Vice President, Warrior-Tombigbee Development Association
Mr. N.J. Barchie, Jr.—Vice President, Warrior & Gulf Navigation Company, Chickasaw, Alabama
Mr. Bob Coleman—Radcliff Materials, Inc., Mobile, Alabama
Mr. Jerome Drummond—Vice President-Transportation, The Drummond Company, Jasper, Alabama
Mr. Ed Hodder—Vice President-Marketing, Mining Division, Jim Walter Resources, Brookwood, Alabama
Mr. James Ludwig—Vice President-Fuel Supply, Southern Company Services, Inc., Birmingham, Alabama
Mr. G. T. Nelson—Vice President-Industrial Development, Alabama Power Company, Birmingham, Alabama
Mr. Tim Parker, Jr.—Executive Vice President, Parker Towing Company, Tuscaloosa, Alabama.

Added Capability—Corps of Engineers Funding Needs, Fiscal Year 1982, Black Warrior-Tombigbee

Budget requests, fiscal year 1982	$7,494,500
Added capability, fiscal year 1982	3,332,000
Total capabilitiy, fiscal year 1982	10,826,500

Explanation of added capability:

1. Additional contract dredging (would be needed in the event of unusual weather conditions such as last year)	1,146,000
2. Additional surveys, studies, engineering design and other	450,000
3. Snagging	136,000
4. Rehabilitation of lock tenders' dwellings, and portable water supply	275,000
5. Construction of boat house and modification of resource manager's office	175,000
6. Modernize Warrior & Oliver locks (includes new gates, lighting, mitering, etc.)	1,150,000
Total	3,332,000

LIST OF SUPPORTING STATEMENTS

Alabama Electric Cooperative, Inc., Andalusia, Alabama
Alabama Power Company, Birmingham, Alabama
Alabama State Docks Department, Mobile, Alabama
American Cast Iron Pipe Company, Birmingham, Alabama
American Commercial Barge Line Company, Harahan, Louisiana
Chicago Bridge & Iron Company, Birmingham, Alabama
Dixie Carriers, Inc., Houston, Texas
Drummond Coal Company, Jasper, Alabama
Findlay Towing Company, Inc., Tuscaloosa, Alabama
First National Bank of Birmingham, Birmingham, Alabama
Georgia Transporters, Inc., Panama City, Florida
Gulf Power Company, Pensacola, Florida
Clarence M. Kilian, Birmingham, Alabama
Mobile Area Chamber of Commerce, Mobile, Alabama
Parker Towing Company, Inc., Tuscaloosa, Alabama
Radcliff Materials, Inc., Mobile, Alabama
South Central Bell, Birmingham, Alabama
Southern Company Services, Inc., Birmingham, Alabama
Southern Industries Corporation, Mobile, Alabama
Tenn-Tom Towing, Inc., Fairhope, Alabama
United States Steel Corporation, Fairfield, Alabama
Jim Walter Resources, Mining Division, Brookwood, Alabama
Warrior & Gulf Navigation Company, Pittsburgh, Pennsylvania
Warrior & Gulf Navigation Company, Chickasaw, Alabama.

Alabama Electric Cooperative, Inc.
POST OFFICE BOX 550
Andalusia, Alabama 36420

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
of Energy and Water Development
2302 Raburn House Office Building
Washington, D. C. 20515

Dear Congressman Bevill:

We support the collective effort by the Warrior Tombigbee Development Association to improve the efficiency and reliability of the Warrior-Tombigbee Waterway. This waterway provides a means of shipping that is both energy efficient and cost effective in transportating coal to produce energy for the electric consumers in our area.

Alabama Electric Cooperative, Inc. (AEC) is a generation and transmission electric cooperative that supplies wholesale power to eighteen distribution cooperatives, four municipalities, and two industries in South Alabama and Northwest Florida.

Presently, AEC has two coal-fired generating plants. The Tombigbee Plant is located near Jackson, Alabama on the Tombigbee River and Southern Railroad and has barge and unit train unloading facilities. The McWilliams Plant is located at Gantt, Alabama on the Conecuh River and Southern Railroad. Unfortunately, the Conecuh River is not navigable and the McWilliams Plant has only rail service. During the past year the rail service on this line has been reduced to only three times per week.

In addition to these facilities, a prime and alternate site have been selected in Choctaw County, Alabama for an additional 1600 MW of coal-fired capacity. The prime site is located on the Tombigbee River and rail and water transportation will be available at this location. The alternate site is not located on the river and will only have rail transportation.

A power requirement study has just been completed and is currently being reviewed in an effort to determine when this new generation will be required. The best estimate at this time is that the first of the new 400 MW generating units will be needed sometime in the period between 1987 and 1989.

AEC has recently completed the installation of two new 235 MW units at the Tombigbee Plant--its largest coal burning plant. The estimated burn for the Tombigbee Plant is 924,870 tons in 1981, 906,970 tons in 1982, 936,270 tons in 1983, 986,700 tons in 1984, and just over one million tons in 1985-1990.

AEC is planning to increase the capacity of the barge unloader and dredge located at the Tombigbee Plant during the summer of 1981. Upon completion of these two projects AEC is projecting to move approximately 60 percent of the coal to the Tombigbee Plant via barge versus 40 percent via rail.

One of the major factors in the selection of the prime site in Choctaw County, Alabama for the location of AEC's next generating plant was the availability of water transportation and the alternate source of fuel that would be available by way of the Warrior-Tombigbee Waterway. It is estimated that approximately 700,000 tons of coal will be burned in the first year of operation of the plant. This would increase to approximately 2.8 million tons per year within three years and is estimated to remain at this rate for the next thirteen years.

In addition to the coal that would be required, limestone will be needed in conjunction with the sulfur removal equipment (scrubbers). It is estimated that 58,000 tons of limestone would be used in the first year of operation. This is estimated to increase to over 233,000 tons per year within three years and remain at this rate for the next thirteen years.

All or a major portion of the coal and limestone that will be used at AEC's new generating plant will possibly be transported by barge through the Warrior-Tombigbee Waterway. This would result in tremendous savings on electrical energy cost for the member-consumers of the distribution cooperatives, municipalities and industries that are member/owners of AEC.

We urge you to support the efforts of our Warrior-Tombigbee Development Association to insure a continued reliable waterway.

Yours very truly,

ALABAMA ELECTRIC COOPERATIVE, INC.

Charles R Lowman

Charles R. Lowman
General Manager

CRL:elf

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 250-1000

Joseph M. Farley
President

Alabama Power
the southern electric system

March 23, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Tom:

Alabama Power Company is vitally concerned over the economy of the state of Alabama. As the major electric utility in Alabama, we appreciate the opportunity to support the statements of Mr. Sheldon Morgan, president of the Warrior-Tombigbee Development Association, in favor of the development of the Warrior-Tombigbee Waterway.

Alabama Power Company operates six coal-fueled electric generating plants which consume over ten million tons of coal annually to produce electricity for its customers. The coal supply for two of these plants is delivered almost exclusively by river barge.

Plant Barry, located on the Mobile River in Mobile County, receives over two million tons by barge annually; and the Greene County Plant, located on the Black Warrior River in Greene County, receives about 750,000 tons by barge annually.

It is essential for the company to purchase the most economical coal available for these plants and to have it delivered through an economical and dependable transportation system.

In recent years, the company has found it most economical to purchase most of the coal for these two plants from mines in Alabama coal fields. The company has some long-term contracts with such mines.

Completion of the Warrior-Tombigbee Waterway will provide an alternative potential source of coal for Alabama Power Company. As we need additional coal, the supply alternative of receiving coal transported on this waterway will be evaluated and compared to other sources. The economic choice may be from various sources, but we believe the existence of the Warrior-Tombigbee Waterway will be a positive factor in our efforts to secure the most economical coal supply.

Our heavy use of the existing waterway facilities causes us to be vitally concerned over their operation and maintenance programs. It is essential to us that the river system operate in a dependable manner.

As an electric utility, we recognize the importance of the existing and proposed water system to the economy of Alabama. For this reason we endorse the plans to complete the Warrior-Tombigbee Waterway and to provide for its efficient and dependable operation.

Yours very truly,

Joe

Joseph M. Farley

JMF:ny

ALABAMA STATE DOCKS DEPARTMENT AN AGENCY OF THE STATE OF ALABAMA
TWX 810 741-7748
P.O.BOX 1588
MOBILE,ALABAMA 36601

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Chairman Bevill:

The Alabama State Docks and the Port of Mobile are embarking on perhaps the most exciting period of development in the port's 52-year history. The State Docks Department facilities at Mobile have for the last five years been undergoing renovation and refurbishing as the result of a $45 million Bond Issue passed for this purpose. On February 10, Coal Export and Port Facilities Expansion Revenue Bonds were sold in the amount of $100 million for the purpose of expanding bulk facilities at the Alabama State Docks vital to the State of Alabama and to the southeastern and midwestern regions of the United States.

In addition to renovation and expansion programs either under way or commencing in the immediate future, the Port of Mobile has a channel deepening and harbor improvement program which has been recommended at the Corps of Engineers District level in Mobile, approved at South Atlantic Region in Atlanta, and has just recently been approved by the Board of Engineers for Rivers and Harbors in Washington, D. C. Final approval of the project rests with the Chief of Engineers in Washington.

The project calls for deepening the Mobile ship channel from the Bankhead and Wallace Tunnels south to the Gulf from a present authorized depth of 40 ft. to an authorized depth of 55 ft. In addition, harbor improvements such as an additional authorized turning basin and anchorages are included in the project.

The Department's expansion program at Mobile includes a third phase to the McDuffie Island export coal terminals and will involve the construction of two additional storage pads bringing ground storage capacity at this plant up to 2 million tons, a third stacker/reclaimer, a third barge unloader, a second rail car dump, a second rail loop track, a second ship dock with high speed ship loading equipment and an integrated material handling conveyor system which will tie Phase Three into Phases One and Two giving the plant an extremely high level of flexibility in regard to its loading and unloading exercises as well as making this facility the most technologically advanced export coal handling plant in the United States.

Also included for expansion is the Alabama State Docks bulk material handling facility at Three Mile Creek. This expansion will include construction of the concrete bottom dump pit of a size and length sufficient to unload two bottom dump rail cars at one time with required feeders and connecting conveyors to move such commodities as coal and coke from the bottom dump pit to existing main dock conveyors for delivery of the commodities either to an existing ship loader or by a new conveyor to a new paved storage area which will be constructed from bond proceeds.

The new conveyor from the main dock conveyor to the new storage area will be reversible so tonnage can be reclaimed from the storage area and transferred to the existing ship loader. Included in this construction will be necessary railroad track work as well as pollution control equipment to meet all applicable air and water discharge requirements.

Export grain tonnages arriving at Mobile are processed through the Alabama State Docks Department grain elevator complex consisting of a number of elevators, storage silos and bins. The Department is presently completing construction of the north head house which enables the cleaning, weighing and loading onto ships of grain transferred from the existing storage facilities, as well as the receipt of grain from truck and rail connections. The existing grain facilities contain a storage capacity of 3.2 million bushels and capacity in four shipping systems to load ships at approximately 40,000 bushels per hour.

The grain handling facilities will be improved from the proceeds of the bond fund by construction of facilities necessary for compliance with Emission Control Regulations of the U.S. Environmental Protection Agency and the development of facilities which will be capable of loading ships at a rate of 80,000 bushels per hour at a new berth which will be constructed at the river end of Pier D. The berth will be of sufficient size to handle the large bulk grain carriers and grain will be conveyed from the North head house through an enclosed gallery building constructed parallel to the loading berth. Two 80,000 bushel per hour belts will feed rail mounted loaders which will be powered for travel up and down the wharf and capable of swinging 180 degrees. The loaders will be equipped with a telescoping verticle loading chute and the loading boom will be able to reach 84 ft. down the face of the wharf.

The highly competitive posture of the Alabama State Docks and the Port of Mobile is a direct result of the port's enviable inland transportation infrastructure. Four major rail lines serve the Port of Mobile; however, it is the State's inland river system that often gives the port its competitive edge.

The expansion projects which I have outlined above are the direct result of bulk tonnages moving on Alabama's River systems and the Warrior-Tombigbee is, of course, the heavier utilized system in the State.

The Alabama State Docks has developed four inland docks on the Warrior-Tombigbee system, two of which are equipped with grain elevators. The inland facility at Demopolis has a 362,000 bushel elevator while the facility at Tuscaloosa-Northport has a 572,000 bushel elevator. Grain arriving at these facilities can be moved to the deep water terminal facilities at Mobile by economical barge transportation.

During the calendar year 1980, eighty-four percent of the inbound traffic moving into the McDuffie export coal terminals arrived by barge. The plant worked 2,493 barges of coal during 1980. This coal was loaded in the Warrior River basin and moved via the Warrior-Tombigbee/Mobile River to the export plant in Mobile. The economies of river transportation in connection with export coal shipments have given producers in the State of Alabama an entre into coal markets abroad. In addition to providing low-cost transport on waterway systems, the rivers have had the additional effect of stabilizing land movement by rail requiring our railroads to be cost competitive.

The continued operation and maintenance of the Warrior-Tombigbee Waterway is vital to the interest of the Alabama State Docks and the Port of Mobile. The restraint on the waterway at this time exists in the Oliver Lock and the continuance of an expedited study to replace this Lock is imperative.

The Alabama State Docks through this statement and in concern for the continued development of the Warrior-Tombigbee Waterway offers its support for the testimony of Sheldon Morgan, President of the Warrior-Tombigbee Development Association. Not only is this waterway vital to the interest of Alabama in that it provides an economic mode of transportation, it also has the national effect through the movement of export coal and grains of offering this country the assistance of bringing into balance our deficit in trade and payments.

The river system is energy efficient and plays a vital role in our local, national and international trade, and we at the Alabama State Docks Department pledge our unerring support to its continued development.

Respectfully,

Robert M. Hope

Robert M. Hope
Director

RMH:ss

AMERICAN
CAST IRON PIPE COMPANY

DUCTILE & GRAY IRON PIPE & FITTINGS
AMERICAN-DARLING VALVES & HYDRANTS
ACIPCO STEEL CASTINGS & TUBES
AMERICAN STEEL PIPE
AMERICAN MAG-COKE
SPECIFICATION RUBBER PRODUCTS

P. O. BOX 2727 • BIRMINGHAM, ALABAMA 35202 • TEL: 205/325-7737 • TELEX 5-9736

CARL P. FARLOW
PRESIDENT

March 23, 1981

Honorable Tom Bevill, Chairman
Subcommittee on Appropriations for
Energy and Water Development
House of Representatives
Washington, D. C. 20515

Re: Warrior-Tombigbee Waterway

Dear Tom:

My company, American Cast Iron Pipe Company, has had a vital and continuing interest in commerce on the Warrior-Tombigbee Waterway for many years. Some twenty-five years ago, we made our first barge shipments to Mobile by trucking cast iron pipe from our plant in North Birmingham, Alabama to the banks of the Warrior River fifteen miles away.

Commencing in 1964, we increased our barge movements of cast iron and ductile iron pipe on the Warrior-Tombigbee Waterway. We have used the facilities of the Alabama State Docks at Cordova, Alabama; the Warrior and Gulf Navigation facilities at Birmingport, Alabama, and the facilities of Osborne Trucking Company at Port Osborne, Alabama.

We have shipped via Warrior and Gulf Navigation Company and Parker Towing Company to the Port of Mobile. We have shipped barges direct to Jamaica without transfer at Mobile, using the services of Adams Marine. We have shipped lash barges to Indonesia, using the services of Central Gulf Shipping Company. We have shipped barges via Alarico Barge Lines direct to Puerto Rico, with transfer at Mobile.

Our barge activity during the last fifteen years would undoubtedly have been much greater had we not been plagued with problems of low water, locks going out of service for long periods of time, and slow transit, due to the necessity of moving a limited number of barges through the locks at one time.

Our total export tonnage through the Port of Mobile varied from 5,000 to 30,000 tons per year during the last fifteen years. We have barged as much as 4,000 tons of pipe in a single year. In some years we have not barged anything. In 1980, we did not ship any barges to Mobile. Our plans are uncertain for 1981. We do have substantial export orders for pipe, but the uncertainty of barge schedules makes us reluctant to risk demurrage on ships at Mobile.

You can judge by the foregoing that we do avail ourselves of water transportation. Under proper conditions it is a useful, economical mode of transportation. I strongly urge you to support the program for expanded operations and maintenance of the Warrior-Tombigbee Waterway.

Sincerely,

Carl P. Farlow

CPF:dlb

AMERICAN COMMERCIAL BARGE LINE COMPANY

P. O. Box 22206
Houston, Louisiana 77083
Phone: 504/733-7870

Division of Texas Gas
Transmission Corporation

March 9, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

I am writing on behalf of the American Commercial Barge Line Company which operates a fleet of towboats and barges on the Inland Rivers and canal system of the country to provide service to the various Industries located along these waterways. We wish to express our support for the initiative being undertaken by the Warrior-Tombigbee Development Association to improve navigation on the Warrior-Tombigbee Waterway.

Included in our transportation system is the movement of coal from Holt, Alabama, Port Osborne and Coal Systems Dock at Mile 372 on the Warrior River to Gulfport, Mississippi. These cargoes move down the Black Warrior, through the Port of Mobile and West to the Gulf Intracoastal Canal. In 1980, these movements accounted for approximately 850,000 tons of cargo. In addition to these volumes, we also were involved in the movement of a number of loads of scrap, alumina and chemicals through the Port of Mobile on a high volume basis for over five years and we anticipate increased volumes of movements in the future due to the significant development of coal resources in the area served by the Waterway. During this time we have developed what we feel is the most efficient method of operating along the subject Waterway. Our tows, when conditions permit,

consist of six barges and a bow steering unit, rather than the four-barge tow traditionally operated along this Waterway. This configuration leads to improvements in fuel efficiency as well as savings in capital and manpower. Improved channel maintenance coupled with expanded capacity at Oliver Lock will lead to increased use of this type tow which in turn would lead to reductions in the cost of transportation, making the products of this region more competitive in U.S. and world markets.

Another project supported by the Warrior-Tombigbee Development Association that has significant potential is the deepening of the Port of Mobile. Some analysts have been quoted as saying that the delivered price of U.S. coal exported through Gulf ports to European markets could be reduced by over $6.00 per ton if the Gulf ports could accommodate the larger vessels now plying the world's oceans. More efficient river operations coupled with the improved channel depths that will accommodate large ocean-going vessels should greatly enhance the competitive position of U.S. coal in the world market place. As a nation chronically fighting balance of payment problems due to the high cost of importing fuel, a program leading to an improved export position should enjoy widespread support.

In closing, I would like to say that if our Company can be of any further assistance in providing input regarding this matter, please advise.

Respectfully yours,

Norman S. Ivey

Norman S. Ivey
General Manager, Asst. V.P.

NSI/dab

CBI

Chicago Bridge & Iron Company

P O Box 277
Birmingham, Alabama 35201
205 595 1191

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

Please accept this statement as one of general support for the testimony to be given by President Sheldon Morgan of the Warrior-Tombigbee Development Association, Birmingham, Alabama. As a board member of this association, we have participated in the collective efforts to improve the efficiency and reliability of the Warrior-Tombigbee Waterways because it results in lower freight rates for our products and contributes significantly to efficiency in energy consumption. The importance of this in enhancing local, national and international trade is clear.

In mid 1970 my company constructed and opened a multimillion dollar fabricating facility on the Warrior River in Cordova, Alabama. This plant is equipped to fabricate, machine, weld, test and load on barge extremely large and heavy steel vessels for use in the nuclear and petroleum industries, as well as other fields such as chemical processing, pulp and paper, water and waste treatment, water storage and many others. The decline of nuclear as well as lack of expansion in oil refineries in recent years has compelled us to cease operation temporarily at this facility. We believe however, that the energy crisis we are now faced with in this country will soon result in a complete turnaround and that we will soon be utilizing the Warrior-Tombigbee System for shipment of the products above mentioned.

In summary, we feel the various projects now pending including the approximately $7.5 million (these are approximate amounts which may be refined for the oral testimony) for Operations and Maintenance of the Warrior-Tombigbee Waterway; $950,000 to continue the expedited study on Oliver Lock replacement and the remainder of the waterway; and $3.7 million for Operation and Maintenance and efforts toward deepening the Port of Mobile are all essential for my company and for the economy of our state.

We respectfully request your dedicated support.

Sincerely yours,

Lewis E Akin

Lewis E. Akin
Plant Manager

ns

Before the

HOUSE OF REPRESENTATIVES,

HOUSE SUBCOMMITTEE ON APPROPRIATIONS

FOR ENERGY & WATER DEVELOPMENT

VERIFIED STATEMENT

OF

L. A. SEALS

ON BEHALF OF DIXIE CARRIERS, INC.

My name is Larry A. Seals. I am Vice President, Marketing of Dixie Carriers, Inc. My office is located at 1717 St. James Place in Houston, Texas. I have had over sixteen years in the transportation field and have been Vice President at Dixie Carriers for the past five years.

Dixie Carriers is a diversified barge line in that we operate approximately 50 oil tank barges, 18 clean products barges, 10 dry cargo barges, 6 offshore barges utilizing 25 towboats. While we serve principally the Gulf Coast we also have service on most all of the inland waterway system including service across the Gulf of Mexico to Florida. We also have Common Carrier authority over all of the Gulf Intracoastal Waterway and on the inland river system to Chicago and Pittsburgh. This service includes the Warrior-Tombigbee Waterway to Birmingham.

Dixie has been in operation since 1948 when it purchased the assets, including floating equipment and operating authority, of River Terminals Corporation, and was renamed Dixie Carriers, Inc. In the intervening years we have moved cargo many times to and from points on the Warrior-Tombigbee Waterway. Our service, in most every instance, has been limited to shipments between points on the Warrior-Tombigbee Waterway and points on the Gulf Intracoastal Waterway. For example, since 1965 approximately every 25 days, we move a very large combination oil and dry cargo barge between Houston, Texas and Birmingham, Alabama. This barge contains bulk and packaged petroleum products. We also have had coal and chemical movements many times to and from numerous points on the Warrior-Tombigbee Waterway. We do not however, compete on short haul movements.

From this history one can see that Dixie Carriers, Inc. is experienced with barge shipments on the Warrior-Tombigbee Waterway and we certainly support the testimony before your committee by Mr. Sheldon Morgan of the Warrior-Tombigbee Development Association.

Continued improvements on this waterway will be necessary in the years to come as it is a most difficult one to operate on. Because of the water conditions, much of the year more boat horsepower is required than on similar rivers. This makes the river a "high cost" operation and increased productivity is difficult to attain.

As our industry seeks ways to improve transportation efficiency including the improvement of energy efficiency we must also seek ways to improve the waterways. Barge transportation by its very nature is economical and everything possible must be done to see that it continues that way. The nation

requires a healthy transportation industry and efficient waterways are a necessity in order to achieve this.

VERIFICATION

L. A. Seals, being duly sworn, deposes and says that he has read the foregoing statement, knows the contents thereof, and that the same are true as stated.

L. A. Seals

Subscribed and sworn to before me, a Notary Public, this 6th day of March, 1981.

Notary Public

JOAN ORTLI
Notary Public in and for Harris County, Texas
My Commission Expires January 31, 1985

(SEAL)

P.O. Box 1549
Jasper, Alabama 35501

Telephone (205) 387-0501
Telex: 5-9768 Drummond Japr

Jerome Drummond
Vice President-Transportation

DRUMMOND
COAL
COMPANY

March 23, 1981

The Honorable Tom Bevill, Chairman
House of Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Bevill:

I am writing you a statement representing Drummond Coal Company, who is in the business of mining, selling and agency, for Drummond's mine production and handling, agency wise, of Jim Walter Corporation. Drummond Coal Company has been in the business of moving coal on the Warrior-Tombigbee River systems for several years and have been in the export business since 1968.

Drummond, in 1980, had contracts for 3 million tons, but because of lock failures and high and low water on the Warrior-Tombigbee River, we were only able to ship 2.4 million tons. In 1981, Drummond has orders and anticipate 4 million plus tons to be exported. In 1982, Drummond is projected 4.25 million and 1983, 4.5 to 5 million tons.

We presently have two barge loading facilities at mile post 354 on the Black Warrior River capable of loading up to 6 million tons per year. These two facilities will be loading 2 million tons for Drummond Coal Company and 3 million plus tons for Jim Walter Corporation in 1981. We are presently loading at Port Osborne at mile post 399, and Port Birmingham at mile post 400 on the Locust Fork and anticipate 2 plus million tons in 1981 from these locations.

Drummond is in the process of building a new barge loading facility and preparation plant at mile post 402 on the Locust River capable of loading 3 million tons per year that will be completed in the first quarter of 1982. Also Drummond is in the process of building a new barge loading facility at mile post 418 on the Mulberry River capable of loading 2 million tons per year.

As you can see, barge transportation is a vital part of Drummond's stability. By using barge, Alabama coals are more competitive with the world producers.

Drummond payroll in 1980, was $54,000,000 for the people of Jefferson, Walker, Cullman, Marion, Winston, Tuscaloosa, and Fayette counties. Of this $54,000,000, over 40 percent is directly tied to the export business. By 1984, Drummond payroll will be in excess of $80,000,000 at which time over 60 percent will be tied directly to export coal. Jim Walter and Drummond Coal Company will be moving 8 to 9 million tons annually, all by barge, with an investment of over $600,000,-000 in their mines.

I don't want to astound you with large figures, but I am stating that the economy of the mining counties of the State of Alabama depend greatly on a vital link, which is the Warrior-Tombigbee water system, from mine to market.

Hope this statement will enlighten you to the necessity of a continued good water system for the State of Alabama. As you are aware, with a much needed balance of payment for the United States, coal, will play a very large part in getting this nation back to where it was previously and the water systems play a very large role in doing so.

I want to thank you for your time in reading this statement and look forward to the opportunity to show you first hand the Alabama coal mines and water system.

Regards,

Jerome Drummond

JD/glm

T. H. FINDLAY, PRESIDENT
HOME 758-7747

OFFICE
758-5206
752-5361

T. E. FINDLAY, VICE-PRESIDENT
HOME 752-3490

FINDLAY TOWING COMPANY, INC.
P. O. BOX 2117
TUSCALOOSA, ALABAMA 35401

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

My firm is engaged in the transportation of coal on the Black Warrior - Tombigbee River in the state of Alabama. This coal is transported by energy efficient towboats and barges to steam generating plants that produce electricity. In 1980 my firm transported approximately one and one half million tons of coal to these generating plants, and I expect to equal or increase that amount for 1981. I have been in the marine transportation business since 1945, and I have seen a tremendous increase in tonnage moved on this river each and every year. I'm sure this increase is due to the fact that marine transportation is the cheapest means of transportation in our country. Another reason for the increase in tonnage moved on the Black Warrior -Tombigbee is the replacement of small antiquated locks and dams by fewer and larger modern locks. The one remaining small lock on the BW - T River is the Oliver Lock located at Tuscaloosa. This lock is now under study for replacement, and it is my hope that I will see work started on a new standard size lock in the not so distant future. The Oliver Lock has become a "bottleneck" for barge traffic on this river, and the problem will increase as more tonnage is moved on this river. The coal producing industry located just north of Tuscaloosa ships tremendous amounts of coal by river to the steam generating plants in Alabama and to the Port of Mobile for export.

I agree with our new administration in Washington that government spending had gotten completely out of hand, but I do believe that we must retain and utilize the proven cost efficient methods of the past concerning transportation if we are to be successful in our fight against high costs and inflation.

T. H. Findlay
President
Findlay Towing Company, Inc.

PHONE (904) 763-6609

Georgia Transporters, Inc.

308 S. CHURCH STREET
PANAMA CITY, FLORIDA 32401

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

Georgia Transporters, Inc. would like to be on record that we whole heartily endorse the testimony which will be given by Sheldon L. Morgan, President of the Warrior-Tombigbee Development Association. We ask that you give this testimony serious consideration.

Georgia Transporters, Inc. was formed in 1952 and has moved considerable tonnage of petroleum products safely and effeciently and is presently operating three tow boats and five tank barges on the Inland Waterways, predominately in the Gulf Coast area.

We are enclosing a picture of our new tow that was put into operation on the Warrior-Tombigbee waterways in December 1980. The picture is particularly symbolic as we do not move cities, as it may seem, we engage in moving via waterways, fuel and energy that the cities must have. This particular tow represents an investment of over $3,000,000.00 and will move 26,000 barrels (3,800 tons) of crude oil from Mobile Harbor to Vulcan Refining at Cordova, Alabama and return to Mobile with 25,000 barrels (3,800 tons) of #6 oil from the refinery to various terminals within the Mobile area. The barge pictured is reportedly the largest inland barge ever built; it is a 370' x 54' x 12' double-skin barge.

We resumed operating on the Warrior-Tombigbee waterways in December 1980 after an absence of several years. Our decision to re-enter this waterway was the result of the improvements in the system that have been made in the past. However, during the first sixty day period, we experienced lock delay of 28 hours at the Oliver Lock and Dam in Tuscaloosa. This lock is only 90' wide and 460' long and has become a bottleneck to the orderly flow of traffic. The 28 hours is approximately 500% over what we would normally expect. If these delays continue, needless to say, this low cost and energy efficient water transportation service to the area will be affected.

It has been our policy to make investments in equipment based on long term cost recovery and profit. However, we and the industry cannot continue making long-range plans if the Government does not respond with an equal amount of long-range optimism to justify these kind of expenditures.

It is our belief that the Government's negative attitude toward water resources development which has been inspired by extreme environmentalists has sharply retarded the development of all waterway systems. We further feel that Congress must resume the roll as policy maker which it has deferred to various Federal agencies which have little regard to the economics of water transportation.

Sincerely yours,

J. H. Murphy, Jr.
General Manager

JHM/el

Enclosure

Gulf Power Company
Post Office Box 1151
Pensacola, Florida 32520
Telephone 904-434-8383

Earl B. Parsons, Jr.
Vice President-Electric Operations

Gulf Power
the southern electric system

March 23, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
on Energy and Water Development
House of Representatives
Washington, D.C. 20515

Dear Mr. Bevill:

Gulf Power Company is an investor-owned electric utility and a member of The Southern Company serving a 7,400 square mile area of the Florida panhandle. Our Company utilizes coal for over 95 percent of its total generation requirements consuming approximately 2.7 million tons per year. Over 90 percent of our coal deliveries are dependent upon waterway transportation.

Gulf Power currently moves approximately 1.2 million tons of coal on the Warrior River and/or through the Port of Mobile. The remainder of Gulf's coal delivered over the national river systems originates from the Southern Illinois Coal Basin vacinity and travels down the Mississippi River through the Port of New Orleans. From the ports of New Orleans and Mobile all waterway deliveries travel via the intercoastal waterway for delivery at our Pensacola and Panama City generating plants.

As you can see from Gulf's dependency on the Warrior River and the Port of Mobile, we wholeheartedly support the need for adequate funding to properly maintain and improve operations. It is imperative that Gulf continue to receive coal shipments in order to provide continued reliable electric service at the most economical cost to our customers.

As proven by our present usage and commitment to Alabama waterways and facilities, we plan to evaluate to the fullest extent possible usage of the Warrior-Tombigbee Waterway for coal originating in the Southern Illinois Basin and to utilize this new waterway system where it is possible and economically in our favor to do so.

In summary, we are in full support of the efforts of the Warrior-Tombigbee Development Association to provide efficient and reliable waterway systems for coal delivery. We feel that it is not only in Gulf Power's interest to support this worthy endeavor, but also in the best interest of our nation to improve our capabilities to transport coal and other commodities from points of origin to market places.

Sincerely,

E B Parsons Jr.

E. B. Parsons, Jr.

EBPjr:dbm

CLARENCE M. KILIAN - 210 YORKSHIRE DRIVE - BIRMINGHAM, ALABAMA 35209

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

My name is Clarence M. Kilian. My address is 210 Yorkshire Drive, Birmingham, Alabama. For approximately 20 years I have been well informed on waterway development in Alabama. Currently I am a consultant in that and related fields.

Development of the Warrior-Tombigbee Rivers system in Alabama began in the late 1870's and progress was made until 1915 when the 17th (Bankhead) in a series of locks and dams was completed. This was a double lift lock, 95 feet wide by 460 feet, and traffic traversing it was less than half-million tons the first year after completion. That lock also has been replaced with one with a capacity consistent with current and future traffic.

Unfortunately maintenance funds for all of the locks were inadequate to maintain them in first class operating condition. Traffic also steadily increased beyond expectations. Delays were frequent. The older locks themselves fell into a state of disrepair and became hazardous to navigation. Areas downstream were threatened with increased flood hazard.

In the late 1930's the dilapidated condition of locks 10, 11, and 12 in the vicinity of Tuscaloosa, Alabama made traffic frequently impossible over the fall line - that area where the land elevation drops most acutely in the shortest distance of a stream's course. They were threatened with complete shutdown. The late Congressman William Bacon Oliver, realizing the seriousness of the situation, both economically and physically, was successful in having legislation enacted which resulted in the construction of the present William Bacon Oliver Lock and Dam, with a dimension of 95 feet x 460 feet. Since then all of the other 14 locks

CLARENCE M. KILIAN - 210 YORKSHIRE DRIVE - BIRMINGHAM, ALABAMA 35209

(including Bankhead) on the Warrior have been replaced with fewer structures, now six (6) in all. With the exception of Oliver, each has dimensions of 110 feet x 600 feet.

Consequently, Oliver Lock presents a serious and major obstruction to the smooth flow of traffic. Since 1940 - the year Oliver was completed - traffic has increased from about 2,000,000 tons annually to 18,000,000 tons annually. Oliver Lock is a serious bottleneck, one which will continue to become more acute as the tonnage, with the increasing movement of coal brought about by the energy crisis, continues to mount.

I will not dwell on operating problems resulting to towboat operators. They can do that better than I. However, I do wish to invite your attention to the fact that many of the broad and diverse economic benefits which supposedly were to have been derived from the replacement of the other obsolete structures on the River are forfeited because of the inadequacies of Oliver Lock. Much energy is wasted as a result of delays at Oliver and consequent inefficiency of operation.

As the members of your Committee well know, the capacity of a waterway, as with any other traffic system, is limited by its most constricted stretch. In the Warrior-Tombigbee System, that is the stretch in the approximate center of which Oliver is situated.

The completion of the Tennessee-Tombigbee Waterway within a few years will impose additional traffic burdens on Oliver Lock as well as other stretches of the Warrior-Tombigbee System downstream from the confluence of the Tenn-Tom System near Demopolis, Alabama.

I am aware of the desirability of close scrutiny of expenditures of public funds but I also recall the old adage "Penny wise and pound foolish". Perhaps you and your Committee members concur in that viewpoint as it applies to the completion of improvements in the Warrior-Tombigbee System.

I endorse the 1982 appropriations of the request of the U. S. Army Corps of Engineers as it relates to the Warrior-Tombigbee System.

With appreciation for any consideration your group will give my viewpoint, I am,

Sincerely,

C. M. Kilian

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy and Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

On behalf of the Mobile Area Chamber of Commerce, we hereby wish to go on record in support of federal funding for the Warrior-Tombigbee Waterway Project.

As you know, this waterway serves as a vital artery for international trade through the great port of Mobile. Presently, extensive shipments of export coal is being made to various overseas destinations. With the ever increasing oil prices, it appears that the outlook for increased shipments of coal will be tremendous over the next several years. In addition to the export coal movements, the Warrior-Tombigbee Waterways also play an important role in our nation's steel industries as large volumes of imported iron ore are discharged at the port of Mobile and transferred by barge to the steel making center of Birmingham, Alabama.

We, therefore, respectfully request that your Committee give favorable consideration to the request for funds to operate and maintain this waterway system as well as to provide the necessary improvements and/or replacements, particularly the replacement of Oliver Lock.

Sincerely yours,

W. J. Hearin, President
Mobile Area Chamber of Commerce

W. J. Hearin
PRESIDENT
sb

Mobile Area Chamber of Commerce
P.O. Box 2187, Mobile, Alabama 36652, 205/433-6951

PARKER TOWING COMPANY, INC.
P. O. BOX 72 • TUSCALOOSA, ALABAMA 35402 • 205-349-1677

March 20, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

My name is Tim Parker, Sr., and I am President of Parker Towing Company. We are a family owned and operated barge line that has transported barge traffic on the Warrior-Tombigbee Waterway for over forty (40) years.

I would like to lend my support to the testimony given by Sheldon Morgan, President of the Warrior-Tombigbee Development Association. The effort of this organization, to improve the reliability and efficiency of the Warrior-Tombigbee Waterway should be joined by all. This effort will result in lower rates for the public, energy efficiency, and is important to international commerce and our balance of trade deficit.

Parker Towing Company has been using the Warrior-Tombigbee Waterway since 1940. We move various commodities; coal, grain, steel products, cement products, petro chemicals, manganese ore and fertilizer are some examples.

In serving our customers, Parker Towing operates a fleet of sixteen (16) towboats, one hundred thirty-nine (139) hopper barges, and three (3) tank barges. This fleet is worked and maintained by one hundred fifty-four (154) personnel and serves the following sites on the Warrior-Tombigbee:

1.	Coyle	Mile 429	Mulberry Fork
2.	Port Walker	Mile 421	Mulberry Fork
3.	Moss Port	Mile 416	Mulberry Fork
4.	Vulcan Refinery	Mile 416	Mulberry Fork
5.	Gorgas Steam Plant	Mile 399	Mulberry Fork
6.	Port Osborne	Mile 398	Locust Fork

7.	Port Birmingham	Mile 397 Locust Fork
8.	Maxine Mines	Mile 390 Locust Fork
9.	Port Warrior	Mile 372 Warrior River
10.	Kellerman Preparation Plant	Mile 354 Warrior River
11.	Port Mayfield	Mile 351 Warrior River
12.	Abston Construction	Mile 348 Warrior River
13.	Warrior Asphalt	Mile 345 Warrior River
14.	Port McDonald	Mile 338 Warrior River
15.	Greene County Steam Plant	Mile 228 Warrior River
16.	Citadel Cement Company	Mile 214 Warrior River
17.	Mississippi Chemical Company	Mile 229 Tombigbee River
18.	Tom Soya Grain Company	Mile 316 Tombigbee River
19.	Barry Steam Plant	Mile 31 Mobile River
20.	Alabama State Docks	Mobile

From our main office, located at Mile 338.7, we are able to observe one of the main bottlenecks on the Warrior-Tombigbee System. William Bacon Oliver Lock at Mile 338.1 can be seen daily slowing traffic. As traffic increases, so will this bottleneck decrease the efficiency of movement on the river. The need for replacement of Oliver Lock is seen each day as we see our own boats and barges and those of many other companies laying idle waiting to lock. Funding for the study to determine the economic feasibility of the replacement of this lock is greatly needed and should be given high priority.

Continued dredging and other channel maintenance of the Warrior-Tombigbee, along with maintenance and deepening of Mobile Harbor are vital to the efficiency with which we can move the energy-rich resources of our nation. The increased efficiency is needed, as in all phases of industry, if the nation's productivity as a whole, is going to increase.

Included in the budget which your Committee is now considering are the following items bearing directly on the needs of the Warrior-Tombigbee Waterway:

Black Warrior and Tombigbee Rivers	Operation and Maintenance	$7,494,500
Warrior and Tombigbee Rivers, Alabama	Surveys	$ 958,000

Other needs allied to the Black Warrior-Tombigbee include:

Mobile Harbor	Deepening Survey	$ 700,000
Mobile Harbor, Alabama	Operation & Maintenance	$3,044,000

I fully endorse and seek the approval of these items and appreciate any consideration your Committee would lend to them.

Sincerely,

Tim Parker Sr

Tim Parker, Sr.

TMPSr/i

RADCLIFF MATERIALS, INC.
McDUFFIE ISLAND.MOBILE, ALABAMA.36601 POST OFFICE BOX 2068 PHONE 205-432-2651

READY - MIXED CONCRETE
RADMIX ASPHALT
SAND • GRAVEL
SHELLS • MORTAR
Radstone

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

We respectfully request your consideration and approval of appropriations necessary to continue the maintenance and development of the Warrior-Tombigbee Waterway System for the fiscal year 1982.

Programs and the approximate funding required include: $7.5 million for operations and maintenance of the navigation channel including locks and dams; $950,000 to continue the expedited study on Oliver Lock replacement; and $3.7 million for operation, maintenance and deepening of the Port of Mobile. The foregoing amounts are approximate and may be refined for the oral testimony.

The Warrior-Tombigbee Waterway and the other waterways of Alabama are invaluable lifelines to a thriving Port of Mobile and a vibrant growing economy in South Alabama.

Not only are the waterways important to the local economy, but also to national and international trade because of the availability of lower cost, energy efficient water transportation. Sheldon Morgan, President of the Warrior-Tombigbee Development Association, will elaborate on this in his statement to the committee. We fully support and endorse his testimony.

Radcliff Materials, in addition to utilizing the waterways as the primary source of raw materials for its aggregates business, is one of the major providers of transportation for coal, limestone, cement and other products from various points on the Warrior-Tombigbee Waterway System to Mobile and points beyond.

RADCLIFF MATERIALS, INC.

In the past 12 months of 1980/81 tonnages moved include:

Gravel	350,000 tons
Coal	100,000 tons
Other Products	25,000 tons

We urge your approval of budget requests to ensure that the energy efficient water transportation systems of the State of Alabama can be made even more efficient and achieve their designed capabilities.

Your committee has always been most generous in its past considerations for appropriations on projects in our area, and we sincerely appreciate the committee's support of the Great Waterway Systems of the State of Alabama.

Yours very truly

RADCLIFF MATERIALS, INC.

Carl A. Torbert, Jr.
President

/mn

Carlton Baker
Vice President

South Central Bell
P. O. Box 2662
Birmingham, Alabama 35202
Phone (205) 321-3390

March 18, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Representative Bevill:

The strength and viability of Alabama's commerce is closely tied to the economic health of the region in which it exists. For that reason, and for many others, I am writing to express my strong support for the continued modernization and maintenance of the Warrior-Tombigbee Waterway and the timely completion of the Tennessee-Tombigbee Waterway.

Maximum effectiveness of these federal projects would more than double the value of the Port of Mobile to the state of Alabama and result in economic stimulation and industrial development of the whole area. It should add several millions of dollars to the economy of Mobile alone in the first few years after the waterway's completion. The benefit-cost ratio of the program means a substantial net profit to the region and the nation. And certainly at this stage of the project, it would be tragic to lose the benefit of the investment to date.

The development of our national waterway systems would help to answer some of our nation's pressing needs: it would increase productivity, aid agricultural production and sales, allow the United States to compete more effectively in foreign markets, increase energy efficiency, provide employment and industrial and commercial development. It would, in addition, bring a better utilization of water, provide flood control, and bring recreational benefits. And, finally, there is the national defense value of a network of navigable inland waterways.

These waterway projects, in particular, seem a sound investment in the future. For that reason, I support the testimony of Sheldon Morgan, President of the Warrior-Tombigbee Development Association on behalf of the project, and I urge that adequate appropriations be made to complete this vital, cost-effective program.

Very truly yours,

C Baker

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870-6011

James C. Ludwig
Vice President

the southern electric system

March 23, 1981

The Honorable Tom Bevill, Chairman
House Subcommittee On Appropriations
For Energy and Water Development
House of Representatives
Washington, D. C. 20515

The Honorable Mark Hatfield, Chairman
Subcommittee On Appropriations For
Energy and Water Development
United States Senate
Washington, D. C. 20510

Gentlemen:

Southern Company Services, Inc., a subsidiary of The Southern Company and a sister company to Alabama Power Company, Georgia Power Company, Gulf Power Company and Mississippi Power Company, is directly involved in the procurement and transportation of approximately 35,000,000 tons of coal for electric power generation purposes in the Southern electric system. More than 5,000,000 tons per year of this amount is shipped by barge currently via the Warrior-Tombigbee River system and increases are expected in the future. Thus, we are vitally interested in improvements in and the level of fundings for the Warrior-Tombigbee projects.

Within the Southern electric system there are nineteen generating plants utilizing coal as the primary fuel. Five of these plants receive coal exclusively or primarily by barge - Plant Barry (near Mobile) and the Greene County Plant (near Demopolis) of Alabama Power Company; Plant Crist (near Pensacola) and Plant Smith (near Panama City) of Gulf Power Company; and Plant Watson (near Gulfport) of Mississippi Power Company. Although Plant Smith of Gulf Power Company is not currently receiving barge coal via the Warrior-Tombigbee River system, a major portion of its coal is being handled through the Port of Mobile and the Alabama State Docks.

Fuel (primarily coal) is the largest single operating expense faced by the operating companies of the Southern electric system and as such has a dramatic cost impact on its customers. Thus, our goal has to be to purchase and deliver coal at the lowest possible cost consistent with reliability and dependability of supply. In this regard it is vitally important that economical and reliable transportation modes be available to our system operating companies. The Warrior-Tombigbee Waterway system being in the center of the Southern electric system obviously provides one very important mode of transportation for coal to three of our four operating companies.

In 1980 there were several outages on the Warrior-Tombigbee River system. These outages represent added cost to us and our customers in terms of higher transportation costs and more expensive alternative sources of supply. Maintenance of the Waterway and improved locks are essential to ensure reliable transportation of coal to the above mentioned plants of the Southern electric system. We therefore fully support the statement of Mr. Sheldon Morgan, President of the Warrior-Tombigbee Development Association, and the points he has made regarding the Warrior-Tombigbee Waterway system today and for the future. We solicit your continued support of the Warrior-Tombigbee River system.

Sincerely,

lh

SOUTHERN INDUSTRIES CORPORATION
Post Office Box 1685 - Mobile, Alabama 36633

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I would like to give general support to the testimony being given your sub-committee today by Sheldon Morgan, President of the Warrior-Tombigbee Development Association, as well as the operators, business men, industries and citizens submitting written testimony.

I have been observing the development of the Warrior-Tombigbee Waterway since I reported to the Mobile District, Corps of Engineers for my first Army assignment in 1929. On returning to the Mobile District as District Engineer in 1949, I found very little modernization or growth in use of the waterway had taken place since, in my earlier assignment, I had been in the survey parties on the headwaters of the Warrior River.

During my tour as District Engineer, modernization of the waterway picked up with the start of construction of Demopolis Lock and Dam and has continued at a steady pace up to the present. The growth of traffic has been ample evidence of the usefulness of the waterway and now we can see increased effectiveness with the Tennessee-Tombigbee project joining the river system.

In today's environment, with efforts underway to turn the economy around, to subdue inflation, to pare government expenditures and at the same time put more people to work and furnish assistance to those unable to support themselves, I recognize that the Congress may find it advantageous to slow the tempo of appropriations.

I am sure, however, as you analyze the requests for funds for operation and maintenance and for planning and improving this waterway and the Port of Mobile, you will find that many of the project goals ultimately will support and reinforce the efforts mentioned above. I put my faith in the ability of the Congress to balance the pros and cons, to work out the timing and phasing and before too long, to add the improvements requested to this vibrant waterway.

Sincerely yours,

Walter K. Wilson Jr.

Walter K. Wilson, Jr.
Lieutenant General, USA, retired
Consultant

WKWJr/bjc

POST OFFICE BOX 949
25 N. SECTION STREET
FAIRHOPE, ALA. 36533
TELEPHONE (205) 928-0230

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

As a member and director of the Warrior-Tombigbee Development Association, as well as a daily user of the Warrior-Tombigbee Waterway, we wholeheartedly support the testimony given by the President of the Warrior-Tombigbee Development Association, Mr. Sheldon Morgan. The importance of the waterway and its impact on, not only local, but national and international trade cannot be overemphasized. Historically the Warrior-Tombigbee Waterway has been one of the most reliable navigation systems in the nation, but during the past two years, 1979 thru 1980, severe navigation problems have been encountered during the low water season. If the waterway is to continue as one of the most economical and energy efficient means of transportation, it, by necessity, has to be properly maintained and controlled through its locks and dams in order to assure its reliability. It is imperative that we continue with the expedited study on the Oliver Lock replacement to assure the success of the future development of the Black Warrior-Tombigbee Waterway System.

During the past twenty five (25) years, I have been associated with companies utilizing the Warrior-Tombigbee Waterway to transport sand, gravel, shell, and petroleum products. We presently utilize the entire length of the Warrior-Tombigbee Waterway hauling petroleum products from Mobile to the Port of Birmingham, and return products from Tuscaloosa and other terminals along the Warrior-Tombigbee Waterway to other ports, including the ports of Mobile, Alabama, New Orleans, Louisiana, and Houston, Texas. During 1980 we moved approximately 4.7 million barrels (725,000 tons) of petroleum products on the Warrior-Tombigbee Waterway and we anticipate moving more than 5.25 million barrles (810,000 tons) during 1981. In order to move these quantities we must be able to rely on the Warrior-Tombigbee Waterway System daily on a year round basis. Without the constant operations and maintenance performed by the U. S. Corps of Engineers, it would not be possible for the barge traffic industry to continue to grow and provide this country with the most economical and energy efficient mode of transportation available today.

The continued development and growth of the Port of Mobile depends vitally on the efficiency and reliability of the Warrior-Tombigbee Waterways, which in turn connects this system with all national and international ports. With regard to this connection of the Black Warrior-Tombigbee and the Port of Mobile, we see the necessity of continuing the efforts toward deepening the Port in order to handle the increased tonnage available. The magnitude of the impact of the coal movements alone on this waterway system lends credence to the importance and necessity of maintaining this waterway so that it may be depended upon on a year round basis. With the vital link of the Tenn-Tom Waterway system opening in 1986, the future for the Warrior-Tombigbee and the development of the area it serves is unlimited.

We appreciate the opportunity of expressing our views on the Warrior-Tombigbee Waterway System and want to thank you for your cooperation in the past and continued interest for the future of the Waterway.

Yours very truly,

R. A. Guthans
President

NWL/mmc

United States Steel Corporation
EASTERN STEEL DIVISION

THEODORE STEVENSON
GENERAL SUPERINTENDENT

FAIRFIELD WORKS
P. O. BOX 599
FAIRFIELD, ALABAMA 35064

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Sir:

We wish to register our support for continuing development and improvement of the Warrior-Tombigbee Waterway. United States Steel has made extensive use of this waterway for the past 27 years.

Current materials being transported for U. S. Steel and approximate annual tonnages are as follow:

Up River

Iron ore from Venezuela Ore concentrates from Canada Iron ore pellets from Brazil and Canada	2,700,000 tons per year
Fluorspar	12,000 tons per year
Ferromanganese	18,000 tons per year

Down River

Coal for export (forecast-future development)	2,000,000 tons per year
Scrap for U. S. Steel @ Texas	350,000 tons per year
Finished steel products	100,000 tons per year

These tonnages represent the requirements for an industry supporting over 9000 U. S. Steel employees in the Birmingham area. All of these materials traverse the entire Warrior-Tombigbee system from Port Birmingham to Mobile.

We feel that it is important that this waterway be maintained in an efficient manner, such as to minimize outages and lock delays.

Sincerely,

T. Stevenson

Jim Walter resources, inc.
MINING DIVISION • BROOKWOOD, ALABAMA

Edwin J. Hodder, Jr.
Vice President, Marketing & Transportation

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D.C. 20515

Dear Sir:

The purpose of this letter is to show our strong support of the testimony to be given today by Mr. Sheldon Morgan, President of the Warrior-Tombigbee Development Association. The livelihood of the coal industry in our area is really predicated on an efficient waterway from Tuscaloosa to the sea.

Jim Walter Resources, Inc., Mining Division, employing 3,099 people currently, operates 6 deep coal mines in the Warrior basin of Alabama, two of which are dedicated entirely to export. By 1984, we will increase our tonnage from a current 4.5 million to over 8 million tons per year with our payroll increasing to 4,855 employees. Of that 8, some 5 million will report to the export market. In 1981, over 2 million tons will be exported, with at least 1.5 million moving down the Black Warrior River to McDuffie Terminal in Mobile. The ability to be able to move our coal expeditiously on this river is essential to the success of our export business.

Last year, over 100 days were lost to shippers on the river due to lock closures, dredging, etc. This forced us to either stock in anticipation of reopening of the river, with resultant demurrage loses for vessles waiting in Mobile, or to ship by rail, some $5.50 more expensive per ton!

In order for our coal to compete in world markets, we need to be able to take advantage of the economics of the large ocean carriers, carriers which draw considerably more water than is currently possible at Mobile. We vigorously support the dredging of Mobile channel to 55 feet.

We thank you for this opportunity to add our support to the objectives of the Warrior-Tombigbee Development Association.

Yours sincerely,

E. J. Hodder, Jr.
Vice President,
Marketing and Transportation

EJH/mv

Warrior & Gulf
Navigation Company
Chickasaw, Alabama

Please reply to:
Suite 3640 - 600 Grant Street
Pittsburgh, Pa. 15219

Neil N. Diehl
President

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, DC 20515

Dear Mr. Bevill:

My name is Neil N. Diehl. I am president of Warrior & Gulf Navigation Company, and A & G Transportation Company, with operational headquarters in Chickasaw, Alabama. Our two companies own and operate 18 towboats and 270 barges on the Warrior-Tombigbee Waterway in Alabama, and on the Gulf Intracoastal Waterway from St. Marks, Florida to Brownsville, Texas. In 1980, our barge lines moved approximately 7.4 million tons of cargo on the Warrior-Tombigbee System, consisting of coal, shale, iron and steel, ores, and other material of crucial importance to the economic life of the area, and employed over 200 people. In addition to the river transportation equipment, our companies own and operate a major bulk material handling facility located near Birmingham, Alabama. This facility is capable of handling up to 6 million tons of bulk materials each year, and is being expanded at the present time to accommodate increased volumes.

Our companies fully support the continued development of the Warrior-Tombigbee River System. We have been operating on this river system since 1940, and have continued to expand each year as the reliability and efficiency of the Warrior-Tombigbee has improved. Many limitations on the system have been overcome in the last 41 years, but many still continue to plague towing companies and water dependent industries alike.

To illustrate, in 1980 alone, the Warrior-Tombigbee River was closed to navigation at some point along its length, a total of 96 days or 26% of the year. These shutdowns were caused primarily by excessive flooding, lock closures due to high water and repairs, and heavy silting on the river bottom.

In addition, tows transiting the Oliver Lock & Dam were delayed on numerous occasions due to congestion. River closures and delays, regardless of the cause, have a compounding effect on waterway transportation, as river tows and ocean vessels incur added expense.

We recognize that the inherent nature of the topography will cause river conditions which cannot always be overcome. However, we believe that positive steps must be taken to assure predictable and reliable operation of these rivers. These steps should include the expedient replacement of the obsolete and undersized Oliver Lock and Dam, as well as timely and responsive maintenance of the river system including preventative dredging and maintenance of the facilities.

Certainly, however, the most progressive step is the recognition for the deepening of the Mobile ship channel which must be viewed as completely necessary to successfully compete in the world's awakening coal market. Of the 4 million tons of coal shipped by our Barge Lines in 1980, 83% was export coal destined for world markets via ocean vessels through the Port of Mobile. In addition, 2.6 million tons of iron ore, was delivered through the Port of Mobile for barge transportation to the steel mills in Birmingham, Alabama. These tonnage volumes are but a small portion of the 12 to 15 million tons of coal and ore traffic anticipated in the near term for the Mobile Ship Channel.

It is our firm conviction that positive steps, such as those just mentioned, will assure the continued economic health of the region, as well as that of our companies.

We appreciate very much the opportunity to present our views.

Very truly yours,

WARRIOR & GULF TRANSPORTATION COMPANY

N. N. Diehl/gma

Neil N. Diehl
President

WARRIOR & GULF NAVIGATION COMPANY

P. O. BOX 11397

CHICKASAW, ALABAMA 36611

N. J. BARCHIE, JR.
VICE PRESIDENT &
GENERAL MANAGER

March 23, 1981

Honorable Tom Bevill, Chairman
House Subcommittee on Appropriations
for Energy & Water Development
House of Representatives
Washington, D. C. 20515

Dear Congressman Bevill:

I am Vice President and General Manager of Warrior & Gulf Navigation Company and A & G Transportation Company. We currently operate 22 towboats and approximately 270 barges of the open and covered hopper types. In 1980 we moved approximately 7.3 million tons of commerce between Birmingham and Mobile of which approximately 3.3 million tons was coal from North Alabama to Mobile for export. We currently have on order for delivery in 1981 three (3) towboats and fifteen (15) barges. This equipment will permit us to handle an additional 1.1 million tons of export coal for which we presently have assurance from our major customers will move through the Port of Mobile. Additionally, we have serious inquiries from our present customers and other potential customers the need for an additional 3.0 million tons of coal to begin moving in 1982. (Attached is a copy of our tonnage moved in 1980 and a projected volume for 1981, 1982 and beyond, based on the best information we are able to obtain.)

Our problems on the Warrior-Tombigbee Waterway System are two-fold:

1. Sufficient funds required for maintenance and dredging in FY 1982 and beyond are needed if the system is to be a reliable transportation artery. In 1980 we experienced severe shoaling on the system that suspended navigation for some thirty-five (35) days. In addition, we experienced approximately thirty (30) days lock outages for repairs to locks that were not anticipated. Sufficient funds are necessary each year to maintain the project depth on the system and make the necessary lock repairs to assure an uninterrupted flow of commerce.

2. Oliver Lock at Tuscaloosa was completed in 1940 to accommodate a four (4) barge tow and is becoming a serious bottleneck to future growth of this transportation artery. The other five (5) locks on the Warrior-Tombigbee System are of modern design and proper size for locking a towboat and up to eight (8) standard river barges in a single locking (lock size 600 feet x 110 feet). Oliver Lock which is 460 feet x 95 feet requires that each time a six barge tow is traveling the waterway the tow must be disassembled

and part of the tow tied off before locking and this dictates at least twice the amount of time required to lock at the other locks. Not only does this require additional precious diesel fuel but also restricts the amount of cargo that can pass through the lock. At a recent meeting between the Corps of Engineers and the Warrior-Tombigbee Association it was reported by the Corps of Engineers that it appears Oliver Lock is about 65 percent of capacity. This utilization is based on traffic already on the river. In Warrior & Gulf's projection of tonnage all of which will require passing through Oliver Lock, we estimate the equipment to move an additional 4.0 million tons by 1982 will require an additional 1,880 lockages. In 1980 a review of the locking statistics maintained by the Corps of Engineers indicated 7,846 lockings were made. On this basis, Warrior & Gulf will need 24 percent of the remaining 35 percent capacity left at Oliver. From my some eighteen (18) years of experience in the waterway industry, I am not naive enough to think we will be the only carrier to experience this tremendous growth. Other carriers presently using the waterway will also realize growth and I feel very strongly that by early 1983 we could reach a saturation point at Oliver Lock. I strongly urge that the Corps of Engineers be encouraged to speed up the study of the Oliver Lock replacement and that necessary funding can be obtained as needed.

I have reviewed the Corps of Engineers request for FY 1982 and feel that what they are requesting for the Warrior-Tombigbee System is needed and urge you to recommend to Congress that these funds be allocated.

Very truly yours,

N J Bouchillon

NJB/dej

Attachment

EXHIBIT I

A & G TRANSPORTATION COMPANY
and
WARRIOR & GULF NAVIGATION COMPANY
Projected Tonnage for
Warrior-Tombigbee River System
(In Millions)

Commodity	Actual 1980	Projected 1981	1982	1983	1984	1985 and Beyond*
Northbound:						
Ores	2.70	No significant change in Northbound tonnage over 1980.				
All Other	.06					
Subtotal	2.76	2.76	2.76	2.76	2.76	
Southbound:						
Steel Products	.30	.30	.30	.30	.30	
Coal	4.10	5.10	6.10	7.10	7.81	
All Other	.16	.16	.16	.16	.14	
Subtotal	4.56	5.56	6.56	7.56	8.25	
GRAND TOTAL	7.32	8.32	9.32	10.32	11.01	
% Increase from 1980 Base Year		14%	27%	41%	50%	

*1985 and beyond projected to experience growth at a rate of 3% annually.

Mr. BEVILL. The record will stay open for five days in the event you wish to submit any further statements. We have a statement from Congressman Shelby, Smith and Flippo for the record.

Thank you very much for a very fine presentation.

STATEMENT OF CONGRESSMAN RICHARD C. SHELBY OF ALABAMA

Mr. Chairman, I appreciate the opportunity to appear today in behalf of the A project that is particularly close to me, the Warrior-Tombigbee Waterway System.

This particular river system travels right through the center of the 7th Congressional District as it makes its way from Birmingham Port to Mobile on the Gulf of Mexico. Obviously, this thoroughfare is of vital economic value to West Alabama and certainly holds the key to its economic future as an attractive spot for industrial locations.

Traffic continues to grow along this waterway, and I am pleased to see the Corps' Fiscal Year 1982 request of $7,493,000 in operation and maintenance funding, reflecting the increase importance of upkeep on the Black Warrior, Warrior, and Tombigbee Rivers, Also, the operations and maintenance request for the Mobile Harbor is $3,044,000.

I would like to point out that there have been very rapid increases in coal production in the uppermost portion of the Warrior Basin. Shipments can readily be doubled in the near future causing an extreme positive impact. This growth, however, excerbates the efficiency and reliability of the older and undersized William Bacon Oliver Lock and Dam which is necessary for coal transportation.

The Corps has requestaed $958,000 for the continuation of a comprehensive study which evaluates replacing the Oliver Lock. This is the only older lock remaining in the system; its width and length are simply inadequate to accommodate modern water traffic and its use is constantly troubled by frequent repairs and time consuming bottlenecks which keep the rest of the waterway from working at peak efficiency. The $958,000 survey request also includes studying the feasibility of increasing the capacity of locking facilities at Demopolis and Coffeeville, and providing cut-offs of critical bends in the rivers.

Funding for continued removal of aquatic growth, where hyacinths pose ongoing navigational problems has been requested in the amount of $49,000.

Again, Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before this distinguished committee on behalf of the Warrior-Tombigbee Waterway System.

Thank you.

STATEMENT BY CONGRESSMAN ALBERT LEE SMITH, JR.

Gentlemen, I am very pleased to offer my endorsement of the Warrior-Tombigbee Waterway project program and to compliment the Warrior-Tombigbee Development Association on its work to achieve the Waterway project goals.

I have submitted a statement in support of the completion of the Tennessee-Tombigbee and feel that its success is ultimately tied to the improved development of the Warrior-Tombigbee system. Together these waterways will do much to improve the flow of energy and agricultural products in a faster and more economical fashion. I am convinced of this for the following reasons:

1. The Warrior-Tombigbee is an existing and currently usable system located near experienced coal companies and within Alabama's most accessible coal areas.

2. The completion of the Tennessee-Tombigbee link in 1985–1986 will, it is estimated, move 28 million tons through some part of the Warrior-Tombigbee system. Twenty-one of the twenty-eight million tons is expected to be coal tonnage. Illinois, Indiana, Kentucky, Ohio, Pennsylvania, Tennessee and West Virginia are coal producing areas which will be served with transportation savings estimated to approach $61 million.

Key to this energy movement and transportation savings is the expedited action in replacing the William Bacon Oliver Lock and the improvement of Mobile Harbor. This improvement would increase the channel depth to 55 feet and also provide needed land fill for further expansion of the Alabama State Docks to accommodate deep draft vessels.

In light of the immediate need for the development of domestic energy sources and their cost effective transportation to market, plus projected increases in the need for shipments of agricultural products, I respectfully urge expedited action and

full funding for these necessary improvements in the Warrior-Tombigbee system. The development of this system's full potential is one of my highest priorities.

STATEMENT OF CONGRESSMAN RONNIE G. FLIPPO BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, SUPPORTING THE WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION, MARCH 23, 1981

Mr. Chairman, I appear in support of the Warrior-Tombigbee Development Association request for funding in Fiscal 1982.

While this project does not serve my district, I am certainly aware of the wide array of benefits this project has afforded to the people of Alabama.

We are faced with the most severe budget cuts in the history of this country in preparing the Fiscal Year 82 Budget, however, the commerce and economic development engendered by this project certainly justifies the request for funding.

However, I want to emphasize that the plan to channelize the lower Tombigbee is one which appears to be very questionable, especially at a time of such severe budget constraints. It is my understanding that the people in the area affected do not support this project, even in the conceptual stage.

I commend the officers and members of the Association for their years of dedication in developing and maintaining the Warrior-Tombigbee and the numerous benefits the project provides to the people of Alabama.

MONDAY, MARCH 23, 1981.

TENNESSEE-TOMBIGBEE WATERWAY

WITNESSES

HON. LOUIS STOKES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

WENDELL PARIS, CHAIRPERSON, MINORITY PEOPLE'S COUNCIL

Mr. BEVILL. Next we will have Wendell Paris.

Mr. Paris, we are pleased to have you with us today. I note you are the Chairman—as you say, Chairperson. I like to say Chairman—Chairman of the Minority People's Council on the Tennessee-Tombigbee Waterway. We are pleased that you could be here.

My good friend here, Congressman Stokes, who serves with us on Appropriations, was able to work his schedule so he could hear your testimony with us. We are anxious to hear it, of course.

You may proceed as you wish.

STATEMENT OF WENDELL PARIS

Mr. PARIS. Thank you very much, Mr. Chairman, members of the committee. I am Wendell Paris, Chairperson of the Minority People's Council on the Waterway. Our membership has over 4,000 organized into 15 or more county chapters in the counties bordering the Tennessee-Tombigbee.

We are in Alabama, Mississippi, and from Mobile to the Tennessee line.

The major goal of our organization is to insure that minorities and poor people receive a fair and proportionate share of all of the benefits of this $2 billion federal public works project.

Our goal is to insure that minorities, women and poor people receive a fair share of the training, jobs, contracts, positions on decision making boards and other benefits of the Tennessee-Tombigbee Waterway, during the construction and subsequent develop-

ment phase of the project. Forty percent of the population in the TTW corridor is black and about half the population is low income.

The Minority People's Council has consistently supported full Federal funding for construction of the Tennessee-Tombigbee Waterway, provided that minorities, women and poor people are given an equitable share of the jobs, training contracts and other benefits of the project.

The Tennessee-Tombigbee Waterway construction contracting and monitoring agencies and companies must live up to their promises to minorities, women and poor, to earn the continuing support of the Minority People's Council and the minority community in the Waterway area generally.

In response to MPC's testimony in 1976, Congress passed Section 185 of the Water Resources Act of 1977, Public Law 91-585, which says:

> The Secretary of the Army, acting through the Chief of Engineers, is directed to make a maximum effort to assure the full participation of members of minority groups, living in the states participating in the Tennessee-Tombigbee Waterway Development Authority, in the construction of the Tennessee-Tombigbee Waterway project, including actions to encourage the use wherever possible, of minority-owned firms.
>
> The Chief of Engineers is directed to report on July 1st of each year to the Congress on the implementation of this section, together with recommendation for any legislation that may be needed to assure the fuller and more equitable participation of members of minority groups in this project or others under the direction of the Secretary.

As a result of Section 185, and as a response to critical reports from MPC—our White Paper I, for example—the U.S. Army Corps of Engineers has become more concerned and sensitive, over the years, to the need to provide minorities, women and local residents with a fair share of the TTW construction benefits.

Special bid conditions for an areawide affirmative action plan, requiring a goal of 30 percent minority workhours in every craft, by every contractor, has been made part of all Tennessee-Tombigbee Waterway contracts.

Special contract provisions, requiring minority set-asides of subcontracted work have been developed.

A worker-trainee program to place more minorities in entry level positions with the draft has been initiated.

A Tennessee-Tombigbee Affirmative Action Committee has been established which provides for a quarterly review and monitoring of affirmative action compliance efforts.

Despite these constructive steps, there is still a long way to go as indicated by the data below:

Table No. 1. Cumulative workforce statistics shows for the period July 1, 1979 to September 30, 1980 that in the crafts, total workhours were 3,561,926 and minority workhours were 731,000 or 21 percent, which means we have reached only two-thirds of the goal.

Table No. 1 shows total minority workhours including craft and non-craft hours is 26 percent, which is also below the 30 percent minimum goal.

Table No. 1 also indicates that 38 percent of all minority workers were in the two lowest paying job categories of laborers and teamsters; while only ten percent of all whites were in those jobs. 32 percent of all minorities, but only 7 percent of all whites were laborers.

Reports from the DOL Office of Federal Contracts Compliance Programs show that with few exceptions all of the contractors on Tennessee-Tombigbee Waterway have been in non-compliance with the goals or the good faith efforts provisions of the special bid conditions for affirmative action in employment.

Minority business utilization reports indicate no more than two percent of the total dollar volume of prime or subcontracts on the Tennessee-Tombigbee Waterway thus far have been awarded to minority contractors.

Minorities are still significantly under-represented on decision-making and planning boards dealing with the project.

It is, therefore, very difficult for us to testify in support of a full appropriation for the Tennessee-Tombigbee Waterway without any reductions when many other worthwhile programs are being cut; for example, food stamps, social security, community service administration, legal services and many others.

We can only recommend a full appropriation for the Tennessee-Tombigbee Waterway if it truly fulfills its economic and community development promises to people in the waterway corridor, particularly minorities, women and the poor.

The Minority People's Council recommends the following steps to the Appropriations Committees of Congress in regard to the funding of the Tennessee-Tombigbee Waterway:

1. That the Congress reaffirm and strengthen its support for Section 185 of the Water Resources Act, as a means of targeting these public works resources to the needs of minorities and poor in the Tennessee-Tombigbee Waterway corridor.

2. That the Appropriations Committees mandate that ten percent of the remaining uncontracted funds for the Tennessee-Tombigbee Waterway Project be set aside for minority prime and subcontractors.

This would mean that $70 million of the $700 million remaining to be contracted would be set aside for minority contractors. This would encourage the development of more minority contractors and joint ventures to help minority firms get established in the commercial construction field.

There is legislative and legal precedent for such action in prior EDA-Public Works legislation which was held constitutional by the Supreme Court in the recent Fullilove case.

3. That the Appropriations Committees require full compliance with the goals of the Tennessee-Tombigbee Waterway areawide affirmative action plan as a condition for current and future funding of the Waterway.

The appropriation for Tennessee-Tombigbee Waterway should contain provisions to automatically reduce the funding for the Tennessee-Tombigbee Waterway if the affirmative action goals are not met and maintained by October 1, 1981, when this fiscal year 1982 appropriation becomes operative.

The appropriation for Tennessee-Tombigbee Waterway should be reduced by the degree that the project is not in compliance with the 30 percent goal for minority employment in the crafts and overall on October 1, 1981 or for any other quarterly period when compliance falls below the goals in a prior quarter.

4. That the Appropriations Committees set aside one percent of the appropriation for the Tennessee-Tombigbee Waterway to support a "Tennessee-Tombigbee Minority Resource Center" which would have staff and resources to increase minority participation on the waterway.

The Tennessee-Tombigbee Minority Resource Center could be created as a special project of the Tennessee-Tombigbee Corridor Study.

Only organizations with a Board of Directors, 51 percent or more composed of minority people living in the Tennessee-Tombigbee Waterway Corridor, would qualify to bid for the funds to operate the Minority Resource Center. This would expedite development of the Center and allow it to begin working immediately to assist minorities, women and the poor in the area.

In conclusion, the MPC feels that the U.S. Army Corps of Engineers, the contractors, unions and other Federal agencies have made remarkable progress in the physical construction of the Waterway while concern for human resource development in the Tennessee-Tombigbee Waterway Corridor has lagged behind.

The Corps and others have closely monitored the consistency of the concrete going into the construction of the locks and dams but they have not been equally careful in enforcing the requirements on the composition of the workforce building the waterway.

The minority People's Council would like both the physical and the human dimensions of the Tennessee-Tombigbee Waterway Project to have more equal consideration. Thank you for the opportunity to address you today on behalf of the membership of the Minority People's Council.

[Mr. Paris' statement follows:]

STATEMENT OF WENDELL PARIS

I am Wendell Paris, Chairperson of the Minority People's Council has over 4,000 members organized into 15 or more county chapters, in the counties bordering the Waterway, in Alabama and Mississippi, from Mobile to the Tennessee line.

The major goal of our organization is to insure that minorities and poor people receive a fair and proportionate share of all of the benefits of this $2 billion Federal public works project. Our goal is to insure that minorities, women and poor people receive a fair share of the training, jobs, contracts, positions on decision making boards and other benefits of the Tennessee-Tombigbee Waterway, during the construction and subsequent development phase of the project. 40 percent of the population in the TTW Corridor is Black and about half the population is low income.

The Minority People's Council has consistently supported full Federal funding for construction of the Tennessee-Tombigbee Waterway, provided that minorities, women and poor people are given an equitable share of the jobs, training contracts and other benefits of the project. The Tennessee-Tombigbee Waterway construction contracting and monitoring agencies and companies must live up to their promises to minorities, women and poor, to earn the continuing support of the Minority People's Council and the minority community in the Waterway area generally.

In response to MPC's testimony in 1976, Congress passed Section 185 of the Water Resources Act of 1977 (Public Law 91-585):

"The Secretary of the Army, acting through the Chief of Engineers, is directed to make a maximum effort to assure the full participation of members of minority groups, living in the States participating in the Tennessee-Tombigbee Waterway Development Authority, in the construction of the Tennessee-Tombigbee Waterway project, including actions to encourage the use wherever possible, of minority owned firms. The Chief of Engineers is directed to report on July 1 of each year to the Congress on the implementation of this section, together with recommendation for any legislation that may be needed to assure the fuller and more equitable participation of members of minority groups in this project or others under the direction of the Secretary".

As a result of Section 185, and as a response to critical reports from MPC-our "White Paper I" for example—the U.S. Army Corps has become more concerned and sensitive, over the years, to the need to provide minorities, women and local residents with a fair share of the TTW construction benefits. Special Bid Conditions for an Areawide Affirmative Action Plan, requiring a goal of 30 percent minority workhours, in every craft, by every contractor, has been made part of all TTW contracts. Special contract provisions, requiring minority set asides of sub-contracted work have been developed. A worker-trainee program to place more minorities in entry level positions with the craft has been initiated. A Tennessee-Tombigbee Affirmative Action Committee (TTAAC) has been established which provides for a quarterly review and monitoring of affirmative action compliance efforts.

Despite these constructive steps, there is still a long way to go as indicated by the data below:

Table No. 1: Cumulative Workforce Statistics. (attached) shows for the period July 1, 1979 to September 30, 1980 that in the crafts, total workhours were 3,561,926 and minority workhours were 731,000 or 21 percent, which means we have reached only two-thirds of the goal.

Table No 1 shows total minority workhours including craft and non-craft hours is 26 percent, which is also below the 30 percent minimum goal.

Table No. 1 also indicates that 38 percent of all minority workers were in the two lowest paying job categories of laborers and teamsters; while only 10 percent of all whites were in those jobs. 32 percent of all minorities, but only 7 percent of all whites were laborers.

Reports from the DOL-Office of Federal Contracts Compliance Pograms (OFCCP) show that, with few exceptions, all of the contractors on TTW have been in non-compliance with the goals or the "good faith efforts" provisions of the Special Bid Conditions for Affirmative Action in employment.

Minority Business Utilization reports indicate no more than 2 percent of the total dollar volume of prime or sub-contracts on the Tennessee-Tombigbee Waterway, thus far, have been awarded to minority contractors;

Minorities are still significantly under-represented on decision making and planning boards dealing with the project.

It is, therefore, very difficult for us testify in support of a full appropriation for the Tennessee-Tombigbee Waterway, without any reductions, when many other worthwhile programs are being cut, for example, food stamps, social security, Community Service Administration, Legal Services and many others. We can only recommend a full approproation for the Tennessee-Tombigbee Waterway if it truly fulfills its economic and community development promises to people in the Waterway Corridor, particularly minorities, women and the poor.

The Minority People's Council recommends the following steps to the Appropriations Committees of Congress in regard to the funding of the Tennessee-Tombigbee Waterway:

1. That, the Congress reaffirm and strengthen its support for Section 185 of the Water Resources Act, as a means of targeting these public works resources to the needs of minorities and poor in the TTW Corridor.

2. That, the Appropriations Committees mandate that 10 percent of the remaining uncontracted funds for the Tennessee-Tombigbee Waterway Project be set aside for minority prime and sub-contractors. This would mean that $70 million of the $700 million remaining to be contracted would be set aside for minority contractors. This would encourage the development of more minority contractors and joint ventures to help minority firms get established in the commercial construction field. There is legislative and legal precedent for such action in prior EDA-Public Works legislation which was held constitutional by the Supreme Court in the recent *Fullilove* case.

That, the Appropriations Committees require full compliance with the goals of the TTW Areawide Affirmative Action Plan as a condition for current and future funding of the Waterway. The appropriation for Tennessee-Tombigbee should contain provisions to automatically reduce the funding for the Tennessee-Tombigbee Waterway if the affirmative action goals are not met and maintained by October 1, 1981, when this Fiscal Year '82 appropriation becomes operative. The appropriation for TTW should be reduced by the degree that the project is not in compliance with the 30 percent goal for minority employment in the crafts and overall on October 1, 1981 or for any other quarterly period when compliance falls below the goals in a prior quarter.

4. That, the Appropriations Committee, set aside 1 percent of the appropriation for the Tennessee-Tombigbee Waterway, to support a "Tennessee-Tombigbee Minority Resource Center" which would have staff and resources to increase minority participation on the Waterway. The Tennessee-Tombigbee Minority Resource Center could

be created as a special project of the Tennessee-Tombigee Cooridor Study. Only organizations with a Board of Directors, 51 percent or more composed of minority people living in ther TTW Corridor, would qualify to bid for the funds to operate the Minority Resource Center. This would expedite development of the Center and allow it to begin working immediately to assist minorities, women and the poor in the area.

In conclusion, the MPC feels that the U.S. Army Corps of Engineers, the contractors, unions and other Federal agencies have made remarkable progress in the physical construction of the Waterway while concern for human resource development into the TTW Corridor has lagged behind. The Corps and others have closely monitored the consistency of the concrete going into the construction of the Locks and Dams but they have not been equally careful in enforcing the requirements on the composition of the workforce building the Waterway. The Minority People's Council would like both the physical and the human dimensions of the Tennessee-Tombigbee Wateway Project to have more equal consideration. Thank you for the opportunity to address you today on behalf on the membership of the Minority People's Council.

TABLE NO. 1: WORK HOURS OF EMPLOYMENT, JULY 1979–SEPTEMBER 1980, BY PAY AND BY RACE—AN ANALYSIS [1]

Craft	3rd quarter 1979			4th quarter 1979			1st quarter 1980			2nd quarter 1980			3rd quarter 1980			Totals		
	Total work hours	Minority hours	Percent minority	Total work hours	Minority hours	Percent minority	Total work hours	Minority hours	Percent minority	Total work hours	Minority hours	Percent minority	Total work hours	Minority hours	Percent minority	Total hours	Minority hours	Percent minority
1. Operating Engineers	511.132	98,556	19.2	508,097	92,532	18	336,736	33,179	10	507,161	116,642	23	869,458	189,729	22	2,732,584	530,638	19
2. Carpenters	90,840	20,376	22.4	89,746	16,755	19.0	82,671	13,637	16.0	125,167	27,239	22.0	140,525	31,892	23	528,949	109,899	21
3. Ironworkers	38,152	3,157	8.2	19,585	4,138	21.0	21,411	3,937	18.0	31,491	7,303	23.0	43,757	11,064	25	154,396	29,599	19
4. Cement Masons	9,836	7,918	80.5	12,081	9,162	76.0	9,333	7,555	81.0	8,663	7,337	85.0	26,066	18,623	71	65,979	50,595	77
5. Plumbers and Pipefitters	2,322	721	31.7	3,956	1,013	25.0	2,926	530	18.0	5,528	874	16.0	8,566	1,003	12	23,298	4,141	18
6. Electricians	2,291	0	0	6,999	794	11	10,866	1,256	12	11,411	976	9	25,154	3,162	13	56,721	6,188	11
7. Subtotal for Crafts	654,573	130,728	20	640,464	124,394	19	463,943	60,094	19	689,421	160,371	23	1,113,525	255,413	23	3,561,926	731,000	21
8. Teamsters	108,713	21,194	19.4	122,972	20,707	18.0	24,116	3,604	15.0	17,832	5,130	29.0	183,894	34,178	19	447,527	84,813	19
9. Laborers	219,508	77,095	35.11	178,621	87,342	49.0	125,391	60,474	48.2	126,857	81,013	64.0	29,456	110,921	46	779,833	416,845	53
10. Total Workforce	982,794	229,017	23.3	977,415	252,732	26	666,789	142,792	21	886,497	261,985	30	1,590,276	421,609	27	5,103,771	1,308,135	26

[1] Source: Reports from the Compliance Task Group of the Tennessee-Tombigbee Affirmative Action Committee.

Note.—The U.S. Department of Labor shows the 1979 pay rates for the above job categories as Operating Engineers, $8.05; Carpenters, $7.19; Ironworkers, $9.31; Cement Masons, $6.95; Plumbers and Pipefitters, ?; Electricians, $8.90; Teamsters, $5.78; and Laborers, $4.96.

Mr. BEVILL. You have made a very, very fine statement. I know that this committee shares your views about the goals of the minorities. I don't recall ever attending a briefing in all these years on the Tennessee-Tombigbee Waterway that it was not automatically part of the briefing as to how many minorities are engaged, what they are trying to do to increase the number of minorities.

Actually, the Governor is even subsidizing training of minorities for these jobs. Carpenters—to begin with, they were all laborers. They are taking them now and giving these contractors money to train these minorities to do the carpenter work, to become electricians, to go in and do all these things. Certainly your goal is a good goal and we support the goal.

There is a good bit being done. Maybe more can be done. That is what you are asking, that more be done?

Mr. PARIS. Yes, sir.

Mr. BEVILL. I am sure you are not unhappy about what has been accomplished in the way of training these people and getting them ready for these jobs, even subsidizing them so they can learn the job. This is going to mean they are going to be trained from now on. When this Tennessee-Tombigbee Waterway opens we have good trained people there that won't be going back as laborers.

The same thing applies—I know this is a concern that the Corps has expressed every time, how they can get more work and do more to help the minorities.

We have a lot of minority people in that area, probably more or as many as anywhere in the country that need help. They have had a pretty rough life. Local people are being hired, as you know. I have forgotten the statistics. I think something like 80 or 85 percent, you may remember, of the people that are working on this project, are really local people.

Mr. PARIS. That again, sir, is a goal.

Mr. BEVILL. Yes.

Mr. PARIS. In actuality, the 80 percent local preference call comes from the Appalachian Regional Commission. Their legislation created that.

Mr. BEVILL. They haven't reached that goal either?

Mr. PARIS. Not for local people.

The legislation that—well, the interpretation of the clause from the Corps of Engineers is that any person that moves into the waterway corridor overnight is local. So I could be from California today——

Mr. BEVILL. And be local tomorrow?

Mr. PARIS [continuing]. And be local tomorrow.

Mr. BEVILL. That is a good point.

Mr. PARIS. We want to see people who vote in Alabama or Mississippi or people who lived in Alabama or Mississippi.

Mr. BEVILL. That would be my interpretation of local people too. I wasn't aware they were using that figure.

Mr. Myers?

Mr. MYERS. I have no questions.

Mr. BEVILL. Mrs. Boggs?

Mrs. BOGGS. Mr. Chairman, I am concerned about the training. I am concerned about the training in all of the areas of our development because, as we have heard from the Appalachian Regional

Commissioners, the kind of training that they have been accomplishing was taking juniors and seniors in high school and with the local business people, industrial people have tried to put them into actual training for jobs that actually exist in the area, and yet we know that the recommendation has been to do away with the Appalachian Regional Commission.

I was also wondering if any of the people who are in the training, particularly the worker trainees, are under the CETA program?

Mr. PARIS. No, ma'am. Not in the worker trainee program.

Mrs. BOGGS. Are any of the trainees in the CETA program?

Mr. PARIS. There are other training provisions. There are numerous unions, especially in the Corps of Engineers and the Carpenters. They have funded CETA programs where they at one time were training people. However, the Tennessee-Tombigbee Affirmative Action Committee has a work force requirement subcommittee. That subcommittee now has statistics that show that no more training is needed. This is surely our concern that now that we have all of the people trained, our percentages have not increased in any appreciable amounts. Those programs are very much needed for the second phase of the waterway not in the construction, but surely in the industrial development.

Those CETA funds are very much needed to train the people for the 135 lasting jobs that are coming. There may be some need to upgrade training of the construction workers to allow them access into the heavy industrial jobs.

Mrs. BOGGS. That is a very complicated situation and, of course, what we really need to do is equate the jobs that are available, that are advertised in the want ads, to the training of people and it is something we were working on last year very hard.

I am very concerned about what we are going to do if we phase out some of these programs. What are we phasing in, because we have to continue the training programs.

Mr. PARIS. Yes, ma'am.

Mrs. BOGGS. Thank you for your splendid testimony.

Mr. PARIS. Thank you. May I say a word?

Mrs. BOGGS. Yes, sir.

Mr. PARIS. That is surely quite our concern also. We don't see—if we don't have the training mechanism in place to prepare our people for the jobs that are coming, then surely we won't be able to get in in any other way if no training provisions are in place.

The CETA program, as well as the ARSC and the Community Services Administration had funds to kind of help with the social infrastructural development that is so very vitally needed in order for this project to be a success.

The experience of the Tennessee Valley Authority is that if you do the physical construction and don't prepare the people for the new jobs or the different types of jobs that are coming, then these waterway projects, or these developmental projects, pass us by.

So you have to have something in place that is going to train the people in the community from those jobs.

Mrs. BOGGS. That is part of the rural initiatives program. We may be able to implement some of those programs.

Mr. PARIS. Thank you.

Mrs. BOGGS. I hope you will remember too that there is women's business enterprise. Since you are representing the women and the poor as well as minorities, in no way did this program intend to impinge upon the minorities contract program, but there is the Executive Order of May 1979 for the various agencies and departments of the government to work with women's business enterprise in addition to the minority enterprises.

I hope you will plug for the women along with the minority contractors.

Mr. PARIS. Yes, ma'am. We are doing that. A member of the National Council of Negro Women sits on the board of the Minority People's Council, as well as we work with the Women's Bureau of the Department of Labor. They sit on the Board of the Tennessee-Tombigbee Affirmative Action Committee as well as, I would imagine, that 60 percent of the membership of the Minority People's Council are women. That is also our concern.

Mrs. BOGGS. Thank you very much.

Mr. PARIS. That is why I am called the Chairperson.

Mr. BEVILL. We are mighty happy to have our beloved colleague and a very distinguished member of this House and a distinguished member of the Appropriations Committee, Congressman Louis Stokes here, who has made a tremendous record in this Congress.

The Chair will recognize now Mr. Stokes to ask any questions that he desires.

STATEMENT OF CONGRESSMAN STOKES OF OHIO

Mr. STOKES. Thank you very much, Mr. Chairman.

Firstly, I would like to say to you, Mr. Chairman, that I deeply appreciate the opportunity this past weekend to visit the Tennessee-Tombigbee Waterway Project. It was a real education for me. I had previously heard of it, even voted for it, but I had never had the privilege of seeing it.

It was a great educational experience. I do want to thank you for having afforded that opportunity to me.

Mr. BEVILL. We appreciate so much your taking the time from your busy schedule to go down there. You just don't know how much it meant to the people down there and to me personally.

Mr. STOKES. Thank you very much.

I would like to compliment Mr. Paris on his testimony here this morning. I did have the occasion to meet him on our trip this past weekend and at that time I had the opportunity to have some discussion with him regarding participation of minorities who are local residents in the vicinity of the waterway. I share some of his concerns in terms of equal access, equal opportunity for minorities in that area. I would like to pose a few questions to him relative to it.

If I understand your testimony, you are saying to us that the Army Corps of Engineers appears now to be sensitized to the unique problems of minorities with reference to having equal opportunity for employment in the area and that they are attempting to enforce the law which you refer to as section 185. But I seem to read into your testimony the fact that they are not getting the kind of cooperation that the Corps needs in order to be able to accom-

plish the goals that are set forth in the affirmative action program; is that correct?

Mr. PARIS. Yes, that is exactly right.

Mr. STOKES. Can you elaborate upon that for a bit so we know what the problem is?

Mr. PARIS. As we see it in the People's Council, the problem comes now that the Corps of Engineers has made a complete turnaround in terms of its looking at these problems that has not filtered down to the contractors and to those providers of the local labor force.

There is a clause in all Federal contracts called mandatory listing, I can't remember exactly, but a mandatory listing of all contracts not covered under closed shops. This mandatory listing comes through the state employment officers. The contract organizations are not providing the employment officers with copies of their—with their employment needs.

Also, the local labor unions have not worked fully up to their capability in assuring minorities get jobs and contracts. Largely this has come from the fact that the unions are not very well-developed in the sense of unionism; it is mostly, if I can say this without—well, it is a dues check-off, and therefore, as long as they can get people to pay the dues, there is not too much concern about meeting these other goals.

Now they had worked previously with us to try to get a 40 percent goal in there, but they have turned away from that now that they see their may be too many minorities working on these projects.

The other thing is that the proponents, Tennessee-Tombigbee Waterway Development Authority and the other coordinating bodies we believe have more of a responsibilty in their coordination of planning to encourage the contractors and the labor unions to meet the goals of the plan. So far, this has not happened.

We keep getting from contractors that they cannot find minorities and at the same time, as I just mentioned, the work force requirements task group has documented that there are sufficient minorities trained in most of the crafts. We are short in ironworkers and electricians, but the other crafts have sufficient majorities that could be put to work, already trained. But somehow there is not that easy access, there is not the coordinated effort coming from all sources, especially the contractors and the unions, to see that the provisions are met.

Mr. STOKES. I see.

I notice one of your recommendations to this committee was that they set aside one percent of the appropriation for the Tennessee-Tombigbee Waterway to support a Tennessee-Tombigbee Minority Resource Center which would have staff and resources to increase minority participation on the waterway.

Is there some kind of precedent for this kind of resource center that you are aware of?

Mr. PARIS. Yes, sir. We believe that the precedent is in the ConRail legislation, in the revitalization of the railroads, where there is a set-aside, I think it is 3 percent set-aside.

Mr. STOKES. I think that was the Ralph Metcalf amendment. The late Ralph Metcalf was here in Congress and he put that amendment on that bill.

Mr. PARIS. Yes, sir.

Mr. STOKES. I understood also that the TVA Authority has a similar type of minority resource center. Are you aware of that?

Mr. PARIS. Yes. That resource center is relatively new. It is based in Memphis. Memphis, being western Tennessee, is not easily accessible to the waterway, which is more toward the center of Tennessee. But that center is there and it is helping minorities over there to get some construction contracts, maybe even one or two on the Tenn-Tom.

However, we feel that the problems that we face in the Tenn-Tom are so acute, we are looking at some counties there with, according to the Department of Labor, that may have as much as 20 percent unemployment. This doesn't count those people who have given up going to the Employment Office, those people who have never gone there for any reason.

So in actuality, you could look at from 5 to 10 percent higher figure in this one county and most of those counties are at least 5 percent above the national average in terms of unemployment. So we feel we need this resource center to address those problems but basically, this resource center would be used more on the contractual side, to get minorities the bonding capability, to get to develop some construction contracts that could actually do some of the heavy construction projects now.

We have contractors already who are doing some recreational construction and some seeding and grassing. But we are confident that our folks have the capability and have the necessary skill level to do the heavy construction. It is simply a matter of us having access to sources of capital as do the larger contractors. We think that this resource center would certainly provide that.

Mr. STOKES. As we flew in the other day, Mr. Chairman, into Aliceville, the Corps of Engineers pointed out to me a large beautiful recreation center that had been built by a minority contractor as just one of the examples of some of the work given to them. But if I understand you right, you are saying that in terms of letting of contracts to minority contractors, both prime and sub, that the percentage is very, very small; is that what you are saying?

Mr. PARIS. Yes, sir.

Mr. STOKES. What percent would you say?

Mr. PARIS We are using a two percent figure in here but it is really not quite two percent. It is more like one percent of the total construction dollars that have gone to minority contractors. The Corps says this is because of the projects being designed—the construction design makes these projects run up something like $200 or $300 million, and we don't have the minority contractors with that capability.

However, we are arguing that the projects could be redesigned to allow minorities to bid them, especially in the remaining $700 million. A lot of that money, those contracts will be let with the remaining money largely going to the recreational project and to dredging projects, and we are confident that minorities can do those, as has been proven already.

Mr. STOKES. Can you give us, give the committee some idea of the number of minorities who are involved in the dredging field? Do we have any?

Mr. PARIS. There is one out of Louisiana who has come and done one dredging project on the Tenn-Tom. But he stayed there about two months and he was working under a prime and apparently, after they did the 10 percent, the prime let him out. I do not know the name of that contractor. But his captain presently lives in Aliceville and is presently out of work, the fellow who captains his crew. I just can't recall his name.

We have folks working on those dredges who have dredging experience coming out of the Mobile Bay area and out of New Orleans.

Mr. STOKES. Are you aware of any others? Have you had a chance to explore whether there are others who are in the field?

Mr. PARIS. I am not personally aware of any others. I understand there are some on the Arkansas River project, but I am not personally familiar.

Mrs. BOGGS. Mr. Chairman, as you know, we have had some problems in the last several years with dredging. There has been very good work for a long time for the private dredges, so much so that we had to have a study commissioned to be able to equate the amount of work and the number of dredges and so on that would be in the private sector and would remain in the Corps of Engineers in the government sector.

They had worked out a very complicated situation so that they are now advancing side-by-side, each of them, and we assume we have enough capability in the Corps of Engineers and will continue to have enough capability for emergency capabilities, for assurance of keeping the channels clear and so on.

I would assume that minority firms have had a hard time breaking into the dredging situation because, for a long time, it was a depressed situation. That is true all over the world. That is why we will be finding French dredging companies and so on, saying, if the French are going to import a lot of coal from the United States, they want to have part of the dredging action.

But I do think that there is an opportunity under the contract that was made between the government and the private sector for more and more minority firms to come on line. It has just been a depressed area in business for a long time. I would imagine it has been difficult for minority firms to come by the work and also investing in heavy equipment.

Mr. PARIS. Yes.

Mr. STOKES. I would imagine that another service that this minority resource center that you propose could perform would be to be able to identify firms that have this kind of capacity around the country. I know that in Cleveland, for instance, we have the largest black, largest minority engineering firm in the country, top engineers who have been all over the world, in fact, performing projects.

I would imagine such a resource center would be able to identify minority firms that are capable of performing almost any kind of work, once given the opportunity

Mr. PARIS. Yes, sir. In fact, a firm called TG&Y based in Cleveland has bid—headed by a woman, too—that has bid on some work on the Tenn-Tom. So far she has not been the low bidder, but we have been able to attract some few.

Needless to say, the resource center with some moneys for funding and some money for lending, and surely to leverage those funds through other mechanisms such as, say, a local development corporation or even an unminority enterprise small business investment program, would allow us that capacity to develop contractors and to locate others that would come into the Tenn-Tom corridor.

Mr. STOKES. Mr. Chairman, I would just say in terminating my questions that I know that this committee and the chairman of this committee has a commitment to seeing that the intent of Congress is carried out insofar as Congress has expressed itself, in terms of minorities getting their fair share of this particular appropriation. I know of your commitment to that and that of the members of this committee.

I would just like to say, I think Mr. Paris has certainly, in a very articulate way, pointed up the problem at the local area and has offered this committee some suggestions as to how we can, possibly, supplement the intent of Congress as exprssed in this legislation.

I am sure the committee at the appropriate time will look at his recommendations and see how they can be carried out for the purpose of the law.

Thank you very much.

Mr. BEVILL. I, too, think Mr. Paris has made a very good presentation here and given us some points here that we have not had before. This committee will certainly look into it because each member of this committee has been very strong to see that the minorities get their share of work, not only on the Tenn-Tom but all over the nation; this is our standard procedure.

You have come up with thoughts that this committee certainly needs to look at and see what can be done—you know there is always room for improvement.

Mr. PARIS. Yes, sir.

Mr. BEVILL. So while a lot of good work has gone into it, certainly the committee will take a good look at this.

Thank you very much for coming up here and presenting these statements.

Mr. PARIS. Thank you all.

Mr. BEVILL. The committee will adjourn until 2 o'clock this afternoon.

[Whereupon, at 12:45 p.m., the subcommittee recessed, to reconvene at 2 p.m., the same day.]

AFTERNOON SESSION

MONDAY, MARCH 23, 1981.

GARRISON DIVERSION PROJECT

WITNESSES

HON. BYRON L. DORGAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH DAKOTA

HON. ALLEN I. OLSON, GOVERNOR, STATE OF NORTH DAKOTA
HON. MARK ANDREWS, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA
HON. QUENTIN N. BURDICK, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA
CHARLES A. RICHTER, CHAIRMAN, BOARD OF DIRECTORS, GARRISON DIVERSION CONSERVANCY DISTRICT

Mr. BEVILL. The committee will come to order.

We are pleased to have our good friend and colleague here, Congressman Byron Dorgan and also our former colleague, Congressman Mark Andrews, who has gone up in the world now. He is up in the Senate. He is one of our group that has made good, Byron.

Then the Governor. We are certainly pleased to have you. I understand Senator Burdick will be in here almost any time.

Since we are on such a tight schedule, we will go ahead and hear from him when he gets here.

Byron, I will place it in your hands and fire at will.

STATEMENT OF CONGRESSMAN DORGAN OF NORTH DAKOTA

Mr. DORGAN. Thank you, Mr. Chairman.

As you indicated, we have the Governor Olson, Senator Andrews and Senator Burdick here with us.

Mr. Charles Richter, Chairman of the Board of the Garrison Conservancy District is here.

He is accompanied by Mr. Homer Engelhorn who also represents the District and by Mr. Jim Casey who works with the District.

I have a statement I would like to provide for the record.

Mr. BEVILL. It will be made part of the record. You may summarize as you wish.

[The statement follows:]

STATEMENT OF CONGRESSMAN BYRON L. DORGAN

Mr. Chairman and Members of the Committee, I am Byron L. Dorgan, a Member of Congress representing the State of North Dakota.

As you know, the people of North Dakota have been very willing over the past years to allow the construction of facilities in our State that serve to benefit the residents of a very wide region of this country.

Despite the fact that by the mid-1970's North Dakota was already a net exporter of electricity, we have, since that time, consented to the strip mining of a additional thirty million tons of coal per year. We have also consented to the construction of a number of new electrical generating plants which will burn that coal. In my opinion, North Dakotans have been willing to make a commitment in an effort to cooperate in this country's struggle for energy independence.

In part this spirit of cooperation has stemmed from a sense of trust—a feeling that if we do our part, Americans in other states will appreciate that sacrifice and be willing to assist with undertakings that are critical for the well-being of North Dakotans.

Until recently, that sense of trust seemed to be well-founded. In the 1940's we consented to allow 566,000 acres—much of it among our richest farmland—to be inundated so that the Garrison and Oahe Dams could be constructed. Those dams now provide both flood control for the entire Missouri River Basin and hydroelectric power for the consumers of the region.

Although the benefits of the dam accrue equally to the residents of other states in the area, the people of our state agreed to lose this vast portion of our most valuable resource because they were promised that, in compensation, the federal government would create what had, for North Dakotans, been a vision since statehood and a fervent plea since the dust bowl days of the 1930's. That vision is a project to divert water from the Missouri River and carry it as a much-needed, stable, and reliable

supply of municipal water for our communities and irrigation waters for our farmers.

In 1965, the Congress made good on this bargain and authorized construction of the first phase of the project called the "Garrison Diversion Unit." Although the project was to ultimately irrigate up to one million acres, this first phase included only 250,000 of those acres.

As you know, construction on this first 250,000 acre portion of the project has been slowed to a near standstill since the federal government has, in recent years, refused to allow the expenditure of funds on two key features of the project—the Longtree Reservoir and the New Rockford Canal. The Water and Power Resources Service has indicated that the first year's construction schedule on these two features will require a total of $7 million—none of which has been included in the Administration's budget for fiscal year 1982.

As a means of getting the project moving again, North Dakotans have proposed phased construction schedule which I'm sure will be detailed by Governor Olson and Mr. Richter. This plan would allow work to proceed on these two important aspects of the project but would defer construction on those project features whereby Missouri River water would flow into Canada until the concerns of that country have been satisfied.

Mr. Chairman and Members of the Committee, I urge that you weigh the suggestions of those who are here representing the people of North Dakota. I urge you to consider the critical role that a spirit of trust and cooperation has played in the growth and prosperity of our nation in the past and the ever more critical role that it must play in the years to come if we are to pull this nation together and resolve our desperate problems in the areas of energy, economic health, and social justice.

We've waited long enough. Our State needs and deserves the water resources to assure our future as a food and energy producer in the years ahead.

It's time to stop the discussions and complete the construction of this project.

Mr. DORGAN. We have people here who have dealt with Garrison Diversion for many years. Senator Andrews has worked with members of the committee for years on this issue. I think it is sufficient to say that all of us feel there comes a time when we ought to start building, in a meaningful way, on a major water resource project in our state.

We believe that North Dakota was promised this project as a reward for the sacrifices that our State has endured as a result of the construction of the Garrison Dam. We also believe that we have waited long enough and that our sacrifices should allow us at this point to begin reaping those rewards.

To a state that has an agricultural base and now an increasing amount of energy development. Those rewards should logically be in the form of water development—the ability to deliver a consistent and reliable supply of water to our municipalities and the ability to enhance our agricultural base.

The details of the project are well known to you, I am sure, and to other members of the committee, because you have dealt with it over a number of years.

It is sufficient to say that all of us here want to see a water project go forward in North Dakota, not just with minimal funding, but with some commitment to completing a project so North Dakota citizens will reap the rewards of what that project can provide for the State.

With that as a summary and with the intention to submit my statement for the record, Mr. Chairman, I would like to call on Governor Al Olson.

Mr. BEVILL. We are pleased to have you with us here today. We enjoy serving with your fine delegation. North Dakota has always had a good delegation here. I know you are proud of all of them.

Governor OLSON. I AM.

Congressman Dorgan, Mr. Chairman, this is not the first time I have had the opportunity to testify before you. I am going to set aside my formal remarks. They are for the record.

Mr. BEVILL. We will put your remarks in the record.

[The statement of Governor Olson follows:]

STATEMENT OF ALLEN I. OLSON, GOVERNOR, STATE OF NORTH DAKOTA

Mr. Chairman, I am Allen I. Olson, Governor of the State of North Dakota, and appear before your Committee in support of the Garrison Diversion Unit and continuing appropriation for its construction.

North Dakota is one of many states which has more than one strong economic base. Agriculture has been, until recently, the primary mainstay, but now we are fast becoming one of the nation's leading oil and gas producers and have strippable coal earmarked for leasing in 1983. Even with our vast energy opportunities, we are an agruicultural state that desires to retain its agrarian status; we wish to increase and ensure our capability to produce food and fiber in significantly higher quantities for both North Dakota and the nation's needs.

The acute 1930's drought brought into bold relief the benefits provided by Federal Reclamation. During these "dust bowl" years thousands of farmers abandoned their homes. By 1940 irrigation and flood control were viewed as the most comprehensive approach to developing a water basin's natural resurces. In our area the Pick-Sloan Plan was the mechanism for creating upstream reservoirs for irrigation and other consumptive uses and the marketing of electrical energy produced by the project's power plants.

The Missouri River Basin Project was the most comprehensive water resource program envisioned at that time. It included the entire spectrum of multiple-purpose benefits—irrigation, hydroelectric power, flood control, navigation, pollution control, and municipal and industrial water. The project included irrigation of 4.3 million acres. Garrison Dam was one of five dams authorized and completed which formed the backbone of the flood control and navigation storage system and produced hydroelectric power.

To date North Dakota has been primarily a provider in the development of the Pick-Sloan Plan. The Garrison and Oahe Reservoirs inundated over one-half million acres of fertile land for water storage. Towns were relocated and a loss of annual income from the land is in excess of $100 million. North Dakota was proud to contribute to the stabilization of the Missouri River. However, we are still, after nearly forty years, awaiting the benefits we were promised through Congressional action.

The Garrison Diversion Project, as reauthorized by Congress in 1965, provides us the benefits promised and agreed to. We expect a stabilization of state and regional economy; we envision increased farm income, increased trade opportunities, new businesses, new fish, wildlife and recreation areas and a stable water supply for many of our cities.

With the diminishing land base constantly a threat, the irrigation of 250,000 acres, which we could count on during lush and lean years, would ensure a more stable and diversified agricultural economy. Many of our municipalities and rural and domestic users see the Garrison Diversion Project as the most dependable source of water which they desperately need to survive and prosper.

We in North Dakota are committed to providing our share of the food and fiber supply for this nation. However, because of our semi-arid climate with extreme temperature and precipitation variations, a dependable and constant water distribution system is critical to our needs. We do not want to fall short of our goals or the nation's expectations.

North Dakotans have worked for decades to realize development of the Garrison Diversion Project which will provide irrigation so that we may increase food and fiber production; it will ensure more productive soils and also protect us against the ever present impact of droughts. We need Garrison Diversion and we are confident that it can be achieved in a responsible manner which is both environmentally and economically sound.

With respect to the planned consultations between Canada and the United States on the authorized features of the Garrison project, the state's position remains that Canadian concerns are to be considered and resolved in a manner that is reasonable and acceptable to the two nations.

Given March 23, 1981.

Governor OLSON. I know you have a busy schedule. I would like to make two points, the first of which has to do with my prior testimony before this committee.

As a Republican Attorney General I shared and continued to share with Governor Art Link the full support of this project. That continues.

The point I would like to make is that the support for this continues to be bipartisan.

Secondly, a major concern of North Dakota, as well as others, is how our neighbors to the north, the Canadians, and our Manitoba neighbors, the province to the north of North Dakota, view the project.

We have presented and recommended a phased construction format that would provide an initial stage that could be and can be and should be monitored very closely as to any boundary violations of the boundary treaty. Any concerns that the Manitobans and the Canadians have should be closely monitored.

We continue to respect sincerely and directly and fully the concerns of Canada and Manitoba. I think that is a point that must be emphasized.

I will be meeting with the Premier of Manitoba in a few weeks. We will discuss this matter again, as I think we can and should over the future of the project; but I want to assure you and members of Congress that North Dakotans—and I speak for them—are sincerely concerned about any adverse effects that we would have on the economy or society of Manitoba.

We take it seriously, but we do feel that we have very serious concerns in this project as Congressman Dorgan indicated and Senator Andrews and Senator Burdick will.

This is a project that has been in the minds of North Dakotans for years. It is part of the Pick-Sloan Plan. North Dakota has given up a great deal. We have substantial benefits to look forward to. We have substantial interests in the project too.

I think with that kind of concern and respect, the Province and the state and the two countries can get along and with respect for each others' interests.

Thank you.

Mr. BEVILL. Senator Andrews.

STATEMENT OF SENATOR ANDREWS

Senator ANDREWS. Thank you, Mr. Chairman. It is a privilege to be back where the power is.

Mr. MYERS. I am glad you haven't forgotten.

Mr. BEVILL. Be sure to get that in the record.

Senator ANDREWS. And to once again tell you of the keen interest and the great deal of support that exists for Garrison Diversion in the State of North Dakota.

I think that probably the best way to sum it up is to say that no state, no group of cities within a state, can exist for long without a dependable water supply.

Over a hundred years ago the people of the Territory of Dakota memorialized the U.S. Congress to transfer water from the Missouri River east to provide an adequate supply in those eastern rivers,

the James, the Souris, the Sheyenne and the Red, that were chronically prone to forget to flow.

That was our environmental problem then. It still is. We have no alternatives to Garrison Diversion as far as water supply is concerned in those rivers. We have no aquifers close to those towns, and that is why the promise made to North Dakota in the forties is just as important, if not more so today as we are moving into the energy era of the eighties where North Dakota lignite and North Dakota food energy has got to be so important to the ongoing wealth potential of our nation.

We need this project and we would sincerely hope that the committee on the House side will give us the type of backing and funding that can move this project forward.

I do appreciate your taking the time to allow us to testify on behalf of North Dakota. I want to commend my colleague in the House, Congressman Dorgan, for the great job he is doing in providing the leadership necessary to get the funds through the House this year so that we can see continued construction on this most important project for North Dakota.

Thanks. Good to be back with you.

Mr. BEVILL. Good to have you back.

Mr. DORGAN. Senator Burdick has joined us.

Mr. BEVILL. We are mighty pleased to have you over here.

Senator Burdick and I are old karate partners.

Our friendship goes back many years just as Mark Andrews there. We have worked mighty close together on many things and you do have a good successor, Mark.

Byron is certainly doing a good job.

STATEMENT OF SENATOR BURDICK

Senator BURDICK. Mr. Chairman, I am not going to read my prepared statement. I would like to ask unanimous consent it be made part of the record at this point.

Mr. BEVILL. Yes. It will be made a part of the record. You may summarize as you wish.

Senator BURDICK. I just want to add a few things which have not been said and may be said.

I think the dearest commodity we have in this country—maybe in the world—is water. I think we have to manage it wisely; we have to conserve it; and, as I say, manage it very well, because, with the increasing population, water is going to be as dear as gold.

We have in our state the Missouri River, which flows through it. The headwaters are in Montana and it flows clear to the Gulf of Mexico.

In years past it carried tons and tons of good soil with it. Flooding in the Lower Mississippi, for example, was an almost annual affair.

With the main stem dams in the Missouri, we have more or less eliminated the downstream flooding.

As probably has been said by my colleagues, 560,000 acres of land have been given to that project because the reservoir retention was necessary to have that flood control.

We think it is only fair and equitable that we be given some consideration for our contribution to the nation, contribution to that whole Mississippi/Missouri Valley.

We think we have a solid plan here that has been devised to use some of that water for agricultural, municipal, and industrial purposes. I think we have a sound program, and I think any difficulty we have with Canada can be worked out. All we are asking for now is the continuation of the project.

[The statement of Senator Burdick follows:]

STATEMENT BY SENATOR QUENTIN N. BURDICK

I thank you for the opportunity to appear before your Subcommittee today to let you know of my continuing strong support for the Garrison Diversion Project. This morning I had the privilege of chairing a similar hearing before the Senate Energy and Water Development Subcommittee, so I am well aware of the many different projects and priorities which your Subcommittee must consider. I hope, however, that your Subcommittee will continue, as it has in the past, to recognize the benefits this project will bring to the citizens of North Dakota, and also the national economic benefits.

As you know, the Congress authorized the Garrison Diversion Unit in 1965 and thus far has appropriated about $157 million. The plan calls for the irrigation of 250,000 acres with ancillary purposes including municipal and industrial water supply, lake restoration, pollution abatement, flood control, recreation, and conservation of fish and wildlife. My primary purpose in appearing here today is to express my personal commitment to the currently authorized project, and to urge my distiguished colleagues on the House Appropriations Committee to provide the funding necessary to continue work on the Garrison Diversion Unit. I have every reason to believe that my colleagues on the Senate Appropriations Committee plan to lend their support to the project when funding is considered later this year.

There can be little question of the need for the Garrison Diversion Project. The drought and crop moisture indexes indicate the real possibility of continued drought conditions in the upper midwest next summer and some weather forecasters are talking about the probability of long-term drought problems. The point is that North Dakota is as interested in a dependable water supply today as it was nearly a hundred years ago when the idea of a Missouri River irrigation plan was born.

We are all hopeful that the problems of the past several years which have slowed the project will soon be resolved, and that we can get on with a full construction schedule. We have received assurances from the new secretary of the interior that policies involving land acquisition for mitigation acreage will be reviewed, and I understand that consultations with the Canadians over transboundary impacts may begin next month. Despite the delays, public support for the project continues. This was demonstrated recently when the North Dakota State Legislature passed a resolution urging the Secretary of the Interior to proceed with a phased construction plan. The bipartisan representation of today's witnesses also attests to the fact that North Dakotans still want and need the Garrison Diversion Project.

Mr. Chairman, North Dakota has invested considerable time and money in this project and we are optimistic that the delays of the past few years will soon be resolved. We are here today to reiterate our support—as elected public officials—for the project Congress authorized in 1965, and we hope your Subcommittee will respond to our concerns and continue its traditional support for the Garrison Diversion Project.

FORTY-SEVENTH LEGISLATIVE ASSEMBLY, STATE OF NORTH DAKOTA

SENATE CONCURRENT RESOLUTION NO. 4038 (SENATORS NETHING, REDLIN) (REPRESENTATIVE STRINDEN)

A concurrent resolution urging the United States Secretary of the Interior to proceed with phased construction of, and to seek consultations on, the authorized Garrison Diversion Unit

Whereas the Garrison Diversion Unit is authorized and funded as a multipurpose water resource development project; and

Whereas the Garrison Diversion Conservancy District has adopted a program for phased development of the project as authorized, with the initial construction of 5,000 acres of irrigation features within the James River Basin; and

Whereas this program of phased development includes a cooperative research and monitoring program consistent with the International Joint Commission's recommendations for conditions precedent to proceeding with project construction; and

Whereas consultations between the United States and Canada have been proposed to discuss certain features of the Garrison Diversion Project: Now, therefore, be it

Resolved by the Senate of the State of North Dakota, the House of Representatives Concurring Therein: That the Forty-seventh Legislative Assembly supports phased development of the authorized and funded Garrison Diversion Unit and urges the United States Secretary of the Interior to proceed with its construction; and be it further

Resolved by the Senate of the State of North Dakota, the House of Representatives Concurring Therein: That the Forty-seventh Legislative Assembly supports it further

Resolved, that copies of this resolution be forwarded by the Secretary of State to the North Dakota Congressional Delegation, the United States Secretary of the Interior, and the Governor of North Dakota.

Mr. BEVILL. Thank you, Senator.

Let me ask you—in Canada—who—when President Reagan was up there recently, do you know whether or not this was discussed, whether they took this subject up? Have you gotten any report from the White House on that one way or the other?

Governor OLSON. We have no specific report unless the Senators or Congressman Dorgan have. Our understanding from news reports is it was discussed briefly.

The President gave, I suppose, the expected assurances regarding Canadian interests. That is all we know.

Senator ANDREWS. The funding we have, the capability, Mr. Chairman, is for developing the irrigation that drains back into the James River so those who question the results from our universities, the results from the Harris Engineering Study that was paid for by funds appropriated by the House and all the other studies we have. We will be able in this phased construction to see what return flows actually are under actual field conditions before we move to irrigating any parts that would drain back into the Red and therefore into Canada.

Mr. DORGAN. Mr. Chairman, I would like to ask the committee to hear a statement by Mr. Charles Richter, the Chairman of the Board of Directors of the Garrison Conservancy District.

Mr. BEVILL. Glad to hear from you, Mr. Richter.

STATEMENT OF CHARLES RICHTER

Mr. RICHTER. Thank you, Mr. Chairman.

Congressman Dorgan, members of the subcommittee, I am Charles Richter of New Rockford, North Dakota. I am Chairman of the Board of Directors and the only person authorized by the governing body of the Garrison Diversion Conservancy District to present the views of the district to this subcommittee.

I appear here today in support of an appropriation of $11 million for the Garrison Diversion unit for fiscal year 1982. This sum represents an increase of $7 million above the amount contained in the Administration's budget request for this activity.

My Board of Directors, and indeed the vast majority of the citizens of the district and the state support President Reagan's ideas with respect to federal spending, particularly his plans for reducing outlays on programs that make no contribution to our economic strength.

However, we do not feel that cutting back on resource development programs to inefficient levels of operation are helpful to the nation's overall economy. Programs such as the Garrison Diversion Unit increase the tax base, strengthen local government's ability to function without federal assistance and ultimately return their cost to the Treasury many times over.

So, Mr. Chairman, we see no paradox in our position of supporting overall reduction of the budget while supporting very modest increases in our own line item.

For the last four years, our project has been the whipping boy of an administration which was overtly hostile to resource development programs. In fiscal year 1981, the Administration did not request a single dollar for our project and, in fact, tried to transfer away our carryover from previous years. We did not seek add-on funds, but we did solicit and receive your support in restoring the transfers.

The Conservancy District deeply appreciates your assistance in that effort and, needless to say, we also appreciate your help in prior years.

Mr. Chairman, we understand what the Carter Administration was trying to do in undertaking to kill our project although we do not quite understand why. In like manner, we understand what President Reagan is trying to do when he limits our funding to $4 million but it does little or no good for this Administration to express support and sympathy with our program unless that sympathy is backed up with dollars.

Please don't overlook the fact that reduction in force notices have been given to numerous employees of the Water and Power Resources Service now working on our project and they will be long gone by this time next year if we don't get enough money from Congress to keep operations going.

The sum which we are requesting will enable a start of construction on Lonetree Reservoir and the New Rockford Canal in fiscal year 1982. These are the key features of a first stage development of some 80,000 acres that can be served without impacting on Canadian streams in any way whatsoever.

The District supports this stage approach to development while consultations are continuing with our Canadian neighbors.

With respect to such consultations, we have always believed that they could be conducted in a way as to reach understanding that would enable continuation of the authorized project. Now we believe that the Administration is on our side in this matter and will indeed throw its considerable influence behind a resolution that is satisfactory to the vast majority of the citizens of North Dakota. Things have not been that way lately.

In a similar vein, there are encouraging signs that we can reach an understanding with federal fish and wildlife officials on the troublesome issue of mitigation lands. We are also hopeful that this Administration will work more closely with us in settling some of the harassing litigation that has been filed against the project.

In short, Mr. Chairman, there is an air of reawakening in Garrison, and people are beginning to have their dwindling hopes renewed.

An additional $7 million would enable us to take advantage of this new spirit and to move forward. Realistically, we cannot expect to make up for the time we have lost in the last four or five years, but we can, hopefully, not lose any more.

Just one final word about our local support. As you know, the Garrison Diversion Unit has always enjoyed strong bipartisan support from all of the important statewide elected officials. You will be interested to know that the same degree of support is forthcoming from the team elected last fall. If this is unique, Mr. Chairman, I suggest that there is a reason for it. That is, simply stated, the people support it and it behooves the elected officials to do likewise.

We want to thank you for the support you have always given us and we hope that it will continue.

Mr. BEVILL. Thank you very much.

Mr. MYERS. Mr. Chairman, may I ask the last witness, Mr. Richter, you state you are the Chairman of the Board of Directors and you say you are the only person authorized to speak for that governing body. Does that mean there might be some difference of opinion within that governing body, the Board?

Mr. RICHTER. No. None whatsoever.

Mr. MYERS. It is unanimous?

Mr. RICHTER. Yes.

Mr. BEVILL. Mr. Burgener, do you have questions?

Mr. BURGENER. No, Mr. Chairman. Thank you.

Mr. BEVILL. Thank you for a fine presentation from a fine delegation.

Mr. BEVILL. Next we have Mr. Duane Sudweeks, Administrator, Division of Colorado River Resources.

MONDAY, MARCH 23, 1981.

SOUTHERN NEVADA WATER PROJECT

WITNESS

DUANE R. SUDWEEKS, ADMINISTRATOR, DIVISION OF COLORADO RIVER RESOURCES

Mr. BEVILL. Mr. Sudweeks, we will submit your statement. Do both of you intend to testify?

Mr. SUDWEEKS. I will do the speaking, Mr. Chairman.

Mr. BEVILL. If you will submit that and make it as short as you can.

[The document follows:]

STATEMENT OF GOVERNOR ROBERT LIST OF THE STATE OF NEVADA

Mr. Chairman, Members of the Committee, I am pleased to see that the water development requirements of the residents of Southern Nevada are receiving favorable consideration by your Committee, and that positive action is being taken by the Federal Water and Power Resources Services of the Department of Interior, the State Divsion of Colorado River Resources and the local water-using agencies. The careful development, management and wise use of our water resources in the State of Nevada is critical to the well being of the citizens of our State.

The appropriation of the funds necessary to continue construction of the Second Stage of the Southern Nevada Water Project is vitally important to Nevada. Your

support of funding authorized by Public Law 89-292 will allow the State to meet the municipal and industrial water requirements of Southern Nevada and avoid adverse social, economic and environmental impacts.

The First Stage of the Project is currently serving the needs of the people in the Las Vegas Valley and Boulder City. However, the Second Stage of the Project will be needed to support future water requirements of the expanding population in that area. It is essential that we meet the December 1981 deadline to have the Second Stage of the Southern Nevada Water Project operational.

Construction is underway, and contracts in the total amount of $91,024,529 have been issued to date. It is anticipated that early in the 1982 Fiscal Year approximately $2.0 million in additional construction contracts will be issued by the Water and Power Resources Service. The proposed $8,140,000 budgeted for Fiscal Year 1982 would be applied toward payment of these contractual obligations. All funds appropriated for the Second Stage of the Southern Nevada Water Project under Public Law 89-292 are reimbursed with interest to the Federal Government. In this regard, I wish to point out that the State of Nevada, through the Division of Colorado River Resources, has made all repayments for First Stage facilities as scheduled. The First Stage facilities are in a sound financial and operational condition. The additional obligations for the Second Stage will be treated in like manner.

The State of Nevada is actively sharing in the cost of the water resource development project. The State has completed the design and is well into the construction phase of the enlargement of the First Stage of the Alfred Merritt Smith Water Treatment Facility. Sixty million dollars of State General Obligation Bonds have been sold for this purpose to provide necessary facilities for a complete municipal and industrial water supply system.

The decision to make water available to the people of Southern Nevada was confirmed by the passage of Public Law 89-292 in October of 1965. As a result of this action, appropriations were made which allowed the First Stage of the Project to be completed in 1971, supplying 132,200 acre feet of water per year allotted to the State of Nevada from the Colorado River. It was then anticipated that this water supply system would be sufficient until approximately 1990. However, our population growth and the rapid expansion of the area produced a larger demand for water, thus the necessity for the Second and final stage of the Project authorized under Public Law 89-292.

It is critical that the entire water system including Federally-funded pipeline additions and pumping plants and the State-funded expansion of the water treatment facilities be completed as quickly as possible. All construction is coordinated between the Federal, State and local water users. I believe that each portion of the system required to deliver water to the people must progress on schedule in order to ensure efficient and effective use of Federal, State and local funds. Any reduction in funding that could delay construction will result in additional costs to the people of Southern Nevada, as well as jeopardizing adequate water supplies.

It is for these reasons that Fiscal Year 1982 appropriations in the minimum amount of $8,140,000 are being requested. I respectfully urge that your Committee support this appropriation for Fiscal Year 1982. I believe it is clearly a matter of record that the Project fully meets or exceeds all the criteria of a wise and prudent water resource development, including the tests of safety, environmental considerations and cost effectiveness.

Your continued support of this vital municpal and industrial water supply project is appreciated.

STATEMENT OF DUANE R. SUDWEEKS, ADMINISTRATOR, STATE OF NEVADA, DIVISION OF COLORADO RIVER RESOURCES

Mr. Chairman, my name is Duane R. Sudweeks. I am the Administrator of the Nevada Division of Colorado River Resources, an agency of the State of Nevada. I appreciate this opportunity to present a statement supporting proposed appropriations for the Southern Nevada Water Project, authorized by Public Law 89-292, in the amount of $8,140,000.

In implementing the Southern Nevada Water Project Act, the facilities were staged to economically and prudently develop the required municipal and industrial water supply to the Southern Nevada area. The First Stage was completed and placed into operation in 1971, with a maximum annual delivery capacity of 132,200 acre feet. The First Stage has provided an additional source of water from Nevada's allocation from the Colorado River to the communities served by the Las Vegas Valley Water District, the cities of North Las Vegas, Henderson and Boulder City, and Nellis Air Force Base. It also provided a means by which the overdrafting of the

limited groundwater supply and its attendant adverse environmental impacts have been mitigated.

It was anticipated that the First Stage would provide an additional supply of treated Colorado River water for the metropolitan Southern Nevada area to about the year 1990. Both the population increase and attendant water requirements, and the continuing need for groundwater pumping management have required the Second and final stage of the Project to be operational in the early 1980's. Construction of the Second Stage, to double the capacity of water deliveries and allow an additional 166,800 acre feet per year of Colorado River water to be delivered, has already commenced and the appropriation for Fiscal Year 1982 would allow construction to continue on schedule in order that substantial completion could occur prior to the end of the 1981 calendar year.

Both the First and Second Stages of the Project and the needed water treatment facility have been a joint Federal, State and local effort. Federal appropriations, along with State funding authorized by the Nevada Legislature, and the investment of local funds for the receipt and distribution of the water from the Project are all necessary paralleling and on-going activities.

Under the authority granted by the Nevada Legislature, the Nevada Division of Colorado River Resources has sold $60,000,000 worth of State General Obligation Bonds to finance the costs of the enlargement of the treatment facility to match the Second Stage of the Project. In addition, approximately $30 to $40-million of local funds are being expended by the water receiving entities in preparation of receipt of Second Stage water deliveries.

Each and every part of the Southern Nevada Water System has been coordinated and integrated to provide potable water deliveries to current and future residential, commercial and industrial consumers. No water from the Project is utilized for agricultural irrigation purposes.

The Water and Power Resources Service, the State of Nevada, and local projections of water needs support and verify the need for the substantial completion of the Second Stage of the Southern Nevada Water Project prior to the end of this calendar year. Without such availability of water, the Southern Nevada area could be substantially damaged, both economically and environmentally. Delay in completion would preclude the full utilization of the investment in the First Stage wherein facilities were constructed to accommodate Second Stage capabilities.

It is our understanding that the Water and Power Resources Service has indicated that they have the capability of effectively and efficiently using $8,140,000 in Fiscal Year 1982. I urge the Subcommittee to support this Federal Year 1982 appropriation for continued construction activities.

Mr. Chairman, it has been my pleasure to present this statement to the Subcommittee and I appreciate the opportunity to request your favorable consideration.

Statement of Duane Sudweeks

Mr. Sudweeks. My presentation will be very short, Mr. Chairman.

Mr. Chairman, members of the committee, for the record I am Duane Sudweeks. I am the Administrator of the Division of Colorado River Resources, which is an agency of the State of Nevada.

Accompanying me in support of this testimony is Don Paff who is the General Manager of the Las Vegas Valley Water District.

The purpose of our being here is to present testimony in support of appropriations for fiscal year 1982 in the amount of $8,140,000 for continued construction of the second stage of the Southern Nevada Water Project as authorized under Public Law 89-292.

I should, by way of information, mention that the agency that Mr. Paff represents presently—and will continue after the second stage is completed, to receive approximately 80 percent of the water made available from the project.

I have provided the committee not only my written statement, but that of the Honorable Robert List, Governor of the State of Nevada. Governor List expressed regret that he was unable to appear personally. I would request that our written testimony be included as part of the record of this hearing. Governor List

stressed the necessity to continue the construction of the second stage of the Southern Nevada Water Project.

He pointed out that the first stage of the project will shortly be inadequate to meet the future water requirements of our expanding population.

Construction of this project is well under way. Contracts in the total amount of a little over $91 million have been issued to date. It is anticipated that early in the 1982 fiscal year approximately $2 million in additional construction contracts will be issued by the Water and Power Resources Service.

The proposed $8,140,000 budgeted for fiscal year 1982 would be applied towards payment of these contractual obligations. It is critical that the entire water system, including the federally funded pipelines and pumping plants as well as the state-funded expansion of the water treatment facilities be continued as expeditiously as possible.

Therefore, Governor List, as well as myself, urge that your committee support this appropriation in the amount of $8,140,000 for fiscal year 1982.

We wish to thank you for your time and consideration of this extremely important matter.

Mr. BEVILL. Any questions?

Thank you very much.

Mr. SUDWEEKS. Thank you.

MONDAY, MARCH 23, 1981.

NUCLEAR ENERGY MATTERS

WITNESS

JEANNINE HONICKER, NASHVILLE, TENN.

Mr. BEVILL. Ms. Jeannine Honicker.

Ms. Honicker, as you can see, we are having to limit everybody to five minutes here. If you will, any way you wish to present it, make it as brief as you can.

STATEMENT OF JEANNINE HONICKER

Ms. HONICKER. I have given you written testimony.

Mr. BEVILL. That will be put in the record.

[The statement of Ms. Honicker follows:]

Chairman Bevill and members of the subcommittee, thank you for inviting me to address your Energy and Water Development Subcommittee on Appropriations today.

For the past seven years I have watched TVA, and have participated in hearings, attended board meetings, contacted my representatives, and done everything that a private citizen can do to call attention to TVA's role in an inflationary spiral. Gentlemen, TVA is not a victim of inflation, but one of the major causes of inflation. To control TVA is to control inflation.

In the past 13 months, we have had rate increases of 10.8 percent, 13 percent, and 9.3 percent. That means that we are paying over 40 percent more for our electricity than we were just 13 months ago. If TVA continues their present policy, the rates will double in just 2½ years, not 10. Presently, TVA is paying over $1.2 billion per year on interest to construct nuclear plants that we do not need now, nor will there be customers for the electricity that TVA hopes they will produce when they are

completed. We are told that TVA needs to continue to build for industrial growth, but last year the state of Tennessee lost 50,000 jobs. We will lose more. What good will it do to have an over abundant supply of electricity if nobody can afford to buy it?

One-third of every dollar that TVA receives from its distributors goes to pay the interest on TVA's debt. $.28 of every dollar that residential customers pay goes for this interest. Although TVA was created in 1933, 48 years ago, to save this region, we are still trailing the rest of the nation. Our per-capita income is still only 50 percent of the national average, and in many counties in the TVA region, the average is less than 50 percent.

TVA's ambitious nuclear construction program was expected to cost a total of approximately $5 billion, or so we were told when the program began. The budget that TVA submitted to this subcommittee lists the costs of completing all 17 reactors at $17.65 billion. In September, TVA submitted a document to Representative Albert Gore Jr's TVA Caucus hearings that listed a top cost estimate of over $31 billion. Accordingly to a story in the Tennessean, the amount given at the recent Baker hearings was $153 billion.

Gentlemen, why did TVA still list the total cost of their nuclear construction program at only $17.65 billion in the budget they submitted to this subcommittee? Why does congress continue to support a program that is so unpopular with the folks back home. There is a way to recoup the money that has been invested, and to defer the construction of any further plants. Your influence extends beyond the 1982 budget that you are considering. I ask you to look beyond 1982 and consider carefully the recommendation that I propose.

TVA has several classes of customers, residential, commercial, industrial, and the federal government. The electricity that TVA sells to the federal government is used by the Department of Energy to enrich uranium at the gaseous diffusion plants at Oak Ridge Tn. and Paducah, Ky. This enriched uranium is sold to utilities in this country and abroad at prices less than it would cost if the electricity that is used to enrich it was not subsidized by the ratepayers of the TVA. The average cost per kilowatt is less to the federal government than it is to any other class of TVA customers. Gentlemen, the ratepayers of the TVA region are tired of being a welfare agency for the nuclear industry.

I respectfully request that you direct TVA to sell Sequoyah and Watts Bar Nuclear Power Plants to the Department of Energy for their current market value. I further request that you direct TVA to use the proceeds of this sale to pay off its debts, eliminate its interest costs, and reduce the rates to the ratepayers of the TVA region. Lastly, I request that you direct TVA to suspend construction on all additional nuclear power plants, and not to plunge into debt again.

To facilitate the sale of Sequoyah and Watts Bar to DOE, TVA can allow DOE to assume the payment of its bonds. This is the same principal that you or I would use if we assumed a mortgage on a home. DOE can increase the price that it charges for its enriched uranium and the cost of the plants will fall fairly where it belongs, to those who will reap the benefits.

Since TVA is presently selling 14 percent of all its electricity to the federal government, this will free up that much more generating capacity to serve residential and industrial customers. Since they pay a higher rate than DOE anyway, that will mean more money for TVA, and can further reduce the rates.

Once the rates are reduced, industry will again move to our region. This need not necessitate building more generating plants, however. TVA can encourage these industries to cogenerate electricity along with their other industrial processes. This will mean more profit for the industry, and will be a powerful lure.

If TVA continues to build the partially constructed nuclear plants, by the time they are all on line, it will require that not only all the new jobs that are expected for the country in the next two decades to be located in the TVA region, but one and a half times all the new jobs that are expected to be in the entire country to be in this region. How will the rest of the country react to this? We are not an island. Can we prosper while the rest of the country dies? Neither should present rate payers be expected to finance construction of plants to ship electricity to other areas. If TVA is the national utility, then they should not be asking this subcommittee for the paltry sum of $166.4 million. Let them be honest and open with the entire country. If the entire country is to benefit, then the entire country should bear the costs.

So, I offer you two options. The first is to use your influence with DOE and TVA to arrange the transfer of title for the Sequoyah and Watts Bar plants from TVA to DOE.

The second option is for the financing of the construction to come from appropriated funds rather than power revenue. The first option is my preference. Poll your

constituents. I anticipate that you will find an overwhelmingly positive reaction to the first problem. Even DOE and TVA will probably find that it suits their self interest.

Thank you again for the opportunity to address you today and to share with you my concerns and solutions for a problem that I have heard much complaints about, but no solutions.

The only people who will be adversely affected by the deferral of construction on TVA's nuclear construction program will be the people who are building the plants. To spur the economy so that they will be able to find jobs immediately, please use your influence to reduce the interest rates for residential homes. This would require no additional federal money, but would be a federal action that would benefit even more people than the few thousand people presently working on TVA's nuclear power plants.

Respectfully submitted.

JEANNINE HONICKER.

Ms. HONICKER. I would like to ask you a question first, if I may, Chairman Bevill. When you go home, are you stopped by your constituents who tell you, I am on Social Security? My electric bill—they call it light bills down where you and I are from—my light bill is over $200 a month and my Social Security check is about $250 a month and how am I going to live?

Mr. BEVILL. The answer to your question is "Yes."

Ms. HONICKER. I have heard this over and over and over again. I have been concerned about it.

In the past 13 months our light bills have gone up 40.6 percent more than they were 13 months ago. So at the current rate, if they keep on going, they are going to double in two and a half years.

There is a solution and there is a way out. That is why I appreciate the invitation to speak to this committee today. Unlike everybody else that has been here asking you to spend more money, I am asking you to help TVA spend less. The way to do that, as I see it, is to transfer the ownership of Sequoyah and Watts Bar nuclear plants to the Department of Energy.

According to page 176 of this year's budget, TVA budget, the Federal government pays less per kilowatt hour than any of the other TVA customers, residential, industrial, or commercial, and they use the electricity that they buy, and last year it was 14 percent of all the electricity that TVA generated, to enrich uranium which is sold all over the world.

Now that means that we, the residential customers and all the other customers of TVA are subsidizing the entire nuclear industry and we are tired of being a welfare agency for the nuclear industry.

So let Department of Energy buy Sequoyah and Watts Bar and generate their own electricity to enrich the uranium. They can increase the price of the enriched uranium—the Department of Energy can increase the price of the enriched uranium that they sell to their customers and pay for this.

In fact, it would not even include—because an increase in the Department of Energy's budget, because just as you and I would buy a house and assume the mortgage, the Department of Energy can assume the loans that TVA has already made.

I propose that these plants be appraised and sold at their fair market value. I think—and I further request that you request TVA to take the money that they get from the sale of Sequoyah and Watts Bar and pay off the loans if they don't just transfer them.

That would reduce by $1.2 billion or about a third of TVA's electric bills, the amount that we are paying.

When we are paying 28 cents out of every dollar to pay the interest, and it is going up year after year after year, you can see that it is going to just lead us into a depression. It is just impossible.

I know that your staff is concerned with the appropriated budget, but you have a whole lot of influence on TVA and the Department of Energy, Chairman Bevill, and so do the other members of this subcommittee. This is a way that this subcommittee can act to save the Tennessee Valley Authority, because it is on a self-destructive course right now.

Mr. BEVILL. If there are no questions, thank you very much.

Ms. HONICKER. Thank you.

MONDAY, MARCH 23, 1981.

ANIMAS-LA PLATA, COLORADO PROJECT

WITNESSES

JEANNE ENGLERT, TAXPAYERS FOR THE ANIMAS-LA PLATA REFERENDUM

JEAN McCULLOCH, TAXPAYERS FOR THE ANIMAS-LA PLATA REFERENDUM

LEW MATIS, SAN JUAN AUDUBON SOCIETY CONSERVATION COMMITTEE

PRESTON ELLSWORTH, DURANGO, COLO. BUSINESSMAN

Mr. BEVILL. Mr. Lew Matis?

This is a large group. We realize this is very little time for this many people. We are sorry we do have to limit it this much, but we have allotted you 15 minutes. We have to hold you to that.

Mr. MATIS. That is fine, Congressman Bevill.

I have submitted testimony and so has Mrs. Englert. So we will be summarizing that.

Mr. BEVILL. Your statement will be made part of the record.

Mr. MATIS. Mrs. Englert will start first.

STATEMENT OF JEANNE ENGLERT

Mrs. ENGLERT. Okay. Mr. Chairman, very quickly, the Animas-La Plata Water Project is a multipurpose $478 million project in southwestern Colorado which is designed to provide municipal, irrigation and industrial water for four New Mexico and Colorado communities, three Indian tribes and area farmers.

I have a problem with this project for several reasons. When the project was first authorized in 1968 for a lot of reasons it made sense. Since that time, as you know, the cost of the project has increased greatly. Unfortunately, although there is an increase—a built-in subsidy for the farmers—and that subsidy can be increased under the Bureau of Reclamation law where the M&I users—mainly the City of Durango—there is no such subsidy which means we have to continue to pay the full cost of it.

The plain truth, gentlemen, is it has reached the point where we simply cannot afford it.

As I see it, we have three problems. One of them is the cost of the project itself in particular to the users who have to pay the full amount; the hidden costs associated with the project which don't appear in that total price tag, but which nevertheless have to be borne by the beneficiaries; for example, the water treatment plant that the City of Durango will have to build in order to utilize the raw water it gets.

Then finally the health costs to Durangoans which you will soon or shortly hear about.

I thank you. If you don't have any questions, I will go on.

[The statement of Mrs. Englert follows:]

STATEMENT OF JEANNE W. ENGLERT, DURANGO, COLORADO

The Animas-La Plata water project is a $478-million, multi-purpose project in southwestern Colorado which is designed to provide municipal, irrigation and industrial water for four New Mexico and Colorado communities, three Indian tribes and area farmers. The project was authorized in 1968 as a participating project in the Colorado River Storage Project system. However, the project that was authorized in 1968 is not the same project which exists today. What was once a gravity-flow diversion and high-mountain reservoir system has become an energy-consumptive project, which will consume over 165,000 megawatts of electricity per year.

The present project is also a great deal more expensive than the project which was authorized acre, I an see fod in 1968. In 1979 the Animas-La Plata cost $336 million. In 1980 it cost $405 million. Its 1981 project cost is now $478 million. The cost of providing irrigation water to the high-altitude farms in the project area is nearing one million dollars per farm.

On the average, only 30 percent of water project costs are repaid by beneficiaries, with only 19 percent for irrigation. In this project only 15 percent of the cost of irrigation water will be repayed and as project costs rise, this subsidy will also increase. While irrigated agriculture produces higher incomes and employment per acre, it does not produce very high income or employment per acre-foot of water consumed. The construction period for large projects, such as the Animas-La Plata, produces higher incomes but also causes high infrastructure and social costs for the project area.

Many of these costs are not included in the official "price-tag" for the project, but are additional costs which will have to be paid, not by the so-called beneficiaries of the project, but by others.

If these costs were to be included in the benefit-cost analysis, the Animas-La Plata project would not even reach unity. Below are some notable examples of the hidden costs of the Animas-La Plata water project.

The City of Durango, in order to utilize its project water, will have to build a second water treatment plant. Because of the poor water quality of the Animas River, the plant may have to provide advanced water treatment, another additional cost. The project pumps are located on a radioactive tailings pond, a health hazard.

Power that is diverted to run the project pumps will have to be replaced by thermal-generated power elsewhere. This cost, according to a University of Colorado economist, will be an additional $5 million annually.

Federal wholesale power rates have recently increased by 21.5 percent in order to include the increased costs of the project's irrigation subsidy. Power consumers, consequently, must subsidize this project in two ways: as federal taxpayers and as power users. In addition, a 345-kilovolt power line is being planned at a cost of nearly $200 million. A line of this size and scope would not have to be built if there were no Animas-La Plata project.

The site of the major project reservoir is also an ideal location for removal of Durango's radioactive tailings pile. The site is close enough to the pile to allow for removal of the tailings by conveyor, a considerable cost savings to both federal and state governments. All other sites under consideration will require hauling the tailings by truck. If Animas-La Plata project objectives were met by alternative means, this site would then become available for tailings disposal.

Mr. Chairman and Members of the Committee, if your objective, as members of Congress, is to increase the agricultural supply, you don't do that at an altitude of 7,000 feet.

If your objective is to increase the supply side economically, you don't invest in those industries which return five percent or less on that investment.

If your objective is to reduce federal spending, you don't build a project which will contribute to inflation.

If your objective is to reduce energy consumption, then you don't build a project which is energy consumptive.

You don't build the Animas-La Plata water project.

Statement of Jean McCulloch

Ms. McCulloch. I am Jean McCulloch representing a group called Taxpayers for the Animas-LaPlata Referendum.

I just want to make one very brief point. This project pumps water up 900 feet over the hill to a handful of farmers on the west side of the county. It is very energy-consumptive, costs a lot of money, and the price is going up.

To emphasize the very few benefactors out there on the west side of the county, I have brought the phone book with me, a page of the phone book, to show you approximately how many irrigators are out there on that side of the county.

Thank you, Mr. Chairman.

[The page from the phone book is retained in Committee files.]

Mr. Matis. In my statement I show some alternatives that can be built at a much lower cost.

Mr. Myers. Who are you?

Statement of Lew Matis

Mr. Matis. I am Lew Matis. I am Co-Chairman of the San Juan Audubon Society.

There are alternatives to the project. Of the five objectives to be met by the project, there are lower cost alternatives that could meet the needs, the projected needs of what is proposed in this project.

I will not elaborate on those. I do want to point out that Mr. Reagan, in his budget, has not included construction funds for this project this year.

Mr. Carter last year excluded funds for this project, the reason being for that is that it would be new start money, a request for $2.78 million for construction funds will be made this year, $2.78 million is a very small amount in the total U.S. budget, but to spend that money on a new start for a dubious project would be to make a commitment of almost a half billion dollars.

Add onto that inflation through the ten-year construction period, and this project could well cost a billion dollars. The benefits today cannot be justified at its present cost let alone at that added cost.

As I said, there are alternatives. Those are in my written testimony and that is the end of my statement.

[The statement of Mr. Matis follows:]

Statement of Lewis Matis

We are here to ask you not to appropriate $2.87 million supplemental budget appropriation for construction funds for the Animas-La Plata water project in southwestern Colorado. Such an appropriation would be "new-start" money and in these days of trying to cut wasteful federal spending represents an opportunity for Congress to save taxpayers' money.

Although 2.87 million dollars is a minute amount in the federal government's budget, it in reality represents a commitment of $478 million over the next ten

years, according to the latest construction cost projections made by the Water and Power Resources Services, the federal agency which will construct the project.

As concerned citizens—all of whom reside within the boundaries of the Animas-La Plata Water Conservancy District—we ask you to stop funding for this project now before any construction begins. The project, as presently planned, is far too expensive, is wasteful of precious electricity and is environmentally detrimental. The objectives it purports to achieve can be accomplished with less expensive alternatives.

The Animas-La Plata project has the following five objectives:

1. To provide municipal water storage for the City of Durango, Colorado.
2. To provide an appropriated amount of municipal water for the New Mexico communities of Aztec, Bloomfield and Farmington.
3. To provide industrial water to the Southern Ute Indian Tribe to develop the coal reserves on their reservation.
4. To provide supplemental irrigation water to New Mexico farmlands.
5. To provide new and supplemental irrigation water to lands owned by farmers and the Southern Ute and Ute Mountain Ute Ute Indian Tribes in Colorado.

Each project objective can be met by other means at a great savings of American tax dollars.

1. Durango can possibly augment its present rights on the Florida River where the city presently gets the majority of its water. The City has recently hired an engineering firm to conduct a long-term water study for Durango. This study will closely examine Durango's participation in the Animas-La Plata water project.
2. The Definite Plan Report lists an alternative known as the Aztec Reservoir for the three New Mexico communities. This alternative would have a capacity of 12,000 acre-feet and provides 38,000 acre-feet of water. Its cost of $15 million would be borne by the cities of Aztec, Bloomfield and Farmington.
3. A proposal made by the Bureau of Indian Affairs several years ago called for a gravity-flow canal to divert water to the proposed Ute Reservoir to provide industrial water for coal development. Because of the estimated 400 million tons of strippable coal the Southern Utes have on their reservation, the cost of this diversion could be borne by private industry. Even at a cost of $100 million for this canal, an additional charge of twenty-five cents per ton would pay for construction.
4. This canal also provides a solution to objectives 4 and 5. At the time of construction of this canal, the federal government could participate to cover the cost of making the canal and reservoir large enough to provide water to New Mexico farms.
5. An irrigation reservoir on the La Plata River could be built by the State of Colorado. Agricultural diversions on the La Plata River average about 14,000 acre-feet annually. Building a reservoir on that river would probably double the annual supply. Improvements on present ditches could eliminate an estimated 25-percent loss of water. Installation of sprinkler systems would improve the efficiency of water use and would allow additional acreage to be irrigated. These improvements could represent a three to four-fold increase in water supply to the Colorado farmers.

In conclusion, let me repeat that an appropriation of $2.87 million in the fiscal 1982 federal budget is a commitment of $478 million. The Animas-La Plata project is an extremely wasteful expenditure of taxpayers' money and epitomizes wasteful federal spending.

Mr. BEVILL. Any questions?

Thank you very much.

STATEMENT OF PRESTON ELLSWORTH

Mr. ELLSWORTH. We appreciate the more informal way of doing business over here. Can I approach the chair with an exhibit, sir?

Mr. BEVILL. Surely.

Mr. ELLSWORTH. In Durango we have a lovely little town out there in Colorado. It is primarily a tourist economy, but we do have a legacy from the Second World War, a good amount of the material that went into the Hiroshima and Nagasaki bomb was processed there. We have the second-most exposed and unstabilized tailings pile abandoned by the processing firm a quarter mile from town.

Lacking an easel, I will have Mr. Matis be my easel here. This jar that I provide you represents material very similar to the material we are talking about.

One of the problems we have—and I might say my trade is that of river pilot, and in a flood situation rivers have a nasty way of returning to their old beds. The Animas River runs down and has been rechanneled around the tailings pile. To give you a little perspective of the tailings pile, gentlemen, this is a cross-section.

Let's say this is the Capitol Building across the street. Let's put two or three of those fellows side by side. That will give you an idea of the magnitude of our problem. It is an enormous tailings pile.

They had a little dog house here. They tried to grow grass on it. Every time the prevailing winds are from the south, we get tailings dust blowing into the community. So the little dog house is here. They pump water up on to it and sprinkle it. The water, of course, permeates down there, this being the bottom of the tailings pile.

Corps drilling within the last year shows that the radioactive material selenium—they were only after vanadium. They left the plutonium and selenium there—has intruded about five feet down into the bedrock which coincidentally correlates with the water table which leads us to the interrelationship, gentlemen, of the Animas-LaPlata project.

The tailings pile being here, the leachate is coming into the river and it stays, gentlemen, tends to stay on the same side of the river in which it enters.

The intake pumps for the Animas-LaPlata project and the domestic water supply that will supply the City of Durango comes out of that river 600 yards below this tailings pile. This is a quarter of a mile from the city of Durango. We now get it in our air. If this water project, gentlemen, is built, we will be ingesting it in our alimentary canals as well. The pump is here. The entire supply that Durango would receive supplementally from this project will be taken out of the river 600 yards below the tailings pile and pumped immediately into a treatment plant.

It will not go into a settlement basin or any other prior treatment. We know of no treatment that removes nuclear material from a drinking water supply. It then will return to the city of Durango and we fear contaminate and polllute our water supply there.

No we have no information, hard information. This question has been ignored by the Bureau of Reclamation in their environmental impact statement.

They merely say that a Corps of Engineers report says the tailings pile will be removed, which we, my God, hope it will be, but I submit the material has already leached into the bed rock, to the water table. Even with the tailings pile removed, there is, we fear, danger of contamination.

Mr. BEVILL. How deep is that pile of the tailings?

Mr. ELLSWORTH. Two hundred feet.

Mr. BEVILL. Deep?

Mr. ELLSWORTH. No. It is at ground level. It is entirely exposed, Mr. Chairman. We are getting erosion from the top of it into the river and getting subsurface leaching from the river into the pile.

The consequences of this have been, up to now, we fear, ignored. There is no information.

Mr. BEVILL. How much dirt would you be talking about moving if you actually took all of that that would be contaminated?

Mr. ELLSWORTH. I believe 120,000 truckloads, sir.

Mr. MATIS. I think Mr. Ellsworth did misunderstand your question about how high the pile is. Here is ground level. There is approximately 200 feet of tailings.

Mr. BEVILL. Two hundred feet?

Mr. MATIS. Yes. It is on the side of a hill. This mountain continues up this way.

Mr. BEVILL. Two hundred feet by what? How wide is it?

Mr. MATIS. It is quite large.

Mr. BEVILL. Two hundred by 400 feet?

Mr. ELLSWORTH. No. Much larger than that. By my scale, you could take the Capitol over here with the Senate and House sides, put two or three of them together and you would have about the volume we are talking about there.

Mr. BEVILL. Any questions?

Thank you very much. Very good.

Mr. MATIS. Thank you, sir.

MONDAY, MARCH 23, 1981.

CENTRAL UTAH PROJECT

WITNESS

MRS. DOROTHY HARVEY, TESTIFYING FOR PETER HOVINGH ON BEHALF OF CITIZENS FOR A RESPONSIBLE CENTRAL UTAH PROJECT ECT

Mr. BEVILL. Mr. Peter Hovingh.

STATEMENT OF DOROTHY HARVEY

Mrs. HARVEY. I am Dorothy Harvey testifying for Mr. Hovingh. I have another statement I will submit for Mr. Osborne of the Utah Water Resources Council.

Mr. BEVILL. That will be part of the record. You may proceed as you wish.

You are allotted five minutes.

Mrs. HARVEY. I plan to talk five minutes, so I will lay out the issues. If you have any questions, I will be glad to answer them for you.

I am submitting this statement on behalf of Citizens for a Responsible Central Utah Project, Salt Lake City. We request deletion of $71 million for the Central Utah Project for the fiscal year 1982 proposals now being considered by the committee. We request no additional funding be provided for any Central Utah Project pending a review of the need for the entire project as presently planned.

It is our belief that production of costly federally developed water is not consistent with the Reagan Administration purposes for reducing federal spending, particularly when available opportu-

nities for state water management programs, which are far cheaper, remain unexplored.

It is important this committee address and resolve the repay status of the Bonneville portion of the Utah Project. You must look into all the details on this because the repayment contract is very difficult to figure out what is intended.

We have a document which you must obtain that Guy Martin sent to the Commissioner of Water and Power Resources Service two days before he left office indicating that it took him the counseling of two solicitors and three economists to figure out what this is all about.

We now see that the citizens, the water users of the state of Utah, municipal and industrial users, will be paying $163.62 per acre foot per year and it could go as high as $339.21 per acre foot, not the $60 per acre foot that they had been led to believe. I will let you struggle through the economics of the whole contract. This really must be resolved.

I would like to state just the issues that are creating public dissatisfaction with the CUP in Utah. If you want to query me on any details, I will give them to you.

Projected increases in construction costs of CUP, only 18 to 20 percent completed already, are four to five times the authorized costs.

The proposed repayment contract stipulates the repayment ceiling seven times greater than the present ceiling.

Costs to Utah taxpayers of undeterminable length of time—in other words, the repayment contract does not state to the public that this is the last time we will have to go back and ask for reauthorization, for refunding, renegotiation of our contracts and for amounts which far exceed those that the public agreed to pay when they—when the development was authorized.

These are objections. These are dissatisfactions. The failure of the state to utilize extensive quantities of wasted and available but unutilized water resources to develop available and cheaper state water management programs, and to instigate municipal, industrial, and agricultural conservation.

Utah's water problem is not one of lack of water, it is one of failure to manage efficiently what water we have.

Another objection is the hold-up the state keeps on its own water management until the CUP is completed.

The failure of the CUP to meet current water needs in the area of needs of the Utah citizens, both Indian and non-Indian. In other words, the trans-basin diversion of the basin water in the Upper Colorado River Basin where energy development is coming on line, oil shale, tar sands, coal, where water is needed, 136,000 acre feet is being transferred over to the Bonneville basin that doesn't need the water. They have 60 million acre feet of ground water; they have 125,000 acre feet of wasted water. They have already storage projects there of unutilized water.

So the scheme for the CUP which might have been good prior to World War II, or even after World War II, has changed now with the changed world circumstances and the energy crisis.

We need the water where the energy is going to be.

The continuing uncertainties of locations for states, safe constructions of projects are other areas of dissatisfaction.

CUP cost overruns are mostly based on geologic problems.

The underlying structure of the CUP continually raises issues of repaying what they did, the mole got stuck in the tunnel for the trans-basin diversion, a $3 million thing.

Mr. BEVILL. Mrs. Harvey, your time is up. Do you want to wrap it up?

Mrs. HARVEY. I have one more point.

The final point of dissatisfaction is the exorbitant and unnecessary environmental destruction. Fish and wildlife and recreation resources, and the exorbitant and high costs of the water and power resources having to restore fish and wildlife and recreation through reservoirs.

Thank you very much.

Any questions?

[The statement follows:]

STATEMENT OF CITIZENS FOR A RESPONSIBLE CENTRAL UTAH PROJECT

I am submitting this statement on behalf of Citizens for a Responsible Central Utah Project organization, Salt Lake City, Utah. We request deletion of $71,000,000 for the Central Utah Project from the fiscal year 1982 budget proposals now being considered by this Committee. We request no additional funding be provided for any Central Utah Project Unit pending a review of the need for the entire Project as presently planned. It is our belief that production of costly federally developed water (CUP) is not consistent with the Reagan Administration purposes for reducing federal spending, particularly when available opportunities for State water management programs, which are far cheaper, remain unexplored.

One potential significant problem which requires management's immediate attention and resolution is the repayment status of the Bonneville Unit (BU) of the Central Utah Project. The Water and Power Resources Service entered into a repayment contract in 1965 with the Central Utah Water Conservancy District (CUWCD) and agreed to contract provisions which explicitly limit CUWCD's repayment obligation to $156.8 million. Based on the Service's estimate to complete the project, this contractual limitation on reimbursable costs will preclude recovery of additional reimbursable costs of about $198 million. Although the Service forecasts that construction expenditures for BU will exceed contract repayment obligations in fiscal year 1981, necessary amendatory contract actions providing for repayment of the project cost increases have not yet been taken.

In the area of irrigator's ability to pay, we noted that the Service recently completed an analysis which shows that since the date the CUWCD executed its repayment contract, the ability to pay for irrigators in the project service area has increased from $16.4 to $69 million. While the $69 is a preliminary estimate subject to change, the long term repayment contract nonetheless contains no provision for increasing repayment obligations to recognize substantial increases in ability to pay. When the CUCWD contract is amended to cover increased construction costs, the Service should at that time include contract language which insures that water rates paid by irrigators are based on current periodic determinations of ability to pay.

As taxpayers with repayment obligations to the Federal government we view with considerable alarm, the possibility that we may be paying for an undetermined length of time, reimbursable costs for a Project whose proposed repayment ceiling will be seven times greater than the present ceiling on which we voted to support the Project's development.

As users of Municipal and Industrial water which we understand could be costing us between $163.62 per acre-foot of water per year and $339.31 per acre foot, we are now looking to the State to development alternative water management opportunities. These include the cheaper utilization of available and wasted water in the Bonneville (Salt Lake) Basin and in the Uintah Basin. These include introduction of widely accepted water conservation practices for water use by municipalities, by industry and by irrigators. It is well known that introduction of new plumbing fixtures in the homes—for toilets, showers and faucets—combined with leak repair can cut residential use by 38–68 percent. Reforms in outdoor water use by homeown-

ers, which is some 40 percent of their water supply, is needed in semi-arid parts of the country. Utah's problem is not one of lack of water, it is one of inefficient use of water that is readily available.

As citizens concerned about our energy situation, we cannot support a water development Project which is to remove some 60,000 acre feet of water from the Uintah Basin/Colorado River sources—where oil shale development is underway and requires sizable quantities of water—and transport this water across the State to the Bonneville Basin where it is not needed. CUP planning took place before our energy situation became acute. So it doesn't meet present Utah needs.

As Utah citizens who enjoy outdoor recreation associated with fishing rivers and wildlife in the Uintah Mountains in northeast Utah, we cannot support a Project which destroys a significant amount of these resources which also support an important economic base in our State. We believe it is wholly out of step with the Administration budget cuts to have already existing fish and wildlife resources destroyed for unneeded water development and then to spend millions of dollars substituting other reservoir recreation resources. We already have more than enough reservoir recreation in the State, so again, the CUP does not meet our needs in replacing already existing and desirable recreation.

Mr. Chairman, you should be aware that support for construction of the CUP was based on use of Indian water and deferral of use of that water by the Uintah and Ouray Indian Reservation Tribe. As a condition for use of this water, the Ute people were promised certain mitigation and ultimate compensating projects. Only one or two have been either completed or started and the Ute Indian Ute Final Phase, has been dropped. To date, equitable treatment of the participating Indians has not taken place. It has been delayed for non-Indian purposes in the development. The CUP projects in the Uintah Basin, even if completed, will not fulfill needs for livelihoods of the Indian people on their Reservation. An earlier Uintah Irrigation Project, started in 1906 primarily for Indian improvement of their arid land, has not been continuously funded by Congress and has fallen into disrepair. The Uintah Irrigation Project rehabilitation is one of several important and cheaper water management options needed for Reservation occupancy. Other answers than proposed CUP projects must be considered.

We would like to inform this Committee, that even with projected funding for CUP completion of a Project which we can do without, there is no guarantee that costs projected in a new Repayment Contract will be sufficient. Individual parts of of the entire development have consistently had cost-overruns primarily due to unplanned for and unmanageable geologic conditions. In the fall of 1977 (September 1) the epicenter of an earthquake was located only 25 miles from the proposed Upper Stillwater Dam.[1] This is the key dam in the transbasin diversion to the Bonneville Basin. Residents in the city of Duchesne, below the proposed damsite, are very concerned about their safety if this dam is completed.

The Committee should recognize that serious inequities in taxing Utah citizens for CUP repayment have resulted in, and continue to produce, opposition to repayment. Salt Lake City residents will pay 60 percent of the costs of CUP water and will receive only 20 percent produced. Residents of Duchesne County are taxed for water they won't get. This amount was around $350,000 per year.

Dissatisfaction with the CUP on many grounds—costs, costs to Utah residents, the existence and non-development of cheaper alternatives pending completion of CUP, the failure to meet current user needs of both Indians and non-Indians, the uncertainties of locations for safe projects, and the exhorbitant and unnecessary environmental destruction—justify our request that this entire Project be no longer funded and be reviewed by this Committee for need for development.

MONDAY, MARCH 23, 1981.

OHIO VALLEY PROJECTS

WITNESSES

WILLIAM J. HULL, CHAIRMAN, LEGISLATIVE COMMITTEE, OHIO VALLEY IMPROVEMENT ASSOCIATION
EDWARD G. DIETZ, UNION CARBIDE CORPORATION

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[1] A number of tremors were noted over several days, as far away as 150 miles, and around 4.5 on the Richter Scale.

ROBERT L. GRAY, MANAGER, MARINE SERVICES
MR. KINZELY, PRESIDENT, OHIO VALLEY IMPROVEMENT ASSOCIATION

Mr. BEVILL. Next will be Mr. William J. Hull from the Ohio Valley Improvement Association.

Mr. Hull, we are pleased to have you all with us today. You may proceed as you wish. You have been allotted 15 minutes.

STATEMENT OF WILLIAM HULL

Mr. HULL. Yes, Mr. Chairman.

My name is William Hull. I am Chairman of the Legislative Committee of the Ohio Valley Improvement Asociation.

A prepared statement has been filed for the record. We have tried to cut its length down considerably, as I am sure Mr. Urian and Mr. Spillan will appreciate, but it is still longer than the regulations will permit. I hope you will file it and then use whatever parts are deemed appropriate in the record.

We are grateful for this opportunity to present our recommendations for fiscal year 1982 appropriations for the various Ohio Valley Resources Projects.

You have recommended fiscal funding of economically feasible projects throughout the Ohio River Basin for navigation, flood control, and multipurpose development not to exceed the capability of the Corps of Engineers for efficient use of funds, except that in the case of the Gallipolis locks and dam, replacement, we recommended $2 million based upon our estimate in light of the magnitude and complexity of the project and our experience with similar projects on the Ohio, subject, of course, to adjustment to the amount reported by the Corps of Engineers as its capability estimate.

On the Gallipolis project, Mr. Chairman, I should point out—as the committee, of course, knows—the project has not been authorized beyond phase one, but I will discuss that problem in a moment if I may so that the committee will understand that I am not deliberately imposing on their kindness to talk about an unauthorized project.

A list of the projects for which we are recommending funding for this coming fiscal year appears on pages 25 through 28 of our prepared statement.

These amounts that are listed as the budgeted amounts in those columns are based upon President Carter's budget. We didn't have the numbers requiring changes based upon President Reagan's presentation until too late for the printing of the document.

But I am sure the committee will have the necessary numbers. There have been a few that have been changed, and we would hope that the full capability of the Corps would be appropriated in all cases, but we recognize that the facts of life are that that is rather an optimistic hope under present circumstances.

With regard to the Gallipolis project, we again have emphasized the increasing urgency of this project as recommended now by the Huntington, West Virginia, district engineer in his draft report of last November.

We had hoped that this vitally important project which has been under study since 1965 would have been authorized for construc-

tion last year, but although the House of Representatives did incorporate a provision for authorization of the project in its version of the Water Resources Development Act of 1980, no such legislation was passed by the Senate, but even though the project has been authorized—had been authorized in 1976 only for phase one, it appears that under the Corps of Engineers proposal, which I think has been submitted to this committee for funding of advanced engineering and design, the Gallipolis preauthorization process will have progressed sufficiently to qualify the project for a fiscal 1982 appropriation to continue studies and initiate advanced engineering and design.

The legislation, as I am sure the committee knows, has been submitted by the Corps of Engineers to the Office of Management and Budget. It would have the effect in this case of a generic authorization to provide for eligibility of projects, the Division Engineer's report which has been submitted to the Board of Engineers of Rivers and Harbors, for advanced engineering and design funds.

The purpose of it is, of course, to eliminate the very sizable gaps of time which occur under present circumstances between authorization of phase one, the preliminary studies and authorization of construction.

The committee will recall, no doubt, that since 1976, when the two phased authorization procedure was then in its second year, none of the projects authorized in the 1976 Water Services Development Act had yet been authorized for construction. We are very fearful that unless legislation of the kind that is proposed by the Corps is passed, that this and other critically important projects will suffer seriously in addition to the delays that already have been sustained over a great many years in the case of this project.

The Gallipolis locks and dam is the primary choke point on the Ohio River. It is no exaggeration to say it bears the same relationship to Ohio River traffic, where modern locks and dams have been installed for a number of years above and below it for hundreds of miles, to have this project operate like a badly maintained two-lane bridge on a six-lane highway. Delays already in 1979, delays awaiting access for the locks, averaged 8 hours. At $350 an hour, that is an expensive proposition.

The Corps of Engineers District Engineer report of last November estimates that by 1990 the delay time will average 33 hours per tow transited through the project. That would mean that, based on $350 per hour awaiting access, which is what the industry estimates that it costs them considering six percent inflation rate, would be approximately $250 million for the single year which comes within about $2 million of total cost of the project as presently estimated.

So we are in a situation now where, unless this bottleneck is relieved—and it is the most serious bottleneck on the inland river system except only Locks and Dam 26 on the Mississippi—and is to coal what Locks and Dam 26 is to grain; unless that bottleneck is relieved, the consequences for the economy of the Ohio Valley region can be most serious.

Steel moving to the Pittsburgh district through the locks, all the way to the Gulf Coast, in competition with Japanese steel is bur-

dened by this excessive waiting time. Petroleum products from the Gulf Coast and Ohio River refineries going up through the dams, chemicals going down to the Gulf Coast are involved.

So it is a matter of major consequence to the entire industry of the Ohio River Basin.

We urge the Committee to pass the legislation that the Corps has recommended, and it is in time to meet the committee's markup deadlines, that $2 million of advance engineering and design money will be provided to initiate planning for this year. Obviously the authorization of construction must come later, but until, as I understand the legislation, the chief's final report is submitted to the Congress, which would be about two years from now, it would be possible under this legislation to provide advance engineering and design funds.

There is no significant risk involved because the benefit-to-cost ratio already is estimated at 9.4-to-1. I am told that because it was smaller in the calculations, the final benefit-to-cost ratio will be still higher. So you can see that it is a highly meritorious project. It has been burdening the commerce on the Ohio River for many years now and it is time we got on with the work.

[Documents follow:]

THE ROLE OF THE PROPOSED GALLIPOLIS LOCKS AND DAM CAPACITY ENLARGEMENT IN SERVING HIGH PRIORITY NATIONAL COALS, INCLUDING INCREASED COAL EXPORTS

SETTING AND SERVICE

This memorandum is submitted in support of the Ohio Valley Improvement Association's urgent recommendation that the Gallipolis Locks and Dam Modification, as recommended by the Huntington District Engineer in his Draft Report of November 1980, to bring the installation into conformity with the dimensions and capacity of those upstream from the Gallipolis site, be authorized and funded as soon as possible. Authorization of the project and funding of advanced engineering and design this year can advance the completion date by at least two years. This estimate is based upon our judgment that (a) adherence to the customary procedures of delaying authorization until the final report of the Chief of Engineers is sent to Congress would rule out authorization this year, and (b) failing authorization this year, a water resources development bill is most unlikely to be considered by Congress until 1983 or 1984. Since at least three years are estimated to be required to complete advanced engineering and design, there is no significant risk of a waste of taxpayers' money involved in authorization on the basis of the latest report available at the time of such action.

The Draft Report estimates the benefit cost ratio of the recommended plan at 9.4 to 1. But should the project prove economically unfeasible, as analysis continues, a decision to terminate the work would, of course, be made well in advance of actual construction. Completion in 1988 or 1989 on the seven year schedule estimated by the Corps of Engineers to be required for advanced engineering and design and construction, can save hundreds of millions of dollars in economic waste which would otherwise result from an exponential increase in delay time occurring with each year's postponement of the completion date.

The Gallipolis Locks-and-Dam, installation, completed in 1937, is located at mile 279 (below Pittsburgh) just downstream from the mouth of the Kanawha River in West Virginia and about 40 miles upstream from Huntington, West Virginia. A major concentration of chemical plants, deeply dependent on river transportation via the Gallipolis Locks, is located in the Kanawha River Valley and on the Ohio River upstream from Gallipolis. Huntington is the principal origin for rail-water coal from southern West Virginia and eastern Kentucky to destinations upstream from Gallipolis. Most of the 14.9 million tons of upbound coal which transited Gallipolis in 1977 originated in the Hunington District. Gallipolis transited an additional 5.6 million tons downbound. This coal is essential to the concentration of electric power stations in the upper and central Ohio Valley and to the steel industry of the Pittsburgh District and Upper Ohio region. In addition, a large part of the petroleum products requirements on the Upper Ohio Basin are met by river

transportation from Gulf Coast and Ohio River refineries. The gasoline alone moved via Gallipolis to Kanawha River destinations in 1977 amounted to 28.5 percent of all the gasoline consumed in the State of West Virginia. Gallipolis downbound transits also include large tonnages of finished steel and other materials critical to the regional economy.

The Gallipolis facilities consist of a 600-foot main lock and a 360-foot auxiliary. Every one of the other Ohio River locks from the Pennsylvania border to the Mississippi consists of a 1,200-foot main lock and a 600-foot auxiliary, except for the recently completed Smithland Locks-and-Dam which provides two 1,200-foot locks. Due to their location on a bend of the Ohio, the Gallipolis locks experience an excessively high accident rate, and, because of their advanced age and deteriorated condition, these locks are subject to frequent and prolonged closings for repairs. Most important, because of their small and obsolete dimensions, the Gallipolis locks have become the focus of ever-mounting traffic congestion progressively more injurious to the regional and national economy. Gallipolis has thus become a choke point on the inland transportation system analogous to a poorlymaintained two-lane bridge in a six-lane highway.

The prospects for growing congestion are especially ominous. In 1979, the Gallipolis locks transited about 40 million tons of freight. Average congestion delay time per tow transit exceeded eight hours at a cost, according to industry estimates, approaching $3,000 per transit, or $6,000 if retu n of empty barges to point of origin is included. Traffic demand is growing rapidly. Three studies prepared entirely independently of each other for the Corps of Engineers, one by CONSAD Research Corporation of Pittsburgh, one by the Battelle Columbus Laboratories, and the other by Robert R. Nathan Associates, yield projections of a 1990 traffic demand in the range of 64.5 to 70.9 million tons. With rising tonnages seeking transit, delay times rise exponentially, and through the 1980's delays will come to be measured in days rather than in hours.

These predictions of severe congestion are confirmed in the November 1980 Draft Report of the Huntington District Engineer on the Gallipolis Locks and Dam Replacement. As shown by Table 10 of this Draft Report, significant diversions of traffic will occur beginning in 1985, as delays and associated costs continue to rise, and by 1990 traffic delays, awaiting access, will average 33.3 hours per tow-transit. Thus it appears that, based upon industry estimates of dealy costs of $350 per hour including costs to carriers, shippers and receivers, such delays would represent an economic waste of $11.655 for each transit. If, as estimated by Robert R. Nathan Associates, tonnage demand will reach 64.5 million tons in 1990, then, based upon the ratio of transits to tonnage in a typical year, the total cost in 1990 would be approximately $133 million in 1979 dollars. At an estimated inflation rate of 6 percent, in 1990 the congestion costs at Gallipolis in 1990 dollars would be about $252 million, substantially equal in economic waste in a single year to the estimated cost of the entire project.

This economic burden would, of course, be a reflection of chaotic traffic conditions, particularly as the aging and deteriorating locks required more and more down time for repairs. Congestion would at times reach crisis proportions. Shipping schedules would be severely disrupted, threatening orderly production of electric power, steel, petroleum and chemical products and other essentials, to the grave impairment of the Basin economy. Severe repercussions would extend beyond the Basin to areas supplied with electric power, steel and other products from Basin sources or providing raw materials or finished products for Basin industries and consumers.

Some conception of the extent and severity of traffic conditions ten years hence may be obtained for the recent experience at Gallipolis during the shutdown of the main lock. According to industry sources, on December 1, 1980, 17 up-bound tows and 13 downbound tows were awaiting access to the auxiliary 360-foot lock, through which modern commerical tows must be locked through in five or six sections requiring many hours. The average delay time awaiting access on that date, in addition to the time consumed in multiple lockages, was 4 days, 20 hours and 20 minutes per tow. The waiting tows were strung out for four to five miles. Such shutdowns for maintenance and repair will, of course, become more frequent as deterioration of these obsolete facilities continues.

The Upper Ohio Basin is a mature industrial economy. Over generations of time, the structure of the processing and energy industries of this region has evolved on a base of water transportation. Extensive installations are sited and laid out exclusively for receipt and shipment by water, and no feasible alternative routings are available. The adverse impact of congestion at Gallipolis on the region and on the nation's objectives as to productivity, employment and energy will be substantial.

The seriousness of this condition is well expressed in the 1979 Annual Report of the Ohio River Basin Commission which assigns No. 1 priority to the Gallipolis modification:

"The most critical developemt project recommended was the replacement of the obsolete locks at Gallipolis on the Ohio River since this is now the major bottleneck in the otherwise modernized Ohio River navigation system."

In the light of these considerations, the Draft Report has recommended a plan for modification of the existing Gallipolis locks and dam, consisting of the following elements:

(1) Rehabilitation of the Gallipolis Dam, Ohio River mile 279.0, Ohio and West Virginia;

(2) Replacement of the Gallipolis Locks by constructiong one 110-foot by 1200-foot lock and one 110-foot by 600-foot lock in a 1.7 mile long canal, landward of the existing lock; and

(3) Mitigation of fish and wildlife habitat losses resulting from construction of the above facilities by purchasing at full federal cost such lands in the vicinity of Glenwood bend, Ohio River mile 289.0, as the Chief of Engineers deems to be necessary and advisable to offset those loses. The District Engineer reports a benefit cost ratio of 9.4 to 1 for the above plan referred to in the Report as Plan B.

THE CONTRIBUTION OF ENLARGED CAPACITY AT GALLIPOLIS TO HIGH PRIORITY NATIONAL OBJECTIVES

With adequate capacity in conformity with the dimensions and capacity of Ohio River projects above and below the Gallipolis site, the Gallipolis facilities can make a major contribution to both the regional and national economy and to the advancement of the national interest in restraint of inflation, increased productivity and employment opportunities, and to strengthening the balance of payments.

The electric power industry of the Upper Ohio Valley provides significant support to national energy security and the U.S. balance of payments. This industry is a large-volume consumer of coal, principally waterborne. Its megawatt capacity provides electric power for homes and industry through an extensive marketing area extending to southern Michigan, northern Ohio, western New York State and other northeastern points. Increasing obstruction of coal receipts via Gallipolis will impair the growth potential of this power base and substantially increase its costs, with a corresponding inducement towards greater reliance on energy produced from foreign oil.

The reliance of the steel industry of the Pittsburgh and Upper Ohio Valley districts on these locks is also a critical factor in the productivity of the industry and the welfare of its employees and in the U.S. balance of payments. The industry's costs are directly affected by its dependence on large tonnages of low-volatile metallurgical coal upbound via Gallipolis. In addition, these districts ship millions of tons of finished steel via the Ohio River to Lower Mississippi Valley and Gulf Coast markets in direct competition with growing volumes of Japanese and Common Market steel. The finished steel transits at Gallipolis in 1977 represented an industry revenue of about $472 million and provides thousands of jobs in the region. The bearing on the revitalization of the industry and the U.S. balance of payments is thus very substantial.

THE ROLE OF GALLIPOLIS IN FACILITATING COAL EXPORTS

The outlook for large tonnages of export coal moving via Gallipolis is highly favorable. Coal, both upbound and downbound, at 20.4 million tons in 1977, constituted 54.8 percent of the total 37.2 million-ton Gallipolis traffic volume. The Robert R. Nathan Association projection of 64.5 million tons in 1990 includes a coal movement of 36 million tons, a growth of 76 percent.

The nation is experiencing an unprecedented upsurge in foreign demand for U.S. steam coal in 1980, a development which has generated extremely costly congestion in Atlantic Coast ports. An enormous and continuing increase in this demand between now and the end of the century is authoritatively projected. This prospect has already generated large-scale commitments of capital to movement via the alternative routes of the Mississippi River and the Tennessee-Tombigbee Waterway to ports of the New Orleans area and Mobile.

Recently constructed coal export terminal capacity in the New Orleans area is now 12.5 million tons per year. By 1985, additional capacity now planned and under design will bring the total to 58 million tons a year. Much of this projected expansion is supported by capital commitments and land acquisitions. In addition the McDuffie coal export terminal of the Alabama State Docks at Mobile is being expanded to an annual capacity of eight million tons. These large commitments of

private capital by a variety of interests strongly confirm the expectation of a large volume of waterborne carriage of coal via the Mississipi and the Tennessee-Tombigbee from interior mining areas to the Gulf for export.

A large portion of this export coal will, of course, originate in the Great Plains states, notably in Wyoming and Montana, and some will originate in southern Illinois. Nevertheless, Ohio Basin coal will inevitably constitute a very large segment. The Gallipolis locks are fully involved in this prospect.

Obviously, because of the shorter distance to the Gulf, coal from the Lower Ohio Basin will have a lower transportation cost to New Orleans. This will be largely offset, however, by lower mine prices in the upper basin above Gallipolis where there are enormous coal reserves in Ohio, West Virginia and Pennsylvania. This price differential is generated in considerable measure by the high and rising demand for lower basin coal for domestic consumption, including large waterborne shipments to Gulf Coast utilities. While a variety of influences such as metallurgical quality and sulphur content affect coal prices, the element of regional demand is a major influence.

Even in the absence of export demand, in 1978 the mine prices of coal were distinctly higher in the Lower than in the Upper Ohio Basin. In three lower basin Kentucky counties near the mouth of the Green River, the average 1978 coal price at the mine, weighted for tonnages shipped, was $22.64 per ton. By contrast, in three upper basin Ohio counties above the Gallipolis site, the average was only $18.01. The differential of $4.63 per ton induced the shipment of several million tons downstream to domestic markets in the Lower Ohio Valley, the Mississippi Valley and on the Gulf Coast.

The $4.63 differential approximates the cost of waterborne carriage between the Upper and Lower Ohio Valley districts. The cost of coal movement on the Ohio River falls in the range of 5.5 to 6.5 mills per ton-mile. At 5.5 mills, the downbound cost for the 720 river miles from Steubenville, Ohio (above Gallipolis), to the mouth of the Green River in the Lower Ohio Valley is $3.96 per ton. At 6.5 mills, the cost is $4.68 per ton. Both of these are close to the $4.63 per ton 1978 price differential and provide a clear explanation of the large downbound movement of coal. The projected huge increase in export demand via New Orleans thus offers every prospect of a major increase in coal movement via the Gallipolis locks over and above that estimated in the above-cited studies. The export demand will inevitably induce higher mine prices in the lower valley, thus increasing the differential and drawing ever-larger tonnages into the downstream domestic and export markets. Considering the enormous reserves of coal above Gallipolis and located within economic hauling distance from the mainstem of the Ohio and commercially navigable tributaries and the fact that the Upper Ohio Valley coal is now competitive with downsteam mines in Mississippi Valley and Gulf Coast markets, the growth in exports will heighten its competitive position and bring it into a substantial sharing in the export movement.[1]

These observations, of course, rest on the assumption of waterborne transportation cost from the upper to the lower valley which includes the current cost of congestion delays at Gallipolis. As congestion becomes worse, the cost of the waterborne movement will rise and in time defeat the prospect for export coal from the upper basin. The outlook for the export movement thus rests squarely on the prospect for enlarged lockage capacity at Gallipolis. It should be emphasized, also, that the availability of a large volume of coal from above Gallipolis in the lower river and Gulf Coat markets will exercise competitive restraint on prices in the downstream areas, in the Great Plains States and in Illinois, and will thus facilitate exports.

This market expansion is badly needed in the Upper Ohio Basin. There remains a large volume of unemployment in the mining areas. Environmental restrictions are a limiting factor in domestic coal sales. The economic benefits resulting from expansion in the export movement would greatly assist recovery in this still depressed sector of Appalachia.

In sum, the prospect for a large-volume movement of Upper Ohio Basin coal via Gallipolis for export appears very strong. In its bearing on the U.S. balance of payments, it is reinforced by the present movements of coal to electric utilities and, even more directly, by the impact on sales of upper basin steel in domestic downstream and Gulf Coast markets.

In the absence, however, of prompt action towards the provision of adequate capacity at Gallipolis, these prospects will fade. Only if expansion of capacity is

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[1] According to Bureau of Mines Report on the Reserve Base of U.S. Coals by Sulphur Content, May 1975, 59.7 percent of the Ohio River System Coal Reserves are located upstream of Gallipolis, including a substantially higher percentage of coal above 1.5 percent sulphur content, which is especially suitable for export.

completed in time for full participation in the export opportunity and only in the absence of oppressive and discriminatory waterway user charges can these hopeful prospects be fulfilled.

Mr. HULL. I would like, Mr. Chairman, if I may, to call on each of the gentlemen with me for a brief statement, if I haven't exceeded my time already.

Mr. BEVILL. You have about six minutes left, two minutes each.

Mr. HULL. Mr. Kinzely is the new president of the Ohio Valley Improvement Association.

STATEMENT OF MR. KINZELY

Mr. KINZELY. Gentlemen, we appreciate you inviting us to testify before this committee. In the interest of time I would like to let Mr. Dietz and Mr. Gray take over.

Thank you.

Mr. NATCHER. Mr. Dietz?

STATEMENT OF EDWARD DIETZ

Mr. DIETZ. I want to elaborate a little on some of the statements that Bill Hull made with respect to the chemical movement.

I am with Union Carbide, my name is Edward Dietz. We use the Gallipolis facility as we do most of the locks on the Ohio River.

We have a number of manufacturing plants located above Gallipolis and we ship products from the Gulf to those plants, and we ship finished products from those plants to Chicago, to the Gulf Coast, and also for export. We ship down to the Gulf Coast where the barges are transloaded to tankers for export.

Mr. Hull mentioned the great delay at the locks. He mentioned the $350 per hour cost. Well, in the chemical business where the value of the cargo is so great, the inventory-carrying costs are additive to that number. Unfortunately, in many of our plants we built with only water terminals; so we can't take some of the alternate modes very cheaply, at any rate, and very quickly because we don't have tank car loading and unloading facilities to handle this volume.

That is all I would like to say.

[Statement of Mr. Dietz follows:]

STATEMENT OF EDWARD G. DIETZ, UNION CARBIDE CORP.

My name is Edward G. Dietz and I am employed by Union Carbide Corporation, Old Ridgebury Road, Danbury, Connecticut 06817, as Manager of Barge Transportation. My office is in Charleston, West Virginia. On behalf of Union Carbide Corporation and the Ohio Valley Improvement Association, of which I am a member of the Board of Trustees, it is urgently recommended that the funds be authorized and appropriated for advanced engineering and design as well as construction of a modern locking facility at Gallipolis, Ohio. More specifically, we strongly endorse the Army Corps of Engineers proposal for twin locks in a bypass canal as the best alternative for the new Gallipolis Locks and Dam.

We have major production and distribution facilities at Institute and South Charleston, West Virginia on the Kanawha River. We also have a major chemical plant at Sistersville, West Virginia, a chemical and metals plant at Marietta, Ohio, and a container handling terminal at Leetsdale, Pennsylvania, all of which are located on the Ohio River. Products are also picked up by barge from vendor sites on the upper Ohio. Scheduling is critical on chemical movements from our plants in the upper Ohio and Kanawha Valley to the Chicago area. Each of these locations

places major dependence on barges moving expeditiously through the Gallipolis Locks.

We have been a major shipper on the inland waterways since 1947 with steadily increasing tonnages of chemicals, ore, coal, and coke to and from our plants geographically situated upstream from the Gallipolis, Ohio facility. In 1977 we initiated containerized shipments of plastics, mentioned above, between Gulf Coast locations and Leetsdale, Pennsylvania near Pittsburgh. This movement is part of an entirely new plastics distribution system concept intended to supply selected customers in the midwest and the entire northeast. The river movement is one segment of an intermodal system which includes rail and truck modes.

The modernization of the locks and dams on the Ohio River has substantially contributed to the industrial development in the Upper Ohio Basin. The modern locking system benefits consumers in many other parts of the country because of low transportation costs which contribute to lower prices. Union Carbide Corporation has about 12,000 employees in the Upper Ohio basin. Gallipolis Locks and Dam are important to them since they are consumers who purchuse goods and services affected by transportation costs.

We are already experiencing extensive delays at the existing facility. The forecasted increase in river transportation of coal, petroleum, and chemical products will create intolerable delays before the new structure can be completed, even if construction is started tomorrow.

Union Caribide Corporation therefore respectfully requests that there be no further delay in authorizing and appropriating the funds required to build a modern structure at Gallipolis which will enhance rather than impede growth in the upper Ohio Basin.

Mr. BEVILL. Very good.

STATEMENT OF ROBERT GRAY

Mr. GRAY. I wanted to stress the age of the present structure and the fact that the number of outages will continue to increase because of the age and because of the hazards of entering the lock. Down-bound tows have to make a maneuver above that lock chamber that exposes the boat and tow to outdraft and heightens the risk of knocking that large lock chamber out of service.

They have had four accidents up there since 1978 involving the sinking of barges under the dam and break-up of tows above it.

We feel that the time is long past due that this structure needs replacement and urge its replacement.

[Statement of Mr. Gray follows:]

ASHLAND PETROLEUM CO.,
Ashland, Ky., March 23, 1981.

Subject: Subcommittee hearing—March 23, 1981, replacement project for the Gallipolis Locks and Dam, mile 279, Ohio River.

Hon. TOM BEVILL,
Chairman, Energy and Water Development Subcommittee,
House of Representatives, Washington, D.C.

GENTLEMEN: Ashland Petroleum Company, a division of Ashland Oil, Inc., welcomes this opportunity to support the earliest possible replacement of the present locks structure.

Ashland has been barging petroleum products to and from our refineries for over 50 years, operating throughout the Inland Waterways of the United States. Since 1925 our refinery on the Big Sandy River, near Catlettsburg, Kentucky, has grown from 300 barrels per day to a capacity of 220,000 barrels per day.

Since 85 to 90 percent of the refineries production is distributed by water, the replacement project for the Gallipolis Locks and Dam, just 37 miles upstream, is crucial to tows carrying energy products to industries in Ohio, West Virginia, and Pennsylvania. We move in excess of 4.5 million tons annually of petroleum products through the present structure to more than 26 terminals and industries located above Gallipolis Locks and Dam.

Ashland Coal, Inc., a subsidiary of Ashland Oil, Inc., is deeply committed to maximizing coal production in District No. 8, and the Gallipolis Locks will play an important part in future coal transportation plans. Today, Ashland Coal is passing 3 million tons per year of coal through Gallipolis Locks and expect to be placing on the

Ohio River System by 1985 about 12 million tons annually of which half will require passage through the Gallipolis Locks. Other coal producers in the area are probably considering similar increases.

The present obsolete structure is a time-delaying barrier to the Upper Ohio Valley for distribution of petroleum, coal, and other vital commodities. Delays to prompt delivery of steel-making fuel, power plant turbine oil, fuels for highway and railroad transportation are escalating steadily. Of increasing importance is the restriction placed on export coal shipments to the Gulf Coast and the related impact on the Nation's balance of payments.

It became obvious in the late 1960's barge traffic would eventually be blocked if traffic continued to approach the many projections developed. Studies were started then to plan for this eventuality but almost 20 years have passed without approval; and after congressional authorization and appropriations are secured, it will still require 10 more years for completion of this replacement structure.

Ashland urges the earliest construction start that can be initiated to minimize traffic delays and reduce future construction costs for this project.

Last summer, lock delays to all tows at Gallipolis were averaging from 6 to 24 hours per trip adding an additional cost of $2,000 to $8,000 for each 7 day round trip to Pittsburgh. However, the 16 day maintenance outage in November and December of 1980 for gate repairs in the 600 ft. lock created delays of 128 hours or over $40,000 per tow per trip. During this period our Company had 3 tows waiting during most of this maintenance period—waiting to complete a normal lockage of 2 hours. There also were many other boats and hundreds of barges tied up at this same time.

The number of outages of the existing 600 ft. lock chamber of Gallipolis will continue to increase due to age of the structure and to lock-gate damage created by the built-in navigation hazards encountered in both the upper and lower approaches to the lock. When the 600 ft. chamber is out of service, normal double locking tows (approximately 1200 ft. long) are required to break their tow 6 times to lock through the small chamber (360 ft. x 110 ft.) adding 10 to 12 hours delay to each trip through the lock.

Attention has frequently been called to the unsafe maneuvering conditions when making high-water, downbound approaches into the lock. We wish to emphasize this again for the record. A downbound tow is required to make a turn to the left—just above the lock chamber—while entering the lock approach—exposing the stern of the boat and tow to a strong outdraft-current toward the dam and away from a safe approach. As a result of these conditions, there have been (4) serious accidents since November 1978, involving breakup of the barge tows, jeopardizing the continued operation of the locks and dam and the pool above the Dam.

For all the above reasons, Ashland strongly supports Plan B for approval, which consists of a 1200′ lock and a 600′ lock in a bypass canal, as described in the District Engineer's completed report.

Thank you for considering these comments. Our Nation deserves a first-class waterway. This bottleneck, located one-third (⅓) of the distance between Pittsburgh and the Lower Mississippi River and in between more efficient lock structures, must be replaced.

Sincerely yours,

ROBERT L. GRAY, *Manager, Marine Services.*

MIDLAND ENTERPRISES INC.,
Cincinnati, Ohio, March 18, 1981.

Hon. TOM BEVILL,
Chairman, Subcommittee on Energy and Water Development, Appropriations Committee, House of Representatives, Rayburn House Office Building, Washington, D.C.

DEAR CONGRESSMAN BEVILL: Midland Enterprises Inc., headquartered in Cincinnati, is one of the nation's largest integrated barge transportation companies with ten subsidiary and affiliated companies operating, and employing almost 2,000 people, throughout the inland waterways of the United States. Much of our terminaling and transportation business is conducted on the Ohio River throughout the entire Ohio River valley and, as President of Midland, I am strongly opposed to any further delay in full authorization of the project replacing the Gallipolis Locks and Dam. This project is of crucial importance, not only for companies such as ours, but also for the utility companies and other industries throughout the nation which depend on efficient barge transportation for the majority of their bulk, fossil fuel needs. Many of these industries were built, and are being built, along the river system because of the availability of barge transportation. Their investments in

plants and equipment would be underutilized if the Gallipolis project is not expedited. Also, the national goal of increasing the production of coal for export will be hindered by further delays in the Gallipolis project.

The existing locks at Gallipolis were built in 1937 when river traffic was less and tow sizes substantially smaller and are not equipped to handle current traffic demands and increased tow size. This has resulted in costly delays in barge traffic, with a waiting time of an average of approximately three hours to traverse the lock. With barge traffic on the Ohio River expected to increase at least 4.3 percent per year, these already unreasonable delays will increase accordingly. Such delays are costly and are in addition to the costs passed through to consumers by industries which sustain higher energy costs and interrupted production schedules due to barge delays.

It is well known that barge transportation is the most efficient means of transporting bulk commodities. This efficiency is seriously impaired by failure to have a new structure built at Gallipolis. The effects of this inefficient use of waterway potential are felt throughout the entire inland waterway system and competing modes of transportation such as railroads and trucks do not have the additional capacity, nor the cost effectiveness, to replace barge transportation in the areas now served by barge. During the present economic climate, Congress should recognize the importance of the unimpeded flow of river commerce to the revitalization of our basic industries and to the efficient use of energy, especially now when our country is striving to reduce the costs of production and increase productivity. Barge transportation of energy related commodities is a necessary part of the nation's attempt to slow the rising cost of energy production and achieve economic growth. The present structure at Gallipolis serves to limit the potential for economic growth that could be realized by the construction of modern, 1200 foot locks.

With the construction of many new locks on the Ohio River over the past 25 years, the Gallipolis locks remain as the largest roadblock to realizing the full potential of the benefits derived from the increased and improved navigation capacity on the rest of the nation's rivers. To waste this potential is to waste the potential for increasing jobs and industrial production throughout our nation.

I strongly urge that positive action for the replacement of Gallipolis Locks and Dam be taken as soon as possible.

Sincerely,

JOHN D. GEARY.

APPALACHIAN POWER CO.,
Charleston, W. Va., March 19, 1981.

HON. TOM BEVILL,
Chairman, Subcommittee on Energy and Water Development, House Appropriations Committee, Rayburn House Office Building, Washington, D.C.

DEAR CHAIRMAN BEVILL: We understand your subcommittee will be considering appropriations for water development projects on Monday, March 23, 1981. We would respectfully request an appropriation for the improvement of the Gallipolis Locks and Dam on the Ohio River, or at least an appropriation for advance design and construction studies for improvements of this facility in the current budget for Fiscal Year 1981.

We would urge the expeditious appropriation for the Gallipolis Locks, which we believe is in the interest of our country in helping to solve its energy needs and towards achieving energy independence. This vital facility to the Ohio and Mississippi waterway system is antiquated, deficient in handling present traffic, dangerous due to its position in the river, and is the only 600-foot lock between the Pennsylvania border and the Gulf of Mexico, which acts as a bottleneck to all commerce to and from the Upper Ohio River. For instance, here is how it affects the American Electric Power Company.

The AEP System operates in seven states; Ohio, West Virginia, Virginia, Kentucky, Tennessee, Indiana, and Michigan. AEP's eight operating companies serve more than 6 million people in over 3,000 communities, primarily located along the Ohio River and its tributaries. AEP is as coal-oriented as any utility in the nation, with over 87 percent of its 1980 generation using coal as a primary fuel source.

The AEP System is the largest coal user in the Nation. In 1979, the system burn was approximately 38 million tons, and in 1980, the system burn was 40 million tons. With the acquisition of the Columbus and Southern Ohio Electric Company in 1980, we estimate AEP's 1981 approximate burn at 46 million tons. The AEP System currently has under construction two 1,300 MW generating units. These generating units will represent an additional annual coal requirement of from 3.5 to 5 million tons each. It is, therefore, important that we continue to find more

efficient ways to mine, prepare and transport coal for use in the generation of electricity. A large amount of AEP's coal moves by barge. We estimate that in 1981, the AEP System will receive by barge approximately 15 million tons of coal. By 1986, an additional 7.5 to 8.5 million tons will be received by barge, making the total some 22.5 to 23.5 million tons annually.

The AEP System is a major user of the Gallipolis Locks. We anticipate that approximately 5 million tons of AEP coal will move through the Gallipolis Locks during 1981. These estimates of projected coal movements are subject to some variation, depending upon several factors, including governmental decisions with respect to air quality regulations. Such factors which are not within the control of the electric industry could result in a change of the type of coal to be used at a particular plant. Of course, as the type of coal changes, the origin of that coal also changes.

Since the Gallipolis Locks were constructed in 1937, the volume of barge traffic has significantly increased. Most current forecasts point to severe congestion at Gallipolis in the very near future. Such congestion causes delays in transporting coal, and these delays, in turn, increase the delivered cost of coal. As a consequence, our customers will pay more for electricity. As a major user of the Gallipolis Locks, we are thus adversely affected by increased delays in transporting coal through the locks.

Of even greater importance than the increased cost is the possiblity that the Gallipolis bottleneck, by delaying the movement of many tons of coal, will adversely affect the adequacy and reliability of the power supply of the Ohio Valley region. As you know, the 600-foot Gallipolis Lock was closed for repairs from November 14, 1980 through December 5, 1980. On the morning of December 1, the AEP System had six towboats with some 90 coal barges awaiting passage through the Gallipolis Locks at a time when posted delays were in the realm of 116 hours per tow. Not only does the operation of the Gallipolis Locks affect our region, its influence is much greater in that the nation's vast reserves of coal will become of increasing value as our country and other countries of the world turn to coal in solving the world's energy problems. Most assuredly, coal will be needed to replace the shortages and expense of the world's decreasing supply of oil.

Mr. Chairman, we would like to call your attention to the attached copy of an industrial facilities map, which illustrates the location of the Gallipolis Locks relative to the vast industrial plants of our region. This map is somewhat out of date; but, nevertheless, it depicts many of the commercial and industrial plants of the Ohio River region which depend upon river transportation not only for commerce, but to move vital commodities such as coal, chemicals, petroleum and steel. These plants employ our people whose welfare is dependent upon their continued and profitable operation. The Gallipolis Locks remain the only lockage facility with a 600-foot limitation between Montgomery Island, Pennsylvania and New Orleans, virtually a bottleneck. This limitation is presently and will continue to be of increasing proportions a deterrent to the vital transportation needs of our region and the country.

While we support the principle that each public dollar should be spent in a manner that will produce as much benefit as possible, we think it is past time for construction to begin to improve the Gallipolis Locks.

We respectfully urge expeditious appropriations to bring about improvements to the Gallipolis Locks so vital to our nation's transportation system.

Very truly yours,

NICHOLAS ROOMY, *Vice President.*

Mr. BEVILL. Thank you very much.

CONCLUDING STATEMENT OF WILLIAM HULL

Mr. HULL. To conclude very briefly, Mr. Chairman, I would like to mention also that we strongly support advance engineering design funds as soon as the necessary authorizing legislation could be provided to replace Locks and Dams 7 and 8 on the Monongahela River, which are burdened with very important commerce on that river. Replacement projects are called Grays landing at Port Marion. Our recommendations also include, of course, the continued construction of the Tenn-Tom project at the recommended levels set forth in our statement.

Finally, in the matter of flood control, we have emphasized the continuing construction of a number of projects. There were no new starts available at the time of our preparation and I do not know whether any had advanced sufficiently far to be considered in that category or not. But in the Ohio River Valley we are anxious to have the studies continued leading toward the Gulf development of the resources of the area.

Finally, I would like to submit for the record, if I may, a recommendation, which deals in more detail with the Gallipolis problem and spells out the consequences of delay, particularly, Mr. Chairman, in relation to the potential for the project for the movement of coal for export from the Upper Ohio Valley, where 59 percent of our reserves are located.

That concludes our testimony Mr. Chairman. We thank you very much for your attention and your time.

Mr. BEVILL. Yes, sir.

Certainly, looking at the map there and considering your testimony there, I can certainly appreciate the problem that you are facing. I hope that we can be of some help to you.

Mr. HULL. If we can get that legislation passed so it would be eligible, it would be a wonderful assistance to a lot of projects, I am sure.

Mr. BEVILL. Yes, it would.

Does that complete your testimony?

Mr. HULL. Yes. Thank you very much.

TUESDAY, MARCH 23, 1981.

ARKANSAS RIVER BASIN PROJECTS

WITNESSES

HON. JOHN PAUL HAMMERSCHMIDT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

R. DOW DAMRON, EXECUTIVE VICE PRESIDENT, ABDA

GALE GRAHAM, PRESIDENT, ABDA

HOUSTON ADAMS, PRESIDENT, BANK OF TULSA

JACQUES CUNNINGHAM, PORT DIRECTOR, TULSA PORT OF CATOOSA

Mr. BEVILL. Next we have Mr. R. Dow Damron of the Arkansas Basin Development Association.

Mr. DAMRON. Our chairman of the Association is Mr. Gail Graham, and he will present the testimony.

We have written testimony for the members also.

Mr. BEVILL. We are glad to have you and you may proceed as you wish. You have 15 minutes.

Mr. GRAHAM. Mr. Chairman?

Mr. BEVILL. We have our colleague John Paul Hammerschmidt here.

I didn't see you here.

Mr. HAMMERSCHMIDT. May I join them at the table?

Mr. BEVILL. We are mighty pleased to have our distinguished colleague here, John Paul Hammerschmidt.

Would you like to make a statement first or is your situation where you can just wait?

Mr. HAMMERSCHMIDT. Let me wait and support their testimony if I may and submit a statement for the record.

Mr. BEVILL. We always give John Paul whatever he asks for, you see.

Mr. HAMMERSCHMIDT. Mr. Chairman, if I may, I might say my new-found role as ranking member of the Water Resources Committee over in Public Works, I have an even closer affiliation with your Appropriations Committee.

Mr. BEVILL. That is right. We are pleased that you hold that position. We are going to be expecting great things from you.

Mr. HAMMERSCHMIDT. I know how busy you are, so I will submit my statement for the record and strongly support the statements you are going to hear.

STATEMENT OF GAIL GRAHAM

Mr. GRAHAM. Mr. Chairman and members of your committee, I am Gail Graham from Joplin, Missouri. It is my pleasure to appear here today as Chairman of the Arkansas River Basin Interstate Committee.

This committee represents the five great States of Arkansas, Colorado, Kansas, Missouri, and Oklahoma, and its members have been appointed by our respective governors to present a consensus of the water resource funding needs of these states in the Arkansas Basin.

In the interest of time, I will not introduce the committee members and other citizens who have accompanied us here today. They are listed in our written statement, but I would ask that you allow them to stand and be recognized at this time.

Mr. BEVILL. Yes. And if you will put their names in the record to show they have left their businesses and jobs and came down here in the interest of this project.

[List referred to follows:]

Houston, Adams, President, Bank of Tulsa, Tulsa, Oklahoma.
E. R. Albert, Jr., Albert Equipment Company, Tulsa, Oklahoma.
Wayne Bennett, Agriculture, Lonoke, Arkansas.
Roger Brown, Vice President, Home National Bank, Arkansas, Kansas.
Jacques Cummingham, Port Director, Tulsa Port of Catoosa, Catoosa, Oklahoma.
R. Dow Damron, Executive Vice President, Arkansas Basin Development Association, Tulsa, Oklahoma.
Ted B. Evans, President, United Missouri Bank, Carthage, Missouri.
James O. Foster, Utilities Coordinator, Boeing Military Airplane Company, Wichita, Kansas.
Wallace A. Gieringer, Pine Bluff-Jefferson County Port Authority Company, Pine Bluff, Arkansas.
Gale A. Graham, Executive Vice President, First National Bank of Joplin, Joplin, Missouri.
Homer Hall, Ozark, Arkansas.
Lee H. Hancock, The High Line Company, Rocky Ford, Colorado.
John Javernick, Canon City, Colorado.
Robert S. Kerr, Jr., President, Oklahoma Water, Inc., Oklahoma, City, Oklahoma.
Robert J. LaFortune, Oil Operator, Tulsa, Oklahoma; President, Arkansas Basin Development Association, Tulsa, Oklahoma.
Frank W. Liebert, Coffeyville, Kansas.
Charles Maynard, President, Pulaski County Flood Control Association, Little Rock, Arkansas.
William McDonald, Director, Colorado Water Conservation Board, Denver, Colorado.

R. Layne Morrill, Shepherd of the Hills Realty Company, Kimberling City, Missouri.
Ray D. Nixon, Colorado Springs, Colorado.
Bill Perry, President, Metropolitan Little Rock Chamber of Commerce, Little Rock, Arkansas.
Pratt Remmell, Director, Arkansas Basin Association in Arkansas, Little Rock, Arkansas.
Harold B. Scoggins, Muskogee, Oklahoma.
Charles Steel, President, Arkansas Basin Association in Arkansas, Little Rock, Arkansas; Sr. Vice President, Arkansas Power and Light Company, Little Rock, Arkansas.
Charles L. Thomson, Southeast Colorado Water Conservation District, Pueblo, Colorado.
Fred G. Turner, Editor and Publisher, McAlester News—Capital, McAlester, Oklahoma.
Jerry Virden, Morrilton, Arkansas.
Arthur T. Woodman, Architect, Wichita, Kansas.
Bob Wright, Muskogee Chamber of Commerce, Muskogee, Oklahoma.

Mr. GRAHAM. Thank you.

Many of them have been here before and they represent a dedicated group of people from the five-state area who have worked over the years to improve the Arkansas Basin area through development of its water resources.

All of us sincerely appreciate the opportunity to again appear before this distinguished committee and express our views concerning funding of our water resource projects and studies. My testimony will be brief but we have incorporated additional material in the written statement which we have submitted.

The committee is aware of the inflationary pressure driving up costs of water projects, and we support the Administration's efforts to reduce spending and work for a balanced budget. We cannot afford to be shortsighted. As we all know, it is our responsibility as citizens of this great nation to protect and control our most precious natural resource, water.

We believe that the Congress has adequately demonstrated its ability to make wise decisions concerning the nation's annual investment in water resource programs, and must retain this decision-making responsibility. We sincerely doubt that full funding of a few projects will deliver any better progress or results. In fact, it may serve to deny funding to a number of other projects where a minimal amount may be vitally needed to prevent significant delay. The full funding concept obviously gives a distorted impression of the annual investment that is being made in water resources projects. It certainly won't stop inflation.

We have a number of projects in the Arkansas Basin where relatively minor additions would permit the Federal Water Resource Agencies to accomplish essential tasks during fiscal year 1982, rather than waste the entire year for lack of funding.

We have watched the number of active projects and studies in the Arkansas Basin shrink significantly over the past few years. This is partly due to the completion of projects. But an even greater toll is being taken by the policies and criteria which have been established for conducting studies and planning and evaluating projects.

Though the Congress has consistently provided funds for general investigations and planning, the results have often been to put another study or needed project on the shelf after the funds are spent.

If we are to meet the future needs of the American people for water, we must have a water resource policy and adequate annual investment that provide a level of studies, planning and construction that is fairly constant. Studies must produce solutions to problems and planning and construction must be turned towards executing those solutions.

The restricted capabilities of the Federal Water Resource agencies are to us prime evidence that the needs of the future are not being adequately addressed today. Within these restrictions we have analyzed the needs of our area and set forth our request for funding in our appropriation request summary. In addition, each state chairman has provided a statement which highlights the needs of his state. We ask that you consider our committee's requests.

We are asking for a small increase for two studies: Arkansas River, Great Bend, KS to John Martin Dam, CO (Flood Damage Protection) and Poteau River, OK and AR (Navigation).

Our requests for extra planning money are even less—a small amount to initaite planning for Douglass Lake, Kansas and Sand Lake, Oklahoma. Local supporting statements are attached.

The Interstate Committee also urges the Congress to appropriate the full Corps of Engineers capabilities in the maintenance and operations area, including navigation.

Justification for spending levels and for those increases that exceed the President's budget is contained in the material that has been submitted by the Corps of Engineers. Justification for each project is itemized in the Corps's report; therefore, in the interest of avoiding redundancy and saving time in this hearing, we have not duplicated those justifications in our statement.

In the opinion of this committee one excellent feature of a capital project spending request in this time of high inflation is that it mandates some consideration of accomplishing the projects in a timely manner, to avoid excessive costs.

On behalf of the Interstate Committee, I thank you for the opportunity to appear here today, and for your consideration of our requests. We ask that this committee, as well as the Congress as a whole, continue to provide the leadership it has in the past in determining whether or not our water resource programs are adequate.

There are many problems that are not being addressed, and many solutions that are still being sought. The future will deal harshly with us if we do not have an adequate National Water Policy and programs.

Thank you.

[The formal statement for the record follows:]

STATEMENT OF THE ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

ARKANSAS-OKLAHOMA-KANSAS-COLORADO-MISSOURI

RELATIVE TO APPROPRIATIONS FOR THE COMPREHENSIVE DEVELOPMENT

OF THE ARKANSAS RIVER BASIN

FOR

FISCAL YEAR 1982

TO

The Chairman of the Energy and Water Development Subcommittee
Appropriations Committee
United States House of Representatives

BY

GAIL GRAHAM

Chairman, Arkansas River Basin Interstate Committee
Arkansas-Oklahoma-Kansas-Colorado-Missouri

March 1981

INTERSTATE COMMITTEE CHAIRMAN STATEMENT

Mr. Chairman:

I am Gail Graham, from Joplin, Missouri. It is my pleasure to appear here today as Chairman of the Arkansas River Basin Interstate Committee.

This Committee represents the five great States of Arkansas, Colorado, Kansas, Missouri, and Oklahoma and its members have been appointed by our respective Governors to present a consensus of the water resource funding needs of these states in the Arkansas Basin.

In the interest of time, I will not introduce the Committee members and other citizens who have accompanied us here today. They are listed in our written statement, but I would ask that you allow them to stand and be recognized. Many of them have been here before and they represent a dedicated group of people from the five-state area who have worked over the years to improve the Arkansas Basin area through development of its water resources.

All of us sincerely appreciate the opportunity to again appear before this distinguished committee and express our views concerning funding of our water resource projects and studies.

My testimony will be brief and we have incorporated additional material in the written statement which we have submitted.

The Committee is aware of the inflationary pressure driving up costs of water projects, and we support the Administration's efforts to reduce spending and work for a balanced budget. We cannot afford to be short-sighted. As we all know, it is our responsibility as citizens of this great nation to protect and control our most precious natural resource -- water.

We believe that the Congress has adequately demonstrated its ability to make wise decisions concerning the Nation's annual investment in water resource

programs, and must retain this decision-making responsibility. We sincerely doubt that full funding of a few projects will deliver any better progress or results. In fact, it may serve to deny funding to a number of other projects where a minimal amount may be vitally needed to prevent significant delay. The full funding concept obviously gives a distorted impression of the annual investment that is being made in water resource projects. It certainly won't stop inflation.

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Though the Congress has consistently provided funds for general investigations and planning, the results have often been to put another study or needed project on the shelf after the funds are spent.

If we are to meet the future needs of the American people for water, we must have a water resouce policy and adequate annual investment that provide a level of studies, planning and construction that is fairly constant. Studies must produce solutions to problems and planning and construction must be turned towards executing those solutions.

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Interstate Committee
Chairman Statement
March 1981

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In addition, each State Chairman has provided a statement which highlights the needs of his state. We ask that you consider our Committee's requests.

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In the opinion of this committee, one excellent feature of a capital projects spending request, in this time of high inflation, is that it mandates some consideration of accomplishing the projects in a timely manner, to avoid excessive costs.

On behalf of the Interstate Committee, I thank you for the opportunity to appear here today, and for you consideration of our requests. We ask that this

Committee, as well as the Congress as a whole, continue to provide the leadership it has in the past in determining whether or not our water resource programs are adequate.

There are many problems that are not being addressed, and many solutions that are still being sought. The future will deal harshly with us if we do not have an adequate National Water Policy and Programs.

Statement of
Wallace A. Gieringer, Chairman for Arkansas
Arkansas River Basin Interstate Committee

Mr. Chairman and members of the Committee, my name is Wallace Gieringer. I serve as Executive Director for the Pine Bluff-Jefferson County Port Authority at Pine Bluff, Arkansas and was appointed by our former governor, David Pryor, to serve as a member of the Arkansas River Basin Interstate Committee. Other committee members representing Arkansas are: Wayne Bennett, Homer Hall and Charles Steel.

The Arkansas Committee recognizes and appreciates your concern for needed fiscal responsibility. Let us identify certain projects vital to the economic well-being of our area.

In view of the flood problem in Little Rock where eight people were killed in the September 1978 flood, we ask you to provide $500,000 for the continuation of planning on this needed urban flood control project.

With regard to attaining our energy independence goal we urge you to provide the full capability of $1,000,000 for the continuation of planning for the Murray Hydropower (L&D No. 7) project. In recognition of the need for the energy from this project, the Corps of Engineers responded by completing a report in a year's time that has been favorably received by all interests. We need to keep this project going and can with the appropriation of the Corps capability amount.

We also have hydropower studies underway for adding erergy production facilities at the existing locks and dams on the Arkansas River. The energy that could be produced would be very useful in cutting imports of foreign oil. Accordingly, we urge you to approve the amount in the budget for the Arkansas River Hydropower studies.

Let us call your particular attention to Ozark-Jeta Taylor Lock and Dam. Full Corps capability is needed for the operation and maintenance of the Ozark Project. Of that amount $1,700,000 is to pay for needed repairs to the power plant which has experienced problems due to its unique new design. (These units are now inoperable due to cracks in the main turbine shafts which are 55 feet long and 53 inches in diameter. This size cannot be forged as one piece and must be constructed in four individual segments, then welded together. The cracks are in a welded joint.)

We support full funding for further construction for the McClellan-Kerr Waterway (Conway water supply). We urge complete funding of the budget request for the operation and maintenance of the locks and dams and for the entire McClellan-Kerr Waterway. This would include model studies to see if navigation conditions on the White River, which are controlled by the Mississippi River, can be improved. The continued safe operation of the waterway is most important to the people of Arkansas and Oklahoma.

Due to our location on the lower end of the Arkansas River, we have very few projects requiring substantial funding; however, the projects we do have are very important to the future growth of our state. We have important urban flood control studies at Little Rock (Fourche Bayou), Fort Smith-Van Buren, Clarksville, Russellville and Morrilton, and a navigation port study in the Little Rock-North Little Rock area that need funding up to the limit of Corps of Engineers capability. Any delay in completion of these studies will delay the future development of these urban centers and our state.

As chairman of the Arkansas State Delegation, I would like to add our endorsement and support to the Interstate statement for the entire Arkansas River Basin. The orderly development of the entire Arkansas River Basin is most essential for the continued growth of our state's economy.

We join with our associates in Oklahoma, Kansas, Missouri and Colorado in commending your committee and Congress for having provided funds for the development of navigation, flood control and water resources in the past. The need for conservation and development of our water and land resources is even greater today. It is only through the action of this committee that this nation's needs can be provided.

Thank you for the privilege of presenting this statement to your committee.

STATEMENT OF

HOUSTON ADAMS
CHAIRMAN FOR THE STATE OF OKLAHOMA
ARKANSAS RIVER BASIN INTERSTATE COMMITTEE
MARCH 23, 1981

Mr. Chairman:

I am Houston Adams, a banker from Tulsa, Oklahoma and Oklahoma Chairman of the Arkansas River Basin Interstate Committee.

It is my privilege to present this statement on behalf of the Oklahoma members of the Committee in support of adequate funding for water resource projects in our area of the Arkansas Basin. Other members of the Committee appointed by our Governor, The Honorable George Nigh are:

Mr. E. R. Albert, Jr.
Mr. Robert S. Kerr, Jr.
Mr. Harold B. Scoggins
Mr. Fred G. Turner

We met in Tulsa on March 5, 1981, together with representatives of the other Arkansas Basin States, and we fully endorse the statement presented to you today by the Chairman of the Interstate Committee.

We also appreciate the opportunity to present our views of the special needs of our State concerning several studies and projects.

We were pleased when the President presented in his budget message for FY 1982 $21 million in funds for the continued construction for Arcadia Lake, Oklahoma.

One of our studies -- Poteau River, Oklahoma and Arkansas -- could be advanced by 3 months, if we could get an additional $100,000 in FY 82.

We also ask that $300,000 be appropriated to resume study of the Central Oklahoma project to convey water from Southeast Oklahoma to the Oklahoma City area.

Our other urgent need is for a planning start on Sand Lake, Oklahoma. The supporting statement from Bartlesville, Oklahoma sets forth the reasons that justify the appropriations to commence this project.

These requests, although relatively few in number, are vital to the economic vitality of Oklahoma. Additionally, they represent important assets in conservation, supply and recreation. Delays in funding will result in excessively high future cost, while deferring the availability of these projects to the people of the State.

We appreciate the opportunity to present our views to your distinguished Committee.

STATEMENT OF
JAMES O. FOSTER
CHAIRMAN, KANSAS INTERSTATE COMMITTEE
THE ARKANSAS RIVER BASIN

TO

THE CHAIRMAN, PUBLIC WORKS COMMITTEE
APPROPRIATION COMMITTEE, U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

Mr. Chairman and members of the Committee, my name is James O. Foster. I am Utilities Coordinator for the Boeing Military Airplane Co. and Chairman of The Governor's Interstate Committee for The Arkansas River Basin. I am pleased to submit this statement today on behalf of myself and the other members of the Kansas Delegation who were appointed to represent the State of Kansas by the Honorable John Carlin, Governor.

My colleagues are Mr. Arthur Woodman, Architect, Wichita; Mr. Frank Liebert, Attorney-at-Law, Coffeyville; Mr. Roger Brown, Bank Executive, Arkansas City; Mr. Taylor Peckham, Insurance Executive, Augusta, Kansas. We are honored to join with our colleagues from the great States of Arkansas, Colorado, Missouri, and Oklahoma, in appearing before you today to put forth our views on the appropriations and projects in Kansas and The Arkansas River Basin.

As part of this statement, you will find two appendixes which the Delegation wishes to discuss. Appendix No. 1 lists those projects in The Arkansas River Basin of Kansas which the President has provided full funding; and we commend him for his recommendations and urge that you concur with them.

Appendix No. 2 lists those projects in the State of Kansas for which additional funding is needed. In addition to the budget figure, we have listed our recommended capabilities to advance or to keep on schedule projects now underway. Many of these projects will save millions of dollars if completed by advancing the work. We recommend that you give every consideration to these advancements as inflation will drive the costs even higher.

In Appendix No. 2, there are two particular projects that we wish to call to your attention. One, the Douglass Lake Project was conceived and started as a water and flood control project. This Project is badly needed because the cities in the area need the Municipal and Industrial Water Supply. As Wichita, Augusta, Newton, Winfield and Arkansas City Continue their growth, water supply will become even more critical.

In recent years, the shortage of rainfall has damaged the present water supply and clearly shows the need for better Municipal and Industrial Water Supply. This Project is needed not only for water storage, we believe, but also because farmers in this area continue to be devastated by floods.

We sincerely hope that you will appropriate funds to the Douglass Lake Project so that planning can start in the foreseeable future.

Two, we believe the El Dorado Lake Project is vitally important not only to our area, but also to this entire region of the United States. This Project is also for Municipal and Industrial Water Supply and flood control. In past years flooding has extensively damaged the City of Augusta along with one of the Nation's largest Mobil refineries.

Mobil officials have been most patient in waiting for some type of relief by the building of the El Dorado Lake Project. However, after it was severely damaged by the 1979 flood, these officials indicated that operations may be discontinued at this location. The shutdown of this refinery would create economic disaster in the area of unemployment for the State of Kansas and a disaster to this entire region by the loss of the vast quantity of petroleum projects supplied by this Mobil refinery. In the past, the El Dorado Lake Project has been a major project of our area; and we believe that advance completion of this Project by eleven months for economic reasons is justified.

At a time when energy supplies are so critical to the State of Kansas and the entire mid-continent area of the United States, we cannot afford to lose our water supply any more than our energy supply source. We recommend that you

appropriate funds for construction at the El Dorado Lake Project and that this Project be completed as quickly as possible.

Mr. Chairman and members of the Committee, we wish to thank you for the sincerely and dedicated manner in which you and your distinguished colleagues in the Congress of the United States have dealt with the Water Resources Programs in allowing us to present our views and recommendations to you. We look forward with great expectations and hope for the future of water resource development in Kansas; with your assistance, it can be achieved.

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US ARMY CORPS OF ENGINEERS

FISCAL YEAR 1982 CAPABILITIES*
IN THE ARKANSAS BASIN

NAME OF SURVEY OR PROJECT IN KANSAS	CATEGORY **	BUDGET ($1,000)	CAPABILITY ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Arkansas River & Tributaries, Great Bend, KS, to Tulsa, OK (FDP)	(S)	550	550	No additional requirement
Grand (Neosho) River, KS & OK (FDP)	(S)	400	400	No additional requirement
Verdigris River, KS & OK (FDP)	(S)	657	657	No additional requirement
Arkansas River, Great Bend, KS to Tulsa, OK, at Halstead, KS (FDP)	(SPE)	200	200	No additional requirement
Pearson-Skubitz Big Hill Lake, KS (FC)	(C)	2,913	2,913	Complete project
Marion, KS (FC)	(C)	-0-	-0-	Fully funded

Appendix No. 1

US ARMY CORPS OF ENGINEERS

FISCAL YEAR 1982 CAPABILITIES*
IN THE ARKANSAS BASIN

NAME OF SURVEY OR PROJECT IN KANSAS	CATEGORY **	BUDGET ($1,000)	CAPABILITY ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Arkansas River, Great Bend, KS, to John Martin Dam, C O (FDP)	(S)	450	600	Advance study completion 6 months
Verdigris River, KS & OK (FDP)	(SPE)	0	500	Continue studies
Douglass Lake, KS (FC)	(P)	0	100	Initial planning.
El Dorado Lake, KS (FC)	(C)	2,600	4,100	Advance completion of project by 11 months.

Appendix No. 2

STATEMENT OF
CHARLES L. THOMSON
CHAIRMAN, COLORADO SECTION
ARKANSAS RIVER BASIN
INTERSTATE COMMITTEE
TO
PUBLIC WORKS SUBCOMMITTEE
APPROPRIATIONS COMMITTEE, U.S. HOUSE OF REPRESENTATIVES

Mr. Chairman, and members of this distinguished Committee, my name is Charles L. Thomson, and I am General Manager of the Southeastern Colorado Water Conservancy District, with headquarters in Pueblo, Colorado. I am pleased to submit this Statement today in behalf of the other four members of the Colorado delegation, who were appointed to represent our State by the Honorable Richard D. Lamm, Governor. My four colleagues are: Mr. William McDonald, Director, Colorado Water Conservation Board; Mr. John E. Javernick, farmer and rancher from Canon City, representing the Upper Colorado Basin in Colorado; Mr. Lee Hancock, Superintendent, Highline Canal Company near Rocky Ford, and a farmer representing the Lower Basin; and Mr. Raymond D. Nixon, retired Executive Director, Department of Public Utilities for the City of Colorado Springs, who was appointed to represent the municipal and domestic water users in the Basin. We are honored to join our colleagues from the great States of Arkansas, Missouri, Oklahoma and Kansas in appearing before you today, and do appreciate your affording us this time to testify as a single group in support of appropriations for Water Resource Projects along the entire reach of the Arkansas River, from its headwaters at an elevation of nearly 14,000 feet near Leadville, Colorado, to its confluence with the mighty Mississippi in Arkansas.

The 25 members of the Interstate Committee worked very closely together to analyze necessary Water Projects in the five States, and, at an Annual Meeting held in March each year, in Tulsa, Oklahoma, agree to a Statement which our Chairman, Mr. Gale Graham of Joplin, Missouri, will present in behalf of the five States. We are of the opinion, Mr. Chairman and members of the Committee, that the Interstate Committee truly epitomizes the type of Interstate cooperation which is so essentially necessary to the orderly development of Water Resource Programs which will benefit not only the five States, but the entire Nation as well.

We, from Colorado, would strongly recommend the approval of the $21.204 million requested by the President for continued construction on the Fryingpan-Arkansas Project, which is a multipurpose Project being constructed by the Water and Power Resources Service. The funds so appropriated would permit continued construction on the Fountain Valley Pipeline, which provide essential water to the Colorado Springs area, and also continued work on the second stage of the Mt. Elbert Power Plant, which is a peaking plant involving pumped-back storage. The first 100 megawatt unit will go on line in July of this year, and the peaking power will be necessary to meet the ever growing demands in the area to be served. Other phases of the Project will be completed during the Fiscal Year in question.

We endorse the request by the President for $350,000 for continued Flood Control Studies on the Arkansas River above John Martin Dam in Colorado, and $3.5 million for Dam safety work at Trinidad Dam in Colorado. In addition, we recommend the Congress

authorize appropriations of $600,000 for continued Flood Control Studies between Great Bend, Kansas and John Martin Dam in Colorado. These Studies cover an area of important agriculture in the United States, and, when completed, will afford local entities and the Corps to determine the best ways to avoid disastrous floods in the future. We also join with the City Council of Pueblo, Colorado, and the County Commissioners of Pueblo County, in recommending the appropriation of $210,000 for Phase II Planning of an essential Flood Control Program in the heart of the City. Phase I was begun immediately after a disastrous flood in 1965, and was completed in February of this year. Agreement has been reached by all parties as to the work necessary, and a copy of a letter from the Fountain Creek Commission accompanies this Statement.

The Committee also recommends the appropriation of $60,000 which will permit the Corps to begin essential Flood Control Studies on Fountain Creek between Colorado Springs and Pueblo. The section of the River is prone to periodic flooding, and a Study will provide essential information for the local entities and the United States on ways to alleviate such expensive and dangerous flooding conditions. We recommend the appropriation of $1.199 million for operation and maintenance of John Martin Reservoir and $288,000 for operation and maintenance of Trinidad Dam and Reservoir. John Martin is used jointly by the States of Colorado and Kansas, and during 1980 a number of Cooperative Programs were developed by Irrigation Companies in both States, and, for the first time since its completion in 1948, the Dam and Reservoir served the type of uses envisioned by the developers of the Project, and those who have seen its potential benefits wasted, because Cooperative Programs could not be developed. This Reservoir is operated in accordance with Interstate Compacts and agreements involving both Pueblo Dam and Reservoir and Trinidad Dam and Reservoir.

Mr. Chairman, and members of the Committee, we again want to thank each of you for the dedicated manner in which you and your distinguished colleagues in the Congress of the United States have permitted those of us who must deal with Water Resource Management on a day to day basis to appear before you to present our recommendations regarding essential Water Resource Programs in the Arkansas River Basin and the United States. We are firmly convinced that investments made by the Congress in such Programs are truly the best investment the United States can make, and economic returns to the economy of our Nation and the world are many times more than the original investment. We hope the members of Congress will continue their strong support for such Water Conservation Programs which will assure a water supply for future generations.

This same letter sent to:

Director of EPA, Washington
James Watt, Sec. of Interior
Gov. Lamm
Congressman Kogovsek
Senator Armstrong
Ken Kramer, Congressman
Bureau of Land Mgmt. Director, Washington

PUEBLO
City of Pueblo

Copies to:

Tommy Thompson
Col. Roth
Doug Ring
D.R. Luster
Jim Carter

March 9, 1981

RECEIVED
MAR 12 1981
SOUTHEASTERN COLORADO WATER CONSERVANCY DISTRICT

The Honorable Gary Hart
U.S. Senator
254 Russell Ofc. Bldg.
Washington, D.C. 20510

Dear Senator Hart:

At their February, 1981 meeting, the U.S. Army Corps of Engineers-Bureau of Rivers and Harbors approved a flood control project plan for the Fountain Creek in Pueblo, Colorado and has forwarded the plan to Congress for funding.

This project will necessitate the construction of levees and the clearing of the channel to provide much-needed flood protection to residential areas on the east side and for downtown Pueblo.

To quote from the Corps of Engineers report on the June 17, 1965 flooding of Fountain Creek: "Approximately 53 city blocks were inundated up to a depth of eight feet. City streets and utilities were washed out or clogged with debris; the interstate freeway was blocked and severely damaged; segments of the main railroad line were washed out; and several industrial and governmental establishments were heavily damaged or destroyed. There were 370 residences and 59 businesses damaged, touching 417 Pueblo County families."

This flood in 1965 produced a peak flow of 47,000 cfs on the Fountain Creek. The 100-year flood is estimated at 64,000 cfs. The proposed Corps of Engineers' project would provide protection of at least 85,000 cfs.

This project is essential to prevent the recurrence of serious flooding in Pueblo; and it will also provide for recreational facilities, bike and hiking trails, bridle paths, playgrounds and wildlife areas in the floodplain.

The program has broad public support. Not only have the State of Colorado, the Colorado Water Conservation Board, the City of Pueblo, the Pueblo Board of County Commissioners, and a number of other political entities indicated their strong support for the project--but other groups and local citizens are anxiously awaiting the implementation of the project.

If we can provide any additional information to your staff, please feel free to have them contact me at (303)544-3392 or D.R. Luster at (303)561-6431.

Very truly yours,

Manuel Rivera

Manuel Rivera, Chairman
Fountain Creek Commission

MR:mm

P.O. Box 1427 Pueblo, Colorado 81002 (303) 545-0561

Statement of
Gale A. Graham, Chairman for Missouri,
Arkansas River Basin Interstate Committee
Relative to Appropriation for the Comprehensive Development
of the Arkansas River Basin
for FY 82
to
The Chairman
Public Works Subcommittee
Appropriation Committee
U.S. House of Representatives
Washington, D.C.

Mr. Chairman and members of the Committee, my name is Gale A. Graham, Banker from Joplin, Missouri, and I appear here today on behalf of the Missouri members of the Arkansas River Basin Interstate Committee. My four colleagues are: Fred A. Lafser, Director, Department of Natural Resources, State of Missouri; Mr. Ted B. Evans, from Carthage, Missouri; Mr. Douglas Mahnkey, Attorney from Forsyth, Missouri; and Mr. Layne Morrell, Realtor from Kimberling City, Missouri. We represent the Southwest corner of Missouri which is a part of the Arkansas River Basin. We are honored to join our colleagues from Arkansas, Kansas, Oklahoma and Colorado in appearing before you today and certainly appreciate the time afforded us to testify collectively in support of appropriations for projects along the entire reach of the Arkansas River.

We have a vital interest in the requests which are being submitted today by the Chairman of our Arkansas River Basin Interstate Committee and urge your favorable consideration of those requests. Included in the President's budget for FY 82 are several projects in Southwest Missouri. We support these projects and hope that the funding as indicated in the President's budget will be approved. However, the capability of the U.S. Corps of Engineers for the Prosperity Lake Study, which was recently shifted from Center Creek to Shoal Creek, is $210,000. The President's budget request is for $150,000. We strongly urge the appropriation of $210,000 which would advance the study by at least three months.

A multipurpose reservoir in this area is urgently needed to meet the ever increasing water supply needs in the area of Carthage, Carterville, Webb City, Carl Junction, Joplin, Neosho and Granby. Not only the increasing population but also the growing per capita demand for water will combine to produce greater demand than supply in the above-mentioned urban triangle within a few years. The use of water from deep wells and streams for irrigation is increasing rapidly. The Missouri Geological Survey Office in Rolla, Missouri reports a drop in the water table of 15 to 20 feet in this immediate area in recent months.

We further support and urge your favorable consideration of all the projects in the Arkansas River Basin as listed on the appropriation request summary which is being presented today by the Chairman of the Arkansas River Basin Interstate Committee.

We have testified each year for many years concerning the importance of water resource management projects in the Arkansas River Basin and many others which are in the overall interest of the United States and we feel that adequate appropriations for such projects at this time will provide both immediate and long-range economic benefits for all our citizens.

We are greatly appreciative of your consideration of our needs in the past and solicit your favorable consideration of our requests as presented here today. We sincerely thank you for the opportunity to present them.

ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

APPROPRIATION REQUEST SUMMARY

F/Y 82

PROJECT	STATUS	PRESIDENT'S BUDGET	INTERSTATE COMMITTEE REQUEST
ARKANSAS RIVER, CO	(S)	$ 450,000	$ 600,000
ARKANSAS RIVER, AR	(S)	-0-	100,000
CENTRAL OKLAHOMA PROJECT, OK (N)	(S)	-0-	300,000
FOUNTAIN CREEK, PUEBLO, CO (FDP)	(S)	-0-	60,000
GRAND (NEOSHO) RIVER, KS & OK (FDP)	(S)	-0-	400,000
LITTLE ROCK-NORTH LITTLE ROCK NAVIGATION STUDY, AR (N)	(S)	-0-	100,000
POTEAU RIVER, OK & AR (FDP)	(S)	200,000	300,000
PROSPERITY LAKE, MO (FDP)	(SP)	-0-	210,000
ARKANSAS RIVER AND TRIBUTARIES, CO	(SPE)	-0-	210,000
ARKANSAS RIVER AND TRIBUTARIES, MURRAY LOCK AND DAM 7, AR (N)	(SPE)	-0-	1,000,000
ARKANSAS RIVER AND TRIBUTARIES, W. D. MAYO LOCK AND DAM 14, OK (N)	(SPE)	-0-	700,000
FOURCHE BAYOU, LITTLE ROCK, AR (FDP)	(SPE)	-0-	500,000
PARKER LAKE, OK (FDP)	(SPE)	-0-	100,000
VERDIGRIS RIVER, MINGO CREEK, KS & OK (FDP)	(SPE)	-0-	500,000

Appropriation Request Summary*
Fiscal Year 1982
Page 2

PROJECT	STATUS	PRESIDENT'S BUDGET	INTERSTATE COMMITTEE REQUEST
EL DORADO LAKE, KS (FC)	(C)	$ 2,600,000	$ 4,100,000
SKIATOOK LAKE, OK (FC)	(C)	10,080,000	11,300,000
DOUGLASS LAKE, KS (FC)	(P)	-0-	100,000
SAND LAKE, OK (FC)	(P)	-0-	250,000
	WHITE RIVER BASIN FY 82		
WHITE RIVER BASIN, AR & MO (CS)	(S)	-0-	345,000
WHITE RIVER BASIN, COUNTY LINE LAKE, MO (FDP)	(S)	-0-	320,000

* It is emphasized that these requests were developed considering each project by itself. The amounts do not consider fiscal constraints, the Administration's assessment of appropriate national priorities for Federal investments, nor the impact of stated capabilities for other individual projects or studies on the Corps' overall capability.

(S) Study
(SP) Supplemental Preauthorization Studies
(SPE) Continuation of Planning and Engineering Studies
(P) Planning
(C) Construction
(CS) Comprehensive Study

(FDP) Flood Damage Prevention
(N) Navigation
(FC) Flood Control

Addendum to Report to
United States Senate and
United States House of Representatives

The ARKANSAS RIVER BASIN INTERSTATE COMMITTEE Members are:

FROM ARKANSAS:

W. A. Gieringer, Pine Bluff-Jefferson County Port Authority, Pine Bluff, AR - (State Chairman)

Wayne Bennett, Farmer and Businessman, Lonoke, AR

Homer Hall, Retired Farmer, Ozark, AR

Jerry Virden, Manager, Pine Crest Wood Products, Morrilton, AR

FROM OKLAHOMA:

Houston Adams, President, Bank of Tulsa, Tulsa, OK - (State Chairman)

E. R. Albert, Jr., Albert Equipment Company, Tulsa, OK

Robert S. Kerr, Jr., Oklahoma Water, Inc., Oklahoma City, OK

Harold B. Scoggins, Muskogee, OK

Fred G. Turner, Editor and Publisher, McAlester News-Capital, McAlester, OK

R. Dow Damron, Executive Secretary, Interstate Committee

FROM KANSAS:

James O. Foster, Utilities Coordinator, Boeing Military Airplany Company, Wichita, KS - (State Chairman)

Roger Brown, Vice President, Home National Bank, Arkansas, KS

Frank W. Liebert, Attorney, Coffeyville, KS

Taylor Peckham, Peckham Insurance Agency, Augusta, KS

Arthur T. Woodman, Architect, Wichita, KS

FROM COLORADO:

Charles L. Thomson, General Manager, Southeast Colorado Water Conservancy District, Pueblo, CO - (State Chairman)

Lee H. Hancock, The High Line Canal Co., Rocky Ford, CO

John Javernick, Farmer and Rancher, Canon City, CO

William McDonald, Director, Colorado Water Conservation Board, Denver, CO

Ray D. Nixon, Colorado Springs, CO

Addendum - Continued
Page 2

FROM MISSOURI:

Gale A. Graham, Vice President, First National Bank and Trust Company, Joplin, MO - (State Chairman and Chairman of the Interstate Committee)

Ted B. Evans, President, United Missouri Bank, Carthage, MO

Fred A. Lafser, Director, Department of Natural Resources, Jefferson City, MO

Douglas Mahnkey, Attorney, Forsyth, MO

R. Layne Morrill, Realtor, Shepherd of the Hills Realty, Kimberling, MO

ARKANSAS RIVER BASIN REPRESENTATIVES

AT

CONGRESSIONAL HEARINGS

Houston Adams - President, Bank of Tulsa, Tulsa Oklahoma

E. R. Albert, Jr. - Albert Equipment Company, Tulsa, Oklahoma

Wayne Bennett - Agriculture, Lonoke, Arkansas

Roger Brown - Vice President, Home National Bank, Arkansas, Kansas

Jacques Cunningham - Port Director, Tulsa Port of Catoosa, Catoosa, Oklahoma

R. Dow Damron - Executive Vice President, Arkansas Basin Development Association, Tulsa, Oklahoma

Ted B. Evans - President, United Missouri Bank, Carthage, Missouri

James O. Foster - Utilities Coordinator, Boeing Military Airplane Company, Wichita, Kansas

Wallace A. Gieringer - Pine Bluff-Jefferson County Port Authority, Pine Bluff, Arkansas

Gale A. Graham - Executive Vice President, First National Bank of Joplin, Joplin, Missouri

Homer Hall - Ozark, Arkansas

Lee H. Hancock - The High Line Company, Rocky Ford, Colorado

John Javernick - Canon City, Colorado

Robert S. Kerr, Jr. - President, Oklahoma Water, Inc., Oklahoma City, Oklahoma

Robert J. LaFortune - Oil Operator, Tulsa, Oklahoma; President, Arkansas Basin Development Association, Tulsa, Oklahoma

Frank W. Liebert - Coffeyville, Kansas

Charles Maynard - President, Pulaski County Flood Control Association, Little Rock, Arkansas

William McDonald - Director, Colorado Water Conservation Board, Denver, Colorado

R. Layne Morrill - Shepherd of the Hills Realty Company, Kimberling City, Missouri

Ray D. Nixon - Colorado Springs, Colorado

Arkansas River Basin Representatives
Page 2

Bill Perry - President, Metropolitan Little Rock Chamber of Commerce, Little Rock, Arkansas

Pratt Remmell- Director, Arkansas Basin Association in Arkansas, Little Rock, Arkansas

Harold B. Scoggins - Muskogee, Oklahoma

Charles Steel - President, Arkansas Basin Association in Arkansas, Little Rock, Arkansas; Sr. Vice President, Arkansas Power and Light Company, Little Rock, Arkansas

Charles L. Thomson - Southeast Colorado Water Conservation District, Pueblo, Colorado

Fred G. Turner - Editor & Publisher, McAlester News - Capital, McAlester, Oklahoma

Jerry Virden - Morrilton, Arkansas

Arthur T. Woodman - Architect, Wichita, Kansas

Bob Wright - Muskogee Chamber of Commerce, Muskogee, Oklahoma

The Honorable Tom Bevill, Chairman
Energy and Water Development
House Appropriations Committee
Washington, DC 20515

Dear Congressman Bevill:

On behalf of the citizens of the City and County of Muskogee, Oklahoma, we endorse and approve the action of the Arkansas River Basin Interstate Committee from Arkansas, Colorado, Kansas, Missouri, and Oklahoma in presenting their requests for appropriations with which to continue development of the natural resources in the Arkansas River Basin, before this honorable Committee of the United States Congress.

In addition, we endorse the full program on Public Works as adopted by the Arkansas River Basin Development Association of Oklahoma.

We are firmly behind those, who for years have supported the operation of the McClellan-Kerr Arkansas River Navigation System and completion of projects for the elimination of salt from the waters of the Arkansas and Red Rivers.

Nothing in the past half century has boosted the economy of the southwest as much as the completion of the Navigation System. Not only does it provide us with an economic source of transportation in savings on freight rates and electric energy but it also provides tremendous recreation and flood control facilities for the benefit of literally millions of people.

With such progress comes problems, which are simply part of the upkeep of such major projects, and correcting or eliminating them is as important as building the navigation system itself. We respectfully request that every consideration be given to the recommendations of the Arkansas River Basin Interstate Committee in order that our progress can continue to be as strong in the future as it has in the past recent years.

Sincerely yours,

Hardy Summers

Hardy Summers, District Judge
Oklahoma District Number 15

Michael C. Turpen, District Attorney
Muskogee County, Oklahoma

Eddie French, Chairman, County Commissioners
Muskogee County, Oklahoma

Fred Shelton, Commissioner
Muskogee County, Oklahoma

Kenneth Ward, Commissioner
Muskogee County, Oklahoma

Coleman Fite, Mayor
City of Muskogee, Oklahoma

James C. Leake, Chairman
Muskogee City/County Port Authority

A.B. Hensley, President
Muskogee Chamber of Commerce

J.E. Bob Wright, Executive Director
Greater Muskogee Development Corporation

Ed Edmondson, Former U.S. Congressman

Harold B. Scoggins, Member
The Arkansas River Basin Interstate Commission
Oklahoma

Bartlesville Area Chamber of Commerce
502 South Keeler • Bartlesville, Oklahoma 74003 • Phone 918-336-8708

ACCREDITED CHAMBER OF COMMERCE

March 2, 1981

Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
House of Representatives

Dear Mr. Chairman:

The Bartlesville area is dependent on the Sand Lake for future water supplies. The City of Bartlesville made application for water supply storage in Sand Lake on May 16, 1960. Additional water supplies will be a necessity in 1988-1990. If our area is to continue to grow and prosper, it is imperative that planning funds be made available now for Sand Lake. Since it will take six or seven years to plan this project and another five years for completion, we find it essential that funds be appropriated in order that the water supply will be available when needed.

The Sand Lake should receive high priority consideration, as it offers benefits much more far-reaching geographically than the immediate vicinity. It will help alleviate flood conditions in the Caney, Verdigris and Arkansas River Basins. It is part of an integrated basin plan approved by Congress in 1962. All of the other structures are presently under construction. Without Sand Lake, we do not have a completed system.

We, the undersigned, strongly urge that the currently needed appropriation of $250,000 be made to start planning for Sand Lake.

Sincerely,

George C. Meese
Mayor of Bartlesville

Melvin W. Otis
President, Chamber of Commerce

Chairman, Washington Co. Commission

D. L. Osborne
Chairman, Caney Valley Conservation District

Chairman, Phillips Petroleum Co.

President, Caney Valley Water Shed Association

President, Copan Lake Association

STATEMENT IN SUPPORT OF
PROSPERITY LAKE IN MISSOURI
TO
Public Works Subcommittee
Appropriation Committee
U. S. House of Representatives
Washington, D. C.

It was determined by the U.S. Corp of Engineers in 1980 that a multipurpose lake on Center Creek was not economically feasible. Subsequently the study was shifted to possible locations on Shoal Creek. The cities of Joplin and Neosho as well as several incorporated villages in the area depend on Shoal Creek for their water supply. Drought conditions in the area have been quite severe and this, together with the rapidly increasing use of water for irrigation, have caused the water level in our area to drop 15 to 20 feet recently. The flow in Shoal Creek is at a very low level at this time and, if drought conditions continue, our area could very well be in trouble.

The President's budget allocates $150,000 to the Prosperity Lake study of alternate sites on Shoal Creek for FY 82. The U.S. Corp of Engineers have indicated a capability of $210,000 for FY 82. The additional $60,000 could speed up completion of the study by three months. We sincerely feel that the additional $60,000 should be budgeted for FY 82 and hereby request that the full capability of $210,000 be allocated for this project for FY 82.

Gary Trim, Manager
Joplin Water Works Co.

Jack M. Belden, Mayor
City of Joplin

Robert Moyer, President
Joplin Chamber of Commerce

James Berzina, City Manager
Joplin, Missouri

William H. Harper, Exec. Vice President
Joplin Chamber of Commerce

Charles Hargis
Associate Judge, County Court
Carthage, Jasper County, Missouri

P. D. Crockett, Mayor
Webb City, Missouri

Frank Dean, Mayor
Carl Junction, Missouri

John Shonkwiler
Presiding Judge, County Court

L.W. Higdon, Vice-Pres., Cashier
Bank of Neosho, Neosho, Mo.

R. Scott Grigsby, President
Neosho Area Chamber of Commerce

Gale A. Graham, Chairman
Missouri Members
Arkansas River Basin
Interstate Committee

Roy J. Cochran, Executive Vice-Pres.
First National Bank of Neosho, Mo.

ARKANSAS WATERWAYS COMMISSION
EXECUTIVE BLDG., SUITE 506 — 2020 W. 3RD Street
LITTLE ROCK, ARKANSAS 72205

AMES H. PHILLIPS
EXECUTIVE DIRECTOR

COMMISSIONERS
CHARLES D. MAYNARD, CHAIRMAN
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AT LARGE
H. CARTER JEFFERY, V. CHAIRMAN
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ARKANSAS RIVER BASIN
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AT LARGE
H. K. THATCHER
CAMDEN
OUACHITA RIVER BASIN
JAMES WALDEN
HELENA
MISSISSIPPI RIVER BASIN
L. E. GILLILAND
TEXARKANA
RED RIVER BASIN

March 11, 1981

Honorable Tom Bevill, Chairman
House Energy and Water Development Sub-Committee
House of Representatives
Congress of the United States
c/o Rayburn House Office Building
Washington, D. C. 20515

Dear Congressman Bevill:

This letter is a component of a package submitted by Wallace A. Gieringer, Arkansas State Chairman, Arkansas River Basin Interstate Committee.

It is again the time of the year when the Arkansas Waterways Commission makes an appeal to Congress for funds to continue the development and operation and maintenance of the waterways of this State and the nation for water transportation and related purposes. We are aware of the need for a balanced budget and know that priorities must be set for federal investments. For these reasons, along with the long range objective of conserving energy, we request approval of the Corps of Engineers capability figures on the enclosure.

The nation's energy problem is one of the most serious problems facing the American people, and water transportation is acknowledged as being the most energy efficient means of transporting bulk commerce to locations where required. Arkansas must take advantage of the waterways as a means of transportation since 55 of our 75 counties are contiguous to navigable rivers. When developed these basins will assist the State and nation to achieve the long range goal of independence from foreign energy producers. We believe the identified investments in the river basins are basic to the needs of the nation and should be funded.

We are of the opinion that the appropriation of funds in the amount that the Corps of Engineers has indicated to be within their capability would do much to improve the economic situation in Arkansas by sustaining and attracting industry, putting people back to work by creating jobs, conserving fuels and enhancing the environment.

In view of the varying conditions of the inland rivers during the last several years (low flows) and the resultant deteriorated channels, it is particularly important that funds amounting to the Corps' maintenance capability be appropriated. As an example unless the capability amounts are appropriated project widths cannot be maintained on the McClellan-Kerr System and there will be deterioration to the facilities that will result in decreased efficiency and increased costs in future years. This fact was driven home during the drought this past summer.

This Commission would appreciate your personal support and the support of your Sub-Committee in behalf of the projects discussed herein.

Sincerely,

James H. Phillips
Executive Director

JHP/cjf
cc: Governor Frank White
Arkansas Delegation
Commissioners

FC/MR&T	APPROVED	3 Feb 81
GI	APPROVED	23 Feb 81
CG	APPROVED	2 Feb 81
O&M	APPROVED	2 Feb 82

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
FC/MR&T, Construction						
Mississippi River Levees	FC	26,100		47,930		Initiate 3 items.
(Vicksburg District Portion)		(10,700)	3,000	(20,700)	5,500	Advance completion 4 months.
Channel Improvement	FC	62,100		145,000		
(Vicksburg District Portion)		(14,000)	200	(46,600)	800	Dikes: Initiate 1 item.
Tensas Basin	FC	25,000		31,700		
Boeuf & Tensas Rivers, etc.		(18,000)		(18,200)		
All Work Except Lake Chicot Pumping Plant		500	0	700	0	No additional requirement in Arkansas.
Lake Chicot Purping Plant		17,500	17,500	17,500	17,500	No additional requirement.
Red River Backwater Area		(7,000)		(13,500)		
All Work Except Tensas Cocodrie Pumping Plant		800	0	2,300	0	No additional requirement.
Tensas Cocodrie Pumping Plant		6,200	0	11,200	0	No additional requirement.
FC/MR&T, Maintenance						
Mississippi River Levees	FC	7,600		8,440		
(Vicksburg District Portion)		467	155	747	249	Miscellaneous levee repairs.
Channel Improvement	FC	39,564		47,359		
(Vicksburg District Portion)		(9,356)	3,118	(12,215)	4,071	Dikes & Revetment: Repairs at various locations.
Boeuf-Tensas Rivers	FC	94	0	94	0	No additional requirement.
Lower Arkansas River, AR	FC					
North Bank		47	47	47	47	No additional requirement.
South Bank		106	106	106	106	No additional requirement.
Inspection of Completed Work	FC	483	48	483	48	No additional requirement.
Mapping	FC	406	41	511	41	Additional quadrangle mapping.

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
FC/MR&T, General Investigations						
Boeuf-Tensas Basin, S.AR & N.LA	FDP	785	195	785	195	No additional requirement.
Collection & Study of Basic Data		165	55	165	55	No additional requirement.
General Investigations						
Ouachita River Basin, AR & LA	FDP	1,000	240	1,300	415	Advance completion of four interim studies: Arkansas Lakes 6 months ($75) Navigation 9 months ($100)
Construction, General						
Blakely Mountain Dam - Lake Ouachita, AR, Sanitation Fac (711)	MP	790	790	790	790	No additional requirement.
Narrows Dam - Lake Greeson, AR, Sanitation Fac (711)	MP	130	130	530	530	Complete construction for sanitary improvements at 4 sites and engineering and design for existing sanitary deficiencies at 8 sites. Initiate sanitary improvements at 2 sites.
Ouachita & Black Rivers, AR & LA	N	24,500	24,150	26,900	26,550	Continue hydrographic surveys. Initiate Felsenthal existing structure removal.
Operation & Maintenance, General						
Blakely Mtn. Dam-Lake Ouachita, AR	MP	2,465	2,465	6,010	6,010	Increased operation of recreation facilities. Repair recreation facilities and roads.

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Operation & Maintenance, General (cont)						
DeGray Lake, AR	MP	2,523	2,523	3,288	3,288	Repairs to project roads.
Narrows Dam-Lake Greeson, AR	MP	2,125	2,125	4,570	4,570	Rehab recreation facilities and increase operation at recreation areas.
Ouachita & Black Rivers, AR & LA	N	3,690	1,490	5,840	1,640	Rehab L&D's after inundation.
General Regulatory Functions	N	584	195	695	232	Aerial photos and navigability studies.
Inspection of Completed Work	FC	64	21	64	21	No additional requirement.

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MEMPHIS DISTRICT*

	OPERATION AND MAINTENANCE	REMARKS
MR & T	$11,950,000**	1/3 of capability figure to be used in Arkansas
WHITE	1,843,000	Mile 10 to Newport
BACKWATER	430,000	
HARBORS:		
OSCEOLA	637,000	
HELENA	332,000	

* - Study figure for district omitted.

**- Dredging

12 March 1981

ARKANSAS RIVER, ARKANSAS
FY - 82 BUDGET AMOUNTS

PROJECT	TYPE PROJECT				APPROVED FY - 82 CAPABILITY AMOUNTS
	SURVEYS	ADVANCED ENGINEERING AND DESIGN	CONSTRUCTION	OPERATION AND MAINTENANCE	
ARKANSAS RIVER IN THE VICINITY OF FT. SMITH-VAN BUREN	$410,000	0	0	0	$410,000
ARKANSAS RIVER & TRIBUTARIES HYDROPOWER & OTHER PURPOSES, ARKANSAS AND OKLAHOMA	488,000	0	0	0	488,000
BLUE MOUNTAIN LAKE, ARKANSAS	0	0	0	$635,000	758,000
ARKANSAS RIVER, RUSSELVILLE-MORRILTON, ARKANSAS	0	0	0	0	100,000
CLARKSVILLE, ARKANSAS	0	0	0	0	200,000
DARDANELLE LOCK & DAM, ARKANSAS	0	0	0	3,108,000	3,978,000
McCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, ARKANSAS & OKLAHOMA	0	0	$14,000,000	14,296,000	14,296,000 (O&M) 14,500,000 (Const.)(1
LITTLE ROCK-NORTH LITTLE ROCK, ARKANSAS	0	0	0	0	100,000 (Surveys)
NIMROD LAKE, ARKANSAS	0	0	0	744,000	844,000
OZARK-JETA TAYLOR LOCK & DAM, ARKANSAS	0	0	0	3,666,000	5,956,000
ARKANSAS RIVER HYDROPOWER, MURRAY LOCK & DAM, AR	0	0	0	0	1,000,000 (Adv Pln)
FOURCHE BAYOU IN THE VICINITY OF LITTLE ROCK, AR	0	0	0	0	500,000 (Adv Pln)
TOTALS	$898,000	0	$14,000,000	$22,449,000	$43,130,000

(1) Recommended reduction by $1,500,000 due to low bid on pipeline construction contract.

Mr. BEVILL. Very good.

Mr. Hammerschmidt, we are ready to hear from you.

STATEMENT OF CONGRESSMAN HAMMERSCHMIDT

Mr. HAMMERSCHMIDT. Mr. Chairman, I just submitted my statement for the record. I totally support Mr. Graham's statement and those other statements submitted.

I might mention as an aside, there is some damage to shafts at Ozark Lock and Dam which will be forthcoming in a statement by Wallace Geiringer.

I want to call the committee's special attention to that, because I really think it is foolish for the government to not repair those and use the hydroelectric power that is available on an existing facility. I want to point that out as a special need.

[Congressman Hammerschmidt's statement follows:]

APPROPRIATIONS FOR THE ARKANSAS RIVER BASIN

Mr. Chairman, and members of the subcommittee, I certainly appreciate the opportunity to once again appear before this distinguished panel to express my enthusiastic support for the Statement of the Arkansas River Basin Interstate Committee. As the Ranking Minority Member of the Water Resources Subcommittee of the Public Works and Transportation Committee, I am more convinced than ever that if we are to meet our national goals of maintaining adequate water supplies, a sound transportation system and flood protection for our citizens, we must rank water resources developments as one of our highest national priorities and secure funding for the studies, plans, and projects which will work toward these important objectives.

Although I certainly realize that this is a time for austerity in the Federal budget, those programs that have proven worthwhile and effective must be continued. I remain concerned over the lack of Federal commitment to investments for capital improvements which will continue to yield benefits to our citizens while enhancing our economy for the future. Also, considering our Nation's energy crisis, I am very much aware of the vital role water transportation must play as an essential tool in the conservation of energy to transport goods. It is with these factors in mind that I urge this panel to accept the funding levels endorsed by the Arkansas River Basin Interstate Committee. These expenditures are basic to a healthy economy in the State of Arkansas and the Nation.

The Arkansas Basin Association has consistently recognized economic, social and industrial value of water resource developments to the Arkansas River Basin. In the past, their persistence has been an essential force in reversing unemployment and population losses in the State, thereby creating a climate in which the area can contribute to the general welfare of the region and the entire country. Their cental belief, and mine, is that continue water resource management work is integral to the future economic growth of the area.

We have again completed another outstanding year on the McClellan-Kerr Waterway. This waterway is surpassing the projections that were made for all multipurpose benefits. Thus, I favor additional funds in fiscal year 1982 for the maintenance of the McClellan-Kerr Arkansas River Navigation System so as to insure an optimum level of performance to reduce future maintenance and to assure the energy effectiveness of the Waterways to its fullest capacity.

Furthermore, I have long been impressed with the results of several studies on the potential for hydropower facilities on the McClellan-Kerr Navigation System which have revealed significant resource potential.

The existing low-lift dams on the Arkansas River from the Mississippi to Fort Smith represent tremendous hydroelectric possibilities. In light of increasing fuel costs for thermally generated electricity, it would be a step in the right direction to have these sites thoroughly evaluated by the Corps as soon as possible. The result will provide the citizens of Arkansas with a choice of potential energy sources and the information to make a wise decision as to energy alternatives.

I am sure the Members of this panel will recall the disastrous headlines in September 1978 which detailed the terrible floods which took the lives of 10 Little Rock citizens. The need for the Little Rock urban flood control project is obvious. We must take all steps possible for alternatives in controlling flood waters, reducing

the susceptibility of property to flood damages, and relieving human and financial losses.

Lastly, I would like to commend this Subcommittee, which in the past has revealed a willingness to make the proper investments in water resource developments, and strongly urge you to show the same farsightedness to make certain that we invest adequately today for our water and water transport needs of tomorrow. It is only through the actions of this panel that this Nation's needs can be satisfied.

Again, I thank you for your time and consideration.

Mr. BEVILL. Very good. We will watch out for that.

Any questions?

Mr. WATKINS. Thank you very much for being here and the fine testimony. I have a number of good friends in the audience, most from way up north, or the north edge of my district.

Mr. WATKINS. I notice his testimony, Mr. Chairman, says he is a banker from Tulsa, Oklahoma. He knew we flew in by helicopter, really. Stick up your hands so folks know who you are. He is down there not too far from Lukfata, really, near Sweeney, Oklahoma, not too far from the great metropolitan area of Lukfata.

We are always interested in your testimony. You have done a great job, John Paul; Arkansas and Oklahoma have been very much kin on this project. In fact, I asked John Paul to help me on a few important things. We don't know whether they are going to get a bill out of the authorization committee this year or not.

Mr. HAMMERSCHMIDT. We haven't had one in five years. We are due one.

Mr. WATKINS. We are due one.

I have in there Parker Reservoir. I notice that is one you had listed too that is going to be a key priority. Parker Reservoir also serves Ada, Oklahoma. We have been getting Birds Mill spring water down there, no surface land water. If you have never tasted Birch Mill spring water, you haven't really existed. Birds Mill used to put out about 12 million gallons a day. The last two years during the drought we have been getting over 3 million.

Mr. MYERS. What do you with it?

Mr. WATKINS. I have a little bill over there that I am trying to change the name of a Clayton Lake to Sardis Lake. It is noncontroversial up here. I will take that political heat to get that changed to Sardis.

Mr. HAMMERSCHMIDT. May I respond? You know I totally support you in your effort. I trust in your judgment. I assure you in our committee it will receive favorable consideration.

Mr. WATKINS. Fine, I hope the people can hear that.

Mr. HAMMERSCHMIDT. While I am responding, may I say something about Houston Adams off the record?

[Discussion off the record.]

Mr. WATKINS. Let me ask you a question on the Arkansas. We have probably suffered one of the strongest, toughest droughts in our part of the country the last couple of years or so. I know with the low rainfall it has made it difficult on some of the barge traffic. Any report on how much is affected?

Mr. CUNNINGHAM. The port moved two million tons through the facilities last year but in January of this year we were below January the year before, and in February we were below the year before, which reversed an ever-increasing trend each month of tonnage in our port history. This was due to the low water in the

Mississippi River, the inability to get the barges through the White River, which is our entrance into the McClellan-Kerr system.

There is plenty of water in that system, but getting into the Mississippi River due to the drought throughout the Midwest, it became a real problem. It did severely affect the movement of cargo for over a period of three to four weeks. The Mississippi River is backed up now, things are back to normal.

But that kind of experience is a tremendous economic price to pay for transportation and movement of goods backed up; jobs in industries waiting on materials on the barges that could not get through the White River. The economic effect was pretty bad, all due to the drought throughout the Midwest.

Mr. WATKINS. I gave personal testimony down in Alabama this past Friday in behalf of the economic increases, economic development of the Arkansas River, and I am certain the comment I made—you can give me some figures on it—that the tons shipped out of there far exceeded the Corps of Engineers estimate; isn't that correct.

Mr. HAMMERSCHMIDT. Yes.

Mr. WATKINS. Muscogee, I think Brother Scoggins is here from Muscogee. I think if we can get our coal problem solved, John, up at Muskogee—it is not my district so I am not trying to make any points here—but it is just something that I don't understand, can't rationalize.

We have a big power plant up there, we are having to bring in Wyoming coal, less than a mile down the road in the Port of Muskogee we are shipping coal out of Oklahoma, because of the sulfur content. Maybe some of that TVA research that has been done, maybe we can end up using some of that coal in those power plants and ship a lot more of it out for doemstic as well as foreign consumption.

Mr. BEVILL. I believe the TVA did assure you they would check your coal out.

Mr. WATKINS. Yes, very much so. They indicated they would check Oklahoma and see what we might do about solving our sulfur content so we can utilize more of your own coal in our own region.

I would like to make reference to a couple of other things. You listed Poteau River navigation. That is also one of my high priorities.

The committee was pleased to see, like I am, from the Corps' efforts a very favorable inclination to go full steam with that Poteau River navigation project, all the way up to the community of Panama, near Poteau itself, won't have to have any locks or anything, just for back water coming in out of the Arkansas River. I am glad to see that is one you are interested in.

Parker, I notice you have listed that one. We also have high priority at Lukfata. We want to discuss that.

I think the committee is about to help us on that just to get rid of us if we can ever get that one going.

Also, you mentioned this morning the Arkansas chloride, which one of these you have listed here is interested in that chloride project?

Mr. DAMRON. The chloride control project is not listed here——

Mr. WATKINS. I couldn't find it.

Mr. DAMRON [continuing]. Because we didn't request additional funds. The study is complete. It is being reviewed by the Corps. It will be sent back to the district in Tulsa when it is completed. I am not sure when that is going to be. We have had two or three different dates on it.

Mr. WATKINS. I know you are familiar with the fact that on Red River we have some chloride work. It affects my area, Congressman Jack Hightower's area. We hope to have some things coming out of there showing some very, very favorable information that would even probably assist concerning your input on the Arkansas.

I notice you have the Central Oklahoma project listed. That is one of those that will have to be considered with the priorities. I do not think we will be on that one. We will have to piece-meal a lot of the others together.

I notice you feel like I do, we are trying to make these cuts, just like you have had to, Mr. Chairman, with your programs in your area. I know Poteau River is one we are going to try to do our best on like a couple of the others. We will have to wait to see where we are on the Central Oklahoma project as we go along.

I want to say to my people from Oklahoma, this is one of the finest committees that I have served on. I am trying to say I haven't been here for any markups yet, I will let you know after that. I feel certain all together we can say this committee has been good in the past and I know—I feel I have developed a very close personal rapport with a lot of just good genuine people here on this committee. They are our kind of people out there.

One of them, starting at the black-headed one, that is black primarily, still a little gray, he is from Indiana. He feels like they play basketball in that state. I hear about that about as much as I do about Lukfata.

Mr. MYERS. I do not know anything about Lukfata, but I might add, if you will yield, you say you haven't been through a markup. I have been through quite a few of them and I haven't got a single thing from my district in this bill or haven't had, they tell me because I talk too much.

Mr. WATKINS. I yield back the rest of my time.

Mr. BEVILL. Well, we appreciate Congressman Watkins being on this committee. He is the president of our Rural Development Caucus here in the Congress and is a leader in the rural development and also in water and energy. So we really appreciate having him on this committee.

Is there any further testimony?

Thank you very much.

[Statement of Mr. Gieringer follows:]

Statement of
Wallace A. Gieringer, Chairman for Arkansas
Arkansas River Basin Interstate Committee

Mr. Chairman and members of the Committee, my name is Wallace Gieringer. I serve as Executive Director for the Pine Bluff-Jefferson County Port Authority at Pine Bluff, Arkansas and was appointed by our former governor, David Pryor, to serve as a member of the Arkansas River Basin Interstate Committee. Other committee members representing Arkansas are: Wayne Bennett, Homer Hall and Charles Steel.

The Arkansas Committee recognizes and appreciates your concern for needed fiscal responsibility. Let us identify certain projects vital to the economic well-being of our area.

In view of the flood problem in Little Rock where eight people were killed in the September 1978 flood, we ask you to provide $500,000 for the continuation of planning on this needed urban flood control project.

With regard to attaining our energy independence goal we urge you to provide the full capability of $1,000,000 for the continuation of planning for the Murray Hydropower (L&D No. 7) project. In recognition of the need for the energy from this project, the Corps of Engineers responded by completing a report in a year's time that has been favorably received by all interests. We need to keep this project going and can with the appropriation of the Corps capability amount.

We also have hydropower studies underway for adding erergy production facilities at the existing locks and dams on the Arkansas River. The energy that could be produced would be very useful in cutting imports of foreign oil. Accordingly, we urge you to approve the amount in the budget for the Arkansas River Hydropower studies.

Let us call your particular attention to Ozark-Jeta Taylor Lock and Dam. Full Corps capability is needed for the operation and maintenance of the Ozark Project. Of that amount $1,700,000 is to pay for needed repairs to the power plant which has experienced problems due to its unique new design. (These units are now inoperable due to cracks in the main turbine shafts which are 55 feet long and 53 inches in diameter. This size cannot be forged as one piece and must be constructed in four individual segments, then welded together. The cracks are in a welded joint.)

We support full funding for further construction for the McClellan-Kerr Waterway (Conway water supply). We urge complete funding of the budget request for the operation and maintenance of the locks and dams and for the entire McClellan-Kerr Waterway. This would include model studies to see if navigation conditions on the White River, which are controlled by the Mississippi River, can be improved. The continued safe operation of the waterway is most important to the people of Arkansas and Oklahoma.

Due to our location on the lower end of the Arkansas River, we have very few projects requiring substantial funding; however, the projects we do have are very important to the future growth of our state. We have important urban flood control studies at Little Rock (Fourche Bayou), Fort Smith-Van Buren, Clarksville, Russellville and Morrilton, and a navigation port study in the Little Rock-North Little Rock area that need funding up to the limit of Corps of Engineers capability. Any delay in completion of these studies will delay the future development of these urban centers and our state.

As chairman of the Arkansas State Delegation, I would like to add our endorsement and support to the Interstate statement for the entire Arkansas River Basin. The orderly development of the entire Arkansas River Basin is most essential for the continued growth of our state's economy.

We join with our associates in Oklahoma, Kansas, Missouri and Colorado in commending your committee and Congress for having provided funds for the development of navigation, flood control and water resources in the past. The need for conservation and development of our water and land resources is even greater today. It is only through the action of this committee that this nation's needs can be provided.

Thank you for the privilege of presenting this statement to your committee.

STATEMENT OF

HOUSTON ADAMS
CHAIRMAN FOR THE STATE OF OKLAHOMA
ARKANSAS RIVER BASIN INTERSTATE COMMITTEE
MARCH 23, 1981

Mr. Chairman:

I am Houston Adams, a banker from Tulsa, Oklahoma and Oklahoma Chairman of the Arkansas River Basin Interstate Committee.

It is my privilege to present this statement on behalf of the Oklahoma members of the Committee in support of adequate funding for water resource projects in our area of the Arkansas Basin. Other members of the Committee appointed by our Governor, The Honorable George Nigh are:

Mr. E. R. Albert, Jr.
Mr. Robert S. Kerr, Jr.
Mr. Harold B. Scoggins
Mr. Fred G. Turner

We met in Tulsa on March 5, 1981, together with representatives of the other Arkansas Basin States, and we fully endorse the statement presented to you today by the Chairman of the Interstate Committee.

We also appreciate the opportunity to present our views of the special needs of our State concerning several studies and projects.

We were pleased when the President presented in his budget message for FY 1982 $21 million in funds for the continued construction for Arcadia Lake, Oklahoma.

One of our studies -- Poteau River, Oklahoma and Arkansas -- could be advanced by 3 months, if we could get an additional $100,000 in FY 82.

We also ask that $300,000 be appropriated to resume study of the Central Oklahoma project to convey water from Southeast Oklahoma to the Oklahoma City area.

Our other urgent need is for a planning start on Sand Lake, Oklahoma. The supporting statement from Bartlesville, Oklahoma sets forth the reasons that justify the appropriations to commence this project.

These requests, although relatively few in number, are vital to the economic vitality of Oklahoma. Additionally, they represent important assets in conservation, supply and recreation. Delays in funding will result in excessively high future cost, while deferring the availability of these projects to the people of the State.

We appreciate the opportunity to present our views to your distinguished Committee.

STATEMENT OF
JAMES O. FOSTER
CHAIRMAN, KANSAS INTERSTATE COMMITTEE
THE ARKANSAS RIVER BASIN

TO

THE CHAIRMAN, PUBLIC WORKS COMMITTEE
APPROPRIATION COMMITTEE, U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

Mr. Chairman and members of the Committee, my name is James O. Foster. I am Utilities Coordinator for the Boeing Military Airplane Co. and Chairman of The Governor's Interstate Committee for The Arkansas River Basin. I am pleased to submit this statement today on behalf of myself and the other members of the Kansas Delegation who were appointed to represent the State of Kansas by the Honorable John Carlin, Governor.

My colleagues are Mr. Arthur Woodman, Architect, Wichita; Mr. Frank Liebert, Attorney-at-Law, Coffeyville; Mr. Roger Brown, Bank Executive, Arkansas City; Mr. Taylor Peckham, Insurance Executive, Augusta, Kansas. We are honored to join with our colleagues from the great States of Arkansas, Colorado, Missouri, and Oklahoma, in appearing before you today to put forth our views on the appropriations and projects in Kansas and The Arkansas River Basin.

As part of this statement, you will find two appendixes which the Delegation wishes to discuss. Appendix No. 1 lists those projects in The Arkansas River Basin of Kansas which the President has provided full funding; and we commend him for his recommendations and urge that you concur with them.

Appendix No. 2 lists those projects in the State of Kansas for which additional funding is needed. In addition to the budget figure, we have listed our recommended capabilities to advance or to keep on schedule projects now underway. Many of these projects will save millions of dollars if completed by advancing the work. We recommend that you give every consideration to these advancements as inflation will drive the costs even higher.

77-001 O - 81 - (Part 9) - 19

In Appendix No. 2, there are two particular projects that we wish to call to your attention. One, the Douglass Lake Project was conceived and started as a water and flood control project. This Project is badly needed because the cities in the area need the Municipal and Industrial Water Supply. As Wichita, Augusta, Newton, Winfield and Arkansas City Continue their growth, water supply will become even more critical.

In recent years, the shortage of rainfall has damaged the present water supply and clearly shows the need for better Municipal and Industrial Water Supply. This Project is needed not only for water storage, we believe, but also because farmers in this area continue to be devastated by floods.

We sincerely hope that you will appropriate funds to the Douglass Lake Project so that planning can start in the foreseeable future.

Two, we believe the El Dorado Lake Project is vitally important not only to our area, but also to this entire region of the United States. This Project is also for Municipal and Industrial Water Supply and flood control. In past years flooding has extensively damaged the City of Augusta along with one of the Nation's largest Mobil refineries.

Mobil officials have been most patient in waiting for some type of relief by the building of the El Dorado Lake Project. However, after it was severely damaged by the 1979 flood, these officials indicated that operations may be discontinued at this location. The shutdown of this refinery would create economic disaster in the area of unemployment for the State of Kansas and a disaster to this entire region by the loss of the vast quantity of petroleum projects supplied by this Mobil refinery. In the past, the El Dorado Lake Project has been a major project of our area: and we believe that advance completion of this Project by eleven months for economic reasons is justified.

At a time when energy supplies are so critical to the State of Kansas and the entire mid-continent area of the United States, we cannot afford to lose our water supply any more than our energy supply source. We recommend that you

appropriate funds for construction at the El Dorado Lake Project and that this Project be completed as quickly as possible.

Mr. Chairman and members of the Committee, we wish to thank you for the sincerely and dedicated manner in which you and your distinguished colleagues in the Congress of the United States have dealt with the Water Resources Programs in allowing us to present our views and recommendations to you. We look forward with great expectations and hope for the future of water resource development in Kansas; with your assistance, it can be achieved.

US ARMY CORPS OF ENGINEERS

FISCAL YEAR 1982 CAPABILITIES*
IN THE ARKANSAS BASIN

NAME OF SURVEY OR PROJECT IN KANSAS	CATEGORY **	BUDGET ($1,000)	CAPABILITY ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Arkansas River & Tributaries, Great Bend, KS, to Tulsa, OK (FDP)	(S)	550	550	No additional requirement
Grand (Neosho) River, KS & OK (FDP)	(S)	400	400	No additional requirement
Verdigris River, KS & OK (FDP)	(S)	657	657	No additional requirement
Arkansas River, Great Bend, KS to Tulsa, OK, at Halstead, KS (FDP)	(SPE)	200	200	No additional requirement
Pearson-Skubitz Big Hill Lake, KS (FC)	(C)	2,913	2,913	Complete project
Marion, KS (FC)	(C)	-0-	-0-	Fully funded

Appendix No. 1

US ARMY CORPS OF ENGINEERS

FISCAL YEAR 1982 CAPABILITIES*
IN THE ARKANSAS BASIN

NAME OF SURVEY OR PROJECT IN KANSAS	CATEGORY **	BUDGET ($1,000)	CAPABILITY ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Arkansas River, Great Bend, KS, to John Martin Dam, C O (FDP)	(S)	450	600	Advance study completion 6 months
Verdigris River, KS & OK (FDP)	(SPE)	0	500	Continue studies
Douglass Lake, KS (FC)	(P)	0	100	Initial planning.
El Dorado Lake, KS (FC)	(C)	2,600	4,100	Advance completion of project by 11 months.

Appendix No. 2

STATEMENT OF
CHARLES L. THOMSON
CHAIRMAN, COLORADO SECTION
ARKANSAS RIVER BASIN
INTERSTATE COMMITTEE
TO
PUBLIC WORKS SUBCOMMITTEE
APPROPRIATIONS COMMITTEE, U.S. HOUSE OF REPRESENTATIVES

Mr. Chairman, and members of this distinguished Committee, my name is Charles L. Thomson, and I am General Manager of the Southeastern Colorado Water Conservancy District, with headquarters in Pueblo, Colorado. I am pleased to submit this Statement today in behalf of the other four members of the Colorado delegation, who were appointed to represent our State by the Honorable Richard D. Lamm, Governor. My four colleagues are: Mr. William McDonald, Director, Colorado Water Conservation Board; Mr. John E. Javernick, farmer and rancher from Canon City, representing the Upper Colorado Basin in Colorado; Mr. Lee Hancock, Superintendent, Highline Canal Company near Rocky Ford, and a farmer representing the Lower Basin; and Mr. Raymond D. Nixon, retired Executive Director, Department of Public Utilities for the City of Colorado Springs, who was appointed to represent the municipal and domestic water users in the Basin. We are honored to join our colleagues from the great States of Arkansas, Missouri, Oklahoma and Kansas in appearing before you today, and do appreciate your affording us this time to testify as a single group in support of appropriations for Water Resource Projects along the entire reach of the Arkansas River, from its headwaters at an elevation of nearly 14,000 feet near Leadville, Colorado, to its confluence with the mighty Mississippi in Arkansas.

The 25 members of the Interstate Committee worked very closely together to analyze necessary Water Projects in the five States, and, at an Annual Meeting held in March each year, in Tulsa, Oklahoma, agree to a Statement which our Chairman, Mr. Gale Graham of Joplin, Missouri, will present in behalf of the five States. We are of the opinion, Mr. Chairman and members of the Committee, that the Interstate Committee truly epitomizes the type of Interstate cooperation which is so essentially necessary to the orderly development of Water Resource Programs which will benefit not only the five States, but the entire Nation as well.

We, from Colorado, would strongly recommend the approval of the $21.204 million requested by the President for continued construction on the Fryingpan-Arkansas Project, which is a multipurpose Project being constructed by the Water and Power Resources Service. The funds so appropriated would permit continued construction on the Fountain Valley Pipeline, which provide essential water to the Colorado Springs area, and also continued work on the second stage of the Mt. Elbert Power Plant, which is a peaking plant involving pumped-back storage. The first 100 megawatt unit will go on line in July of this year, and the peaking power will be necessary to meet the ever growing demands in the area to be served. Other phases of the Project will be completed during the Fiscal Year in question.

We endorse the request by the President for $350,000 for continued Flood Control Studies on the Arkansas River above John Martin Dam in Colorado, and $3.5 million for Dam safety work at Trinidad Dam in Colorado. In addition, we recommend the Congress

authorize appropriations of $600,000 for continued Flood Control Studies between Great Bend, Kansas and John Martin Dam in Colorado. These Studies cover an area of important agriculture in the United States, and, when completed, will afford local entities and the Corps to determine the best ways to avoid disastrous floods in the future. We also join with the City Council of Pueblo, Colorado, and the County Commissioners of Pueblo County, in recommending the appropriation of $210,000 for Phase II Planning of an essential Flood Control Program in the heart of the City. Phase I was begun immediately after a disastrous flood in 1965, and was completed in February of this year. Agreement has been reached by all parties as to the work necessary, and a copy of a letter from the Fountain Creek Commission accompanies this Statement.

The Committee also recommends the appropriation of $60,000 which will permit the Corps to begin essential Flood Control Studies on Fountain Creek between Colorado Springs and Pueblo. The section of the River is prone to periodic flooding, and a Study will provide essential information for the local entities and the United States on ways to alleviate such expensive and dangerous flooding conditions. We recommend the appropriation of $1.199 million for operation and maintenance of John Martin Reservoir and $288,000 for operation and maintenance of Trinidad Dam and Reservoir. John Martin is used jointly by the States of Colorado and Kansas, and during 1980 a number of Cooperative Programs were developed by Irrigation Companies in both States, and, for the first time since its completion in 1948, the Dam and Reservoir served the type of uses envisioned by the developers of the Project, and those who have seen its potential benefits wasted, because Cooperative Programs could not be developed. This Reservoir is operated in accordance with Interstate Compacts and agreements involving both Pueblo Dam and Reservoir and Trinidad Dam and Reservoir.

Mr. Chairman, and members of the Committee, we again want to thank each of you for the dedicated manner in which you and your distinguished colleagues in the Congress of the United States have permitted those of us who must deal with Water Resource Management on a day to day basis to appear before you to present our recommendations regarding essential Water Resource Programs in the Arkansas River Basin and the United States. We are firmly convinced that investments made by the Congress in such Programs are truly the best investment the United States can make, and economic returns to the economy of our Nation and the world are many times more than the original investment. We hope the members of Congress will continue their strong support for such Water Conservation Programs which will assure a water supply for future generations.

This same letter sent to:

Director of EPA, Washington
James Watt, Sec. of Interior
Gov. Lamm
Congressman Kogovsek
Senator Armstrong
Ken Kramer, Congressman
Bureau of Land Mgmt. Director, Washington

PUEBLO
City of Pueblo

Copies to:

Tommy Thompson
Col. Roth
Doug Ring
D.R. Luster
Jim Carter

March 9, 1981

RECEIVED
MAR 12 1981
SOUTHEASTERN COLORADO WATER CONSERVANCY DISTRICT

The Honorable Gary Hart
U.S. Senator
254 Russell Ofc. Bldg.
Washington, D.C. 20510

Dear Senator Hart:

At their February, 1981 meeting, the U.S. Army Corps of Engineers-Bureau of Rivers and Harbors approved a flood control project plan for the Fountain Creek in Pueblo, Colorado and has forwarded the plan to Congress for funding.

This project will necessitate the construction of levees and the clearing of the channel to provide much-needed flood protection to residential areas on the east side and for downtown Pueblo.

To quote from the Corps of Engineers report on the June 17, 1965 flooding of Fountain Creek: "Approximately 53 city blocks were inundated up to a depth of eight feet. City streets and utilities were washed out or clogged with debris; the interstate freeway was blocked and severely damaged; segments of the main railroad line were washed out; and several industrial and governmental establishments were heavily damaged or destroyed. There were 370 residences and 59 businesses damaged, touching 417 Pueblo County families."

This flood in 1965 produced a peak flow of 47,000 cfs on the Fountain Creek. The 100-year flood is estimated at 64,000 cfs. The proposed Corps of Engineers' project would provide protection of at least 85,000 cfs.

This project is essential to prevent the recurrence of serious flooding in Pueblo; and it will also provide for recreational facilities, bike and hiking trails, bridle paths, playgrounds and wildlife areas in the floodplain.

The program has broad public support. Not only have the State of Colorado, the Colorado Water Conservation Board, the City of Pueblo, the Pueblo Board of County Commissioners, and a number of other political entities indicated their strong support for the project--but other groups and local citizens are anxiously awaiting the implementation of the project.

If we can provide any additional information to your staff, please feel free to have them contact me at (303)544-3392 or D.R. Luster at (303)561-6431.

Very truly yours,

Manuel Rivera

Manuel Rivera, Chairman
Fountain Creek Commission

MR:mm

P.O. Box 1427 Pueblo, Colorado 81002 (303) 545-0561

Statement of
Gale A. Graham, Chairman for Missouri,
Arkansas River Basin Interstate Committee
Relative to Appropriation for the Comprehensive Development
of the Arkansas River Basin
for FY 82
to
The Chairman
Public Works Subcommittee
Appropriation Committee
U.S. House of Representatives
Washington, D.C.

Mr. Chairman and members of the Committee, my name is Gale A. Graham, Banker from Joplin, Missouri, and I appear here today on behalf of the Missouri members of the Arkansas River Basin Interstate Committee. My four colleagues are: Fred A. Lafser, Director, Department of Natural Resources, State of Missouri; Mr. Ted B. Evans, from Carthage, Missouri; Mr. Douglas Mahnkey, Attorney from Forsyth, Missouri; and Mr. Layne Morrell, Realtor from Kimberling City, Missouri. We represent the Southwest corner of Missouri which is a part of the Arkansas River Basin. We are honored to join our colleagues from Arkansas, Kansas, Oklahoma and Colorado in appearing before you today and certainly appreciate the time afforded us to testify collectively in support of appropriations for projects along the entire reach of the Arkansas River.

We have a vital interest in the requests which are being submitted today by the Chairman of our Arkansas River Basin Interstate Committee and urge your favorable consideration of those requests. Included in the President's budget for FY 82 are several projects in Southwest Missouri. We support these projects and hope that the funding as indicated in the President's budget will be approved. However, the capability of the U.S. Corps of Engineers for the Prosperity Lake Study, which was recently shifted from Center Creek to Shoal Creek, is $210,000. The President's budget request is for $150,000. We strongly urge the appropriation of $210,000 which would advance the study by at least three months.

A multipurpose reservoir in this area is urgently needed to meet the ever increasing water supply needs in the area of Carthage, Carterville, Webb City, Carl Junction, Joplin, Neosho and Granby. Not only the increasing population but also the growing per capita demand for water will combine to produce greater demand than supply in the above-mentioned urban triangle within a few years. The use of water from deep wells and streams for irrigation is increasing rapidly. The Missouri Geological Survey Office in Rolla, Missouri reports a drop in the water table of 15 to 20 feet in this immediate area in recent months.

We further support and urge your favorable consideration of all the projects in the Arkansas River Basin as listed on the appropriation request summary which is being presented today by the Chairman of the Arkansas River Basin Interstate Committee.

We have testified each year for many years concerning the importance of water resource management projects in the Arkansas River Basin and many others which are in the overall interest of the United States and we feel that adequate appropriations for such projects at this time will provide both immediate and long-range economic benefits for all our citizens.

We are greatly appreciative of your consideration of our needs in the past and solicit your favorable consideration of our requests as presented here today. We sincerely thank you for the opportunity to present them.

ARKANSAS RIVER BASIN INTERSTATE COMMITTEE

APPROPRIATION REQUEST SUMMARY

F/Y 82

PROJECT	STATUS	PRESIDENT'S BUDGET	INTERSTATE COMMITTEE REQUEST
ARKANSAS RIVER, CO	(S)	$ 450,000	$ 600,000
ARKANSAS RIVER, AR	(S)	-0-	100,000
CENTRAL OKLAHOMA PROJECT, OK (N)	(S)	-0-	300,000
FOUNTAIN CREEK, PUEBLO, CO (FDP)	(S)	-0-	60,000
GRAND (NEOSHO) RIVER, KS & OK (FDP)	(S)	-0-	400,000
LITTLE ROCK-NORTH LITTLE ROCK NAVIGATION STUDY, AR (N)	(S)	-0-	100,000
POTEAU RIVER, OK & AR (FDP)	(S)	200,000	300,000
PROSPERITY LAKE, MO (FDP)	(SP)	-0-	210,000
ARKANSAS RIVER AND TRIBUTARIES, CO	(SPE)	-0-	210,000
ARKANSAS RIVER AND TRIBUTARIES, MURRAY LOCK AND DAM 7, AR (N)	(SPE)	-0-	1,000,000
ARKANSAS RIVER AND TRIBUTARIES, W. D. MAYO LOCK AND DAM 14, OK (N)	(SPE)	-0-	700,000
FOURCHE BAYOU, LITTLE ROCK, AR (FDP)	(SPE)	-0-	500,000
PARKER LAKE, OK (FDP)	(SPE)	-0-	100,000
VERDIGRIS RIVER, MINGO CREEK, KS & OK (FDP)	(SPE)	-0-	500,000

Appropriation Request Summary*
Fiscal Year 1982
Page 2

PROJECT	STATUS	PRESIDENT'S BUDGET	INTERSTATE COMMITTEE REQUEST
EL DORADO LAKE, KS (FC)	(C)	$ 2,600,000	$ 4,100,000
SKIATOOK LAKE, OK (FC)	(C)	10,080,000	11,300,000
DOUGLASS LAKE, KS (FC)	(P)	-0-	100,000
SAND LAKE, OK (FC)	(P)	-0-	250,000
	WHITE RIVER BASIN FY 82		
WHITE RIVER BASIN, AR & MO (CS)	(S)	-0-	345,000
WHITE RIVER BASIN, COUNTY LINE LAKE, MO (FDP)	(S)	-0-	320,000

* It is emphasized that these requests were developed considering each project by itself. The amounts do not consider fiscal constraints, the Administration's assessment of appropriate national priorities for Federal investments, nor the impact of stated capabilities for other individual projects or studies on the Corps' overall capability.

(S) Study
(SP) Supplemental Preauthorization Studies
(SPE) Continuation of Planning and Engineering Studies
(P) Planning
(C) Construction
(CS) Comprehensive Study

(FDP) Flood Damage Prevention
(N) Navigation
(FC) Flood Control

Addendum to Report to
United States Senate and
United States House of Representatives

The ARKANSAS RIVER BASIN INTERSTATE COMMITTEE Members are:

FROM ARKANSAS:

W. A. Gieringer, Pine Bluff-Jefferson County Port Authority, Pine Bluff, AR - (State Chairman)

Wayne Bennett, Farmer and Businessman, Lonoke, AR

Homer Hall, Retired Farmer, Ozark, AR

Jerry Virden, Manager, Pine Crest Wood Products, Morrilton, AR

FROM OKLAHOMA:

Houston Adams, President, Bank of Tulsa, Tulsa, OK - (State Chairman)

E. R. Albert, Jr., Albert Equipment Company, Tulsa, OK

Robert S. Kerr, Jr., Oklahoma Water, Inc., Oklahoma City, OK

Harold B. Scoggins, Muskogee, OK

Fred G. Turner, Editor and Publisher, McAlester News-Capital, McAlester, OK

R. Dow Damron, Executive Secretary, Interstate Committee

FROM KANSAS:

James O. Foster, Utilities Coordinator, Boeing Military Airplany Company, Wichita, KS - (State Chairman)

Roger Brown, Vice President, Home National Bank, Arkansas, KS

Frank W. Liebert, Attorney, Coffeyville, KS

Taylor Peckham, Peckham Insurance Agency, Augusta, KS

Arthur T. Woodman, Architect, Wichita, KS

FROM COLORADO:

Charles L. Thomson, General Manager, Southeast Colorado Water Conservancy District, Pueblo, CO - (State Chairman)

Lee H. Hancock, The High Line Canal Co., Rocky Ford, CO

John Javernick, Farmer and Rancher, Canon City, CO

William McDonald, Director, Colorado Water Conservation Board, Denver, CO

Ray D. Nixon, Colorado Springs, CO

FROM MISSOURI:

Gale A. Graham, Vice President, First National Bank and Trust Company, Joplin, MO - (State Chairman and Chairman of the Interstate Committee)

Ted B. Evans, President, United Missouri Bank, Carthage, MO

Fred A. Lafser, Director, Department of Natural Resources, Jefferson City, MO

Douglas Mahnkey, Attorney, Forsyth, MO

R. Layne Morrill, Realtor, Shepherd of the Hills Realty, Kimberling, MO

The Honorable Tom Bevill, Chairman
Energy and Water Development
House Appropriations Committee
Washington, DC 20515

Dear Congressman Bevill:

On behalf of the citizens of the City and County of Muskogee, Oklahoma, we endorse and approve the action of the Arkansas River Basin Interstate Committee from Arkansas, Colorado, Kansas, Missouri, and Oklahoma in presenting their requests for appropriations with which to continue development of the natural resources in the Arkansas River Basin, before this honorable Committee of the United States Congress.

In addition, we endorse the full program on Public Works as adopted by the Arkansas River Basin Development Association of Oklahoma.

We are firmly behind those, who for years have supported the operation of the McClellan-Kerr Arkansas River Navigation System and completion of projects for the elimination of salt from the waters of the Arkansas and Red Rivers.

Nothing in the past half century has boosted the economy of the southwest as much as the completion of the Navigation System. Not only does it provide us with an economic source of transportation in savings on freight rates and electric energy but it also provides tremendous recreation and flood control facilities for the benefit of literally millions of people.

With such progress comes problems, which are simply part of the upkeep of such major projects, and correcting or eliminating them is as important as building the navigation system itself. We respectfully request that every consideration be given to the recommendations of the Arkansas River Basin Interstate Committee in order that our progress can continue to be as strong in the future as it has in the past recent years.

Sincerely yours,

Hardy Summers

Hardy Summers, District Judge
Oklahoma District Number 15

Michael C. Turpen, District Attorney
Muskogee County, Oklahoma

Eddie French, Chairman, County Commissioners
Muskogee County, Oklahoma

Fred Shelton, Commissioner
Muskogee County, Oklahoma

Kenneth Ward, Commissioner
Muskogee County, Oklahoma

Coleman Fite, Mayor
City of Muskogee, Oklahoma

James C. Leake, Chairman
Muskogee City/County Port Authority

A.B. Hensley, President
Muskogee Chamber of Commerce

J.E. Bob Wright, Executive Director
Greater Muskogee Development Corporation

Ed Edmondson, Former U.S. Congressman

Harold B. Scoggins, Member
The Arkansas River Basin Interstate Commission
Oklahoma

Bartlesville Area Chamber of Commerce
502 South Keeler • Bartlesville, Oklahoma 74003 • Phone 918-336-8708

ACCREDITED CHAMBER OF COMMERCE

March 2, 1981

Chairman
Subcommittee on Energy and Water Development
Appropriation Committee
House of Representatives

Dear Mr. Chairman:

The Bartlesville area is dependent on the Sand Lake for future water supplies. The City of Bartlesville made application for water supply storage in Sand Lake on May 16, 1960. Additional water supplies will be a necessity in 1988-1990. If our area is to continue to grow and prosper, it is imperative that planning funds be made available now for Sand Lake. Since it will take six or seven years to plan this project and another five years for completion, we find it essential that funds be appropriated in order that the water supply will be available when needed.

The Sand Lake should receive high priority consideration, as it offers benefits much more far-reaching geographically than the immediate vicinity. It will help alleviate flood conditions in the Caney, Verdigris and Arkansas River Basins. It is part of an integrated basin plan approved by Congress in 1962. All of the other structures are presently under construction. Without Sand Lake, we do not have a completed system.

We, the undersigned, strongly urge that the currently needed appropriation of $250,000 be made to start planning for Sand Lake.

Sincerely,

George C. Meese
Mayor of Bartlesville

Melvin W. Oates
President, Chamber of Commerce

Chairman, Washington Co. Commission

D. L. Osborne
Chairman, Caney Valley Conservation District

Chairman, Phillips Petroleum Co.

President, Caney Valley Water Shed Association

President, Copan Lake Association

STATEMENT IN SUPPORT OF
PROSPERITY LAKE IN MISSOURI
TO
Public Works Subcommittee
Appropriation Committee
U. S. House of Representatives
Washington, D. C.

It was determined by the U.S. Corp of Engineers in 1980 that a multipurpose lake on Center Creek was not economically feasible. Subsequently the study was shifted to possible locations on Shoal Creek. The cities of Joplin and Neosho as well as several incorporated villages in the area depend on Shoal Creek for their water supply. Drought conditions in the area have been quite severe and this, together with the rapidly increasing use of water for irrigation, have caused the water level in our area to drop 15 to 20 feet recently. The flow in Shoal Creek is at a very low level at this time and, if drought conditions continue, our area could very well be in trouble.

The President's budget allocates $150,000 to the Prosperity Lake study of alternate sites on Shoal Creek for FY 82. The U.S. Corp of Engineers have indicated a capability of $210,000 for FY 82. The additional $60,000 could speed up completion of the study by three months. We sincerely feel that the additional $60,000 should be budgeted for FY 82 and hereby request that the full capability of $210,000 be allocated for this project for FY 82.

Gary Trim, Manager
Joplin Water Works Co.

Jack M. Belden, Mayor
City of Joplin

Robert Moyer, President
Joplin Chamber of Commerce

James Berzina, City Manager
Joplin, Missouri

William H. Harper, Exec. Vice President
Joplin Chamber of Commerce

Charles Hargis
Associate Judge, County Court
Carthage, Jasper County, Missouri

P. D. Crockett, Mayor
Webb City, Missouri

Frank Dean, Mayor
Carl Junction, Missouri

John Shonkwiler
Presiding Judge, County Court

L.W. Higdon, Vice-Pres., Cashier
Bank of Neosho, Neosho, Mo.

R. Scott Grigsby, President
Neosho Area Chamber of Commerce

Gale A. Graham, Chairman
Missouri Members
Arkansas River Basin
Interstate Committee

Roy J. Cochran, Executive Vice-Pres.
First National Bank of Neosho, Mo.

ARKANSAS WATERWAYS COMMISSION
EXECUTIVE BLDG., SUITE 506 — 2020 W. 3RD Street
LITTLE ROCK, ARKANSAS 72205

JAMES H. PHILLIPS
EXECUTIVE DIRECTOR

COMMISSIONERS
CHARLES D. MAYNARD, CHAIRMAN
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AT LARGE
H. CARTER JEFFERY, V. CHAIRMAN
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H. K. THATCHER
CAMDEN
OUACHITA RIVER BASIN
JAMES WALDEN
HELENA
MISSISSIPPI RIVER BASIN
L. E. GILLILAND
TEXARKANA
RED RIVER BASIN

March 11, 1981

Honorable Tom Bevill, Chairman
House Energy and Water Development Sub-Committee
House of Representatives
Congress of the United States
c/o Rayburn House Office Building
Washington, D. C. 20515

Dear Congressman Bevill:

This letter is a component of a package submitted by Wallace A. Gieringer, Arkansas State Chairman, Arkansas River Basin Interstate Committee.

It is again the time of the year when the Arkansas Waterways Commission makes an appeal to Congress for funds to continue the development and operation and maintenance of the waterways of this State and the nation for water transportation and related purposes. We are aware of the need for a balanced budget and know that priorities must be set for federal investments. For these reasons, along with the long range objective of conserving energy, we request approval of the Corps of Engineers capability figures on the enclosure.

The nation's energy problem is one of the most serious problems facing the American people, and water transportation is acknowledged as being the most energy efficient means of transporting bulk commerce to locations where required. Arkansas must take advantage of the waterways as a means of transportation since 55 of our 75 counties are contiguous to navigable rivers. When developed these basins will assist the State and nation to achieve the long range goal of independence from foreign energy producers. We believe the identified investments in the river basins are basic to the needs of the nation and should be funded.

We are of the opinion that the appropriation of funds in the amount that the Corps of Engineers has indicated to be within their capability would do much to improve the economic situation in Arkansas by sustaining and attracting industry, putting people back to work by creating jobs, conserving fuels and enhancing the environment.

In view of the varying conditions of the inland rivers during the last several years (low flows) and the resultant deteriorated channels, it is particularly important that funds amounting to the Corps' maintenance capability be appropriated. As an example unless the capability amounts are appropriated project widths cannot be maintained on the McClellan-Kerr System and there will be deterioration to the facilities that will result in decreased efficiency and increased costs in future years. This fact was driven home during the drought this past summer.

This Commission would appreciate your personal support and the support of your Sub-Committee in behalf of the projects discussed herein.

Sincerely,

James H. Phillips
Executive Director

JHP/cjf
cc: Governor Frank White
Arkansas Delegation
Commissioners

FC/MR&T	APPROVED	3 Feb 81
CI	APPROVED	25 Feb 81
CG	APPROVED	2 Feb 81
OCE	APPROVED	2 Feb 82

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
FC/MR&T, Construction						
Mississippi River Levees	FC	26,100		47,930		Initiate 3 items.
(Vicksburg District Portion)		(10,700)	3,000	(20,700)	5,500	Advance completion 4 months.
Channel Improvement	FC	62,100		145,000		
(Vicksburg District Portion)		(14,000)	200	(46,600)	800	Dikes: Initiate 1 item.
Tensas Basin	FC	25,000		31,700		
Boeuf & Tensas Rivers, etc.		(18,000)		(18,200)		
All Work Except Lake Chicot Pumping Plant		500	0	700	0	No additional requirement in Arkansas.
Lake Chicot Pumping Plant		17,500	17,500	17,500	17,500	No additional requirement.
Red River Backwater Area		(7,000)		(13,500)		
All Work Except Tensas Cocodrie Pumping Plant		800	0	2,300	0	No additional requirement.
Tensas Cocodrie Pumping Plant		6,200	0	11,200	0	No additional requirement.
FC/MR&T, Maintenance						
Mississippi River Levees	FC	7,600		8,440		
(Vicksburg District Portion)		467	155	747	249	Miscellaneous levee repairs.
Channel Improvement	FC	39,564		47,359		
(Vicksburg District Portion)		(9,356)	3,118	(12,215)	4,071	Dikes & Revetment: Repairs at various locations.
Boeuf-Tensas Rivers	FC	94	0	94	0	No additional requirement.
Lower Arkansas River, AR	FC					
North Bank		47	47	47	47	No additional requirement.
South Bank		106	106	106	106	No additional requirement.
Inspection of Completed Work	FC	483	48	483	48	No additional requirement.
Mapping	FC	406	41	511	41	Additional quadrangle mapping.

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
FC/MR&T, General Investigations						
Boeuf-Tensas Basin, S.AR & N.LA	FDP	785	195	785	195	No additional requirement.
Collection & Study of Basic Data		165	55	165	55	No additional requirement.
General Investigations						
Ouachita River Basin, AR & LA	FDP	1,000	240	1,300	415	Advance completion of four interim studies: Arkansas Lakes 6 months ($75) Navigation 9 months ($100)
Construction, General						
Blakely Mountain Dam - Lake Ouachita, AR, Sanitation Fac (711)	MP	790	790	790	790	No additional requirement.
Narrows Dam - Lake Greeson, AR, Sanitation Fac (711)	MP	130	130	530	530	Complete construction for sanitary improvements at 4 sites and engineering and design for existing sanitary deficiencies at 8 sites. Initiate sanitary improvements at 2 sites.
Ouachita & Black Rivers, AR & LA	N	24,500	24,150	26,900	26,550	Continue hydrographic surveys. Initiate Felsenthal existing structure removal.
Operation & Maintenance, General						
Blakely Mtn. Dam-Lake Ouachita, AR	MP	2,465	2,465	6,010	6,010	Increased operation of recreation facilities. Repair recreation facilities and roads.

CORPS OF ENGINEERS
FISCAL YEAR 1982 CAPABILITIES IN ARKANSAS
(Vicksburg District Portion Only)

APPROPRIATION/PROJECT	CATEGORY	FY82 BUDGET ($1,000)	FY82 BUDGET ARKANSAS PORTION ($1,000)	FY82 CAPABILITY ($1,000)	FY82 CAPABILITY ARKANSAS PORTION ($1,000)	PURPOSE OF ADDITIONAL CAPABILITY
Operation & Maintenance, General (cont)						
DeGray Lake, AR	MP	2,523	2,523	3,288	3,288	Repairs to project roads.
Narrows Dam-Lake Greeson, AR	MP	2,125	2,125	4,570	4,570	Rehab recreation facilities and increase operation at recreation areas.
Ouachita & Black Rivers, AR & LA	N	3,690	1,490	5,840	1,640	Rehab L&D's after inundation.
General Regulatory Functions	N	584	195	695	232	Aerial photos and navigability studies.
Inspection of Completed Work	FC	64	21	64	21	No additional requirement.

MEMPHIS DISTRICT*

	OPERATION AND MAINTENANCE	REMARKS
MR & T	$11,950,000**	1/3 of capability figure to be used in Arkansas
WHITE	1,843,000	Mile 10 to Newport
BACKWATER	430,000	
HARBORS:		
OSCEOLA	637,000	
HELENA	332,000	

* - Study figure for district omitted.

**- Dredging

ARKANSAS RIVER, ARKANSAS
FY - 82 BUDGET AMOUNTS

PROJECT	TYPE PROJECT				APPROVED FY - 82 CAPABILITY AMOUNTS
	SURVEYS	ADVANCED ENGINEERING AND DESIGN	CONSTRUCTION	OPERATION AND MAINTENANCE	
ARKANSAS RIVER IN THE VICINITY OF FT. SMITH-VAN BUREN	$410,000	0	0	0	$410,000
ARKANSAS RIVER & TRIBUTARIES HYDROPOWER & OTHER PURPOSES, ARKANSAS AND OKLAHOMA	488,000	0	0	0	488,000
BLUE MOUNTAIN LAKE, ARKANSAS	0	0	0	$635,000	758,000
ARKANSAS RIVER, RUSSELVILLE-MORRILTON, ARKANSAS	0	0	0	0	100,000
CLARKSVILLE, ARKANSAS	0	0	0	0	200,000
DARDANELLE LOCK & DAM, ARKANSAS	0	0	0	3,108,000	3,978,000
McCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, ARKANSAS & OKLAHOMA	0	0	$14,000,000	14,296,000	14,296,000 (O&M) 14,500,000 (Const.)(1
LITTLE ROCK-NORTH LITTLE ROCK, ARKANSAS	0	0	0	0	100,000 (Surveys)
NIMROD LAKE, ARKANSAS	0	0	0	744,000	844,000
OZARK-JETA TAYLOR LOCK & DAM, ARKANSAS	0	0	0	3,666,000	5,956,000
ARKANSAS RIVER HYDROPOWER, MURRAY LOCK & DAM, AR	0	0	0	0	1,000,000 (Adv Pln)
FOURCHE BAYOU IN THE VICINITY OF LITTLE ROCK, AR	0	0	0	0	500,000 (Adv Pln)
TOTALS	$898,000	0	$14,000,000	$22,449,000	$43,130,000

(1) Recommended reduction by $1,500,000 due to low bid on pipeline construction contract.

TUESDAY, MARCH 23, 1981.

COLUMBIA DAM

WITNESS

ZYGMUNT PLATER

Mr. BEVILL. The next witness is Dr. Zygmunt Plater, Wayne State University, Columbia Dam.

Mr. PLATER. Yes, sir.

Mr. BEVILL. You may proceed as you wish.

Your statement is already made a part of the record now. Just summarize it as you wish. You are allotted five minutes.

[Statement of Mr. Plater follows:]

STATEMENT OF ZYGMUNT J. B. PLATER, WAYNE STATE UNIVERSITY LAW SCHOOL, RE 1982 ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL

I am a professor of administrative law, land use, environmental law, and property law; from 1973 to 1976 I was professor of law at the University of Tennessee; beginning then, and continuing until 1980 I was professor of law at the University of Tennessee; beginning then, and continuing until 1980 I was volunteer counsel in the lawsuits and extensive public debates on the economic, social, and ecological effects of the TVA Tellico dam.

My comments will primarily deal with TVA issues, but are intended as well to be relevant to the energy and water public works program in general.

Let me use three specific TVA examples to set up some premises and permit some constructive suggestions:

(1) At this time of year in 1976 and 1977, as in prior and subsequent years, the Chairman of the TVA, then Mr. Aubrey "Red" Wagner, came before you to testify in favor of new appropriations. He told you that the TVA region had a desperate shortage of electric power generation capacity and desperately needed half a dozen new nuclear units at its Yellow Creek, Phipps Bend and Hartsville plants.

At the same time, informed citizens testified that TVA was actually over built; that the demand statistics were in reality far lower than TVA's claims, and power capacity needs (even allowing a 20 percent margin for flexibility) did not justify adding new units to the TVA system and to TVA ratepayers' monthly bills. A 1978 GAO study (98-75, Electric Energy Options-TVA) backed up the citizens analysis and testimony.

The appropriations committees at that time chose to accept the TVA claims and disregarded the outside testimony, funding all the projects that TVA proposed.

This year Tennessee ratepayers and the United States are paying the price. As the Reagan transition team noted, the TVA system is now committed to a grossly expensive and unnecessary building program. Even if some units are delayed or scrapped, millions have been irretrievably sunk, and on the units which continue, Tennessee rate payers will be obliged to pay ever higher prices for unnecessary power capacity, even though their consumption remains the same.

(2) The Tellico Dam. Chairman Wagner also came before these committees repeatedly to urge funding for his Tellico dam project which claimed recreation benefits and profits from the sale of condemned farmlands as its two primary purposes. Since it was the beginning of the energy crisis, however, Chariman Wagner emphasized possible electric power benefits. And it was he who repeatedly focussed the issue and "insignificant" little fish, the snail darter.

The citizens' testimony was consistently based upon economic facts: that besides destroying a beautiful historic river, the project's claimed recreation benefits were negative in comparison to the flowing river's; that even if it were proper to condemn more than twice as much private land as necessary for the reservoir for federal resale, prior TVA experience showed that new industry would not come to the fluctuating lakeshore; and that since the dam did not have generators, the electric power produced through diversions would equal less than 23 megawatts equivalent (and this would not even be peaking power). A GAO study and an intensive Cabinet-level review backed up the citizens' deflation of project benefits, and the desireability of a river-based non-dam development alternative.

Today, because of an appropriations rider exempting Tellico from all contrary laws, that beautiful river is dead, 340 farm families have lost their lands, and along

the riverbank the most sacred places of the Cherokee civilization lie under 100 feet of mud and water. The water diversions have produced a paltry 23 megawatts equivalent of power, at a capital cost higher than the most expensive nuclear facilities; the farmlands condemned for industrial development lie empty, and no industry has come. Even the real estate industry, which provided the real push for this project over the years, is not happy with the results.

(3) The TVA Columbia dam project on the Duck River is again before the appropriations committees this year, and citizens have been joined in their factual testimony by the extensive 197-page analysis prepared by the House Committee on Government Operations. (House Report 96-1533, Dec. 11, 1980). The citizens over the years have noted that this dam is an economic negative in every regard: Recreation—minus; industrial development—purely speculative; water supply—unnecessary in that region; loss of 11,000 acres of farmland; most of the "lake" lying in open mud-flats six months of the year; destruction of a farming community and a beautiful remnant stretch of river. And the Government Operations committee came to that same conclusion: it was "curious to know how you can add that many minuses and neutrals and get a plus at all, just mathematically, even with the new math." (Comment of Rep. Fithian, Gov. Ops. Report, 102).

"Based on the investigation of the Subcommittee on Environment, Energy, and Natural Resources and on its own review of the record, the Committee has determined that completion of the Columbia dam and reservoir is not in the public interest. That finding is based in part on TVA's own heretofore-undisclosed determination that the original project benefits can be obtained without a dam, without destroying 54 miles of river, without eliminating 13,000 acres of farmland and at a favorable benefit/cost ratio. Those project benefits under the no-dam alternative can be obtained for $15 to $25 million—compared to the $78 million needed to complete the planned Columbia dam and reservoir. TVA repeatedly showed a disregard for its fundamental responsibility to American taxpayers to spend their tax dollars wisely." (103-04, 108.)

And a further note: we often forget that even TVA never claimed that Columbia Dam was cost-justified—it justified the dam by including it in a package with the upstream Normandy Dam. TVA based its economic claims in part on a claim that Normandy would have generated 400 jobs by today, five years after completion. (TVA, 1969 Supplementary Notes, 13; Gov. Ops. Report 12). The citizens refuted those claims. The appropriations committees accepted TVA's arguments completely, and rejected the citizens' completely. Today not a single industry has even expressed an interest in coming because of the dam, and not a single job has been created.

These examples of the past are only painful, embittering reminders, unless we can use them to improve future decisions.

Accordingly, here are some constructive conclusions:

1. Government spending decisions are only as good as the information on which they are based. If today's decisions are to be viewed in the future as something more than wasteful mistakes, then the committees might to well to be a bit skeptical of the benefit claims of the construction agencies and the private parties who will profit directly from the federal construction subsidies. The past indicates that the committee should take account of the research and factual testimony supplied by citizens who are outside the agency subsidy process. This is equally true whether citizens are talking about direct monetized costs and benefits or non-monetized social costs and benefits, which also are real and must be part of rational decision making.

2. Review past projects to see if their actual performance has lived up to agency claims. Now, it could be argued that the examples I have given, where citizen economic testimony was ultimately more reliable than the agency's analysis, may be exceptions. Remarkably we do not know, for the appropriations process has no retrospective accountability provisions. It is revealing that construction agencies and the appropriations process have not generally undertaken follow-up studies to examine whether the benefit-cost claims made for various proposed projects in the past were borne out in actual performance once those projects were built. Sources within TVA report that no follow-up studies have been made because there is general internal agency agreement that past projects built in the last two decades do not fulfill their purported projections. One recent study by a non-agency analyst revealed that transportation benefits claimed in 52 water projects over the past 35 years actually had average benefit-cost ratios between 0.0000 and 0.0009; only nine of the projects had any net benefit at all. Allen, An Ex-Post Benefit-Cost Analysis of U.S. Waterway Construction Projects, Univer. of Penn. Dept. of Economics Ph.D., 1979. The few other studies which have been made reach similar results. Further follow-up studies by non-agency analysts would help the committees classify the

economic foundation of present proposed projects. Information feed-back and accountability are basic needs in any rational decision-making system.

At this point let me digress a moment and note that some will say these first two suggestions are naive: that it is well known in Congress that agency benefit-cost claims are highly fictionalized justifications for sending federal subsidies out to the districts. Thus economic criticisms of agency project claims by non-agency economists and other citizens miss the political point. According to this viewpoint, moreover, the porkbarrel system is bigger than all of us, politically far beyond the possibility of conscientious modification.

Times are changing, however, and with them the political context of the public works programs. There have been interesting indications that the Reagan budget will retreat somewhat on selected projects. At that time of tax cuts, the nation risks a real credit panic to the degree in which it does not cut back cost-inefficient spending. Now may be the time to say that it is subversive of the national economy to fund projects that are not only not maximally cost-beneficial but also may actually be negative on an overall benefit-cost analysis. The most profitable hundreds of water projects were built in the 1930's, 1940's, and 1950's; the country may no longer afford the luxury of being wasteful.

3. In that vein, perhaps the appropriations process should explore ways to build a better pork barrel. The political function of the public works programs doesn't have to continue a program of the 1940's. There are variety of cost-efficient technologies for public spending programs—constructing rail and other energy-efficient transport systems, educational and health care facilities, implementing (as TVA has begun) broad programs of home retrofitting for energy savings, rebuilding deterioriated dams, cleaning out silted-in past projects, and so on. Such programs would deliver money in cost-efficient form, with credible multiplier effects, and politicaly appreciable local consequences.

4. I hardly need say that, based on the public record, this committee should follow the cost-cutting lead of the Reagan Administration and authorize no more funds for the TVA Columbia Dam.

Finally let me note that there are often dangers in having a system that ignores the real costs and benefits of prepared projects. These constitute yet another form of "subversion."

As a teacher of law I counsel hundreds of students to use our governmental system to give effect to their ideals and to the fruits of their analytical research. I have been honored to work over the past seven years with a magnificent group of Tennessee farmers, students, and the Eastern Band of Cherokees, trying to protect a fabulous remnant of the Tennessee River system. Armed only with the facts and the law they were able for six years to make the system work—in the courts up through the Supreme Court, in Congress in three years of hearings in the proper substantive committees, and in the executive branch, where often a full dress economic review by a Cabinet-level review committee set up by Congress unanimously upheld their position on economic grounds. But the porkbarrel system subverted their efforts. On June 18, 1979, in just 42 seconds, in a virtually empty chamber with no mention or discussion of the Tellico project, the House Appropriations Committee slipped a rider onto the 1979 public works appropriations bill overriding all laws violated by that project; once on the appropriations bill it was virtually impossible that it could be removed. This cynical move violated the rules of the chamber, was unprecedented in its blanket scope, and ignored the merits so painfully and democratically worked out by the citizens over the years. Several hundred of us had labored for years for that valley; part of each of us died with the river, and along with it, part of our faith in the integrity of the governmental system. You can in some measure, perhaps restore the latter, by your actions in these new times, and in the future.

[From the Los Angeles Times, Sept. 2, 1979]

Those Who Care About Laws or Sausages Shouldn't Watch Them Being Made

(By Zygmunt J. B. Plater)

Late on the afternoon of June 18, the floor of the House of Representatives was sparsely populated as the 1980 public-works appropriations bill approached final passage. The pork-barrel money bill had weathered its battles and roll-call votes, and members had drifted off to attend to other things as the clerk droned on through the uncontroverted text.

When the clerk reached the section on appropriations for the Tennessee Valley Authority, a lone congressman stood up. "Mr. Chairman," said Republican John J.

Duncan of Knoxville, Tenn., handing an amendment to the clerk, who began to read it. "Mr. Chairman," Duncan repeated quickly, interrupting the clerk and thus waiving the procedure for reading proposed amendments. Then Rep. Tom Bevill (D-Ala.), chairman of the Appropriations Committee's public works subcommittee, rose and declared that he had seen the amendment and approved it without its being read, a sentiment immediately echoed by the subcommittee's senior Republican, John T. Myers of Indiana. A voice vote was called and the amendment was declared passed. (On the official House video tapes, no "ayes" can be heard since there were so few members present.) The episode took 42 seconds, and the bill moved on the routine final passage an hour later.

What happened in those 42 seconds capped the decade's most dramatic pork-barrel saga. The next morning's Congressional Record revealed a full-text amendment that repealed all laws—federal, state and local—as they applied to the TVA's long-disputed Tellico Dam, and ordered the dam's immediate completion.

Thus began a new chapter in the Tellico case, one that raises fundamental questions about law-making ethics, and about the contest between economic fact (not to mention conservation principles) and pork-barrel rhetoric.

Tellico, you will remember, is the recreational dam project that was stopped because it threatened a tiny, endangered fish, the snail darter. But last January, the darter became a taxpayers' hero when a special Cabinet-level review committee set up by Congress unanimously decided against the nearly completed dam on economic grounds. Charles Schultze, who is chairman of the Council of Economic Advisors and no knee-jerk ecologist, declared: "If one takes just the costs of finishing it against the (total project) benefits and does it properly, it doesn't pay, which says something about the original design."

A large portion of the project's $111-million cost to date went for acquisition of prime farmland that would be flooded to create a lake. The review found that preservation of that farmland, together with the project's road improvements and related development, would have more value to the area's agricultural, tourism and industrial health than would a recreation lake and dam.

The TVA itself revealed last December that the project was actually in violation of a parade of legal constraints beyond those applying to the endangered fish: The agency had neglected to comply with flood-plain management rules, waterway-alteration permit requirements, historic site preservation laws (the Little Tennessee Valley, the heartland of the old Cherokee nation, is the richest remaining archaeological trove to the Southeast), conservation laws, and remarkably, dam-safety requirements. The dam, it turned out, could not safely contain the maximum probable flood for which it was designed in the 1960s, and would need another $14.5 million in new spillway construction even to meet the old standards.

Thus to promote the dam, its backers could no longer merely seek an exemption from endangered-species laws. They now needed a blanket exemption from all applicable laws—and so it was.

But how can this happen, asked the shocked Tennessee farmers, sportsmen and conservationists who had fought for 15 years to bring out the case for their valley. Here was a sweeping legislative reversal in less than 60 seconds, with not a word from the factual record so laboriously compiled in courts, agencies and endless congressional hearings. Here was an appropriations amendment that sweepingly changed existing law, a move specifically prohibited by the rules of the House. Though this was the most drastic such violation he had seen, said one of the House parliamentarians, the applicable rule can only be enforced on the moment by a point of order, and since no member had heard the amendment in time, none had been made.

By attaching the rider to the appropriations bill, Duncan's maneuver took on special life. "There are enough goodies in this appropriations bill for all the senators and congressmen to go along with my amendment," Duncan told a reporter.

The rider went to the Senate where the pork-barrel pressures mounted. The dam was pushed by the Tennessee senator with presidential ambitions, Republican Howard H. Baker. He had helped last year to engineer the compromise that had sent Tellico to its extraordinary executive review; now he wanted to override that process because it had decided against the dam. Nevertheless, on July 17, the Senate narrowly defeated the Duncan rider, led by the hard-driving statesmanship of Democrat John C. Culver (who surely gets little credit for his efforts back home, unless Iowa farmers know or care about the Tellico case), with the help of John H. Chafee (R-R.I), Alan Cranston (D-Calif.) and others who care about governmental principles.

Back in the House after a deadlocked conference, the bill was against the Appropriations Committee's baby. The issue, the committee said, was quite simply minnows versus a dam. The exemption amendment was not improper, they asserted,

because no point of order had been made. A blanket exemption from multiple laws? Not mentioned. The economic record? It cannot be true, they said; after all, hadn't Congressman Duncan told them that the dam cost $111 million and is 99% complete? (That's not quite the whole truth. The dam accounts for less than 20% of the total project cost.) We need energy, they said. (But the dam has no generators. Its water-flow might produce 22 megawatts for an adjacent reservoir's generation, just a drop in TVA's 27,000-megawatt system.) Furthermore, the committee said, we control the funds for projects in every congressional district. (It's hard to argue with that fact of life.)

John B. Breaux (D-La) of the Fisheries and Wildlife Committee, which held hearings on the economics of Tellico for three years, was given a scant five minutes in an empty chamber to ask the House to strike the amendment.

Fifteen years of citizen efforts and three years of congressional economic studies came to this: It was late at night as the chamber filled for the vote. The appropriations committee stood by the door with Duncan joined by House Majority Leader Jim Wright of Texas. "What's the vote about?" asked the members as they arrived on the floor. "It's the fish versus dams," said the doorwatchers, pointing thumbs down. The dam won by 100 votes.

To the citizen in the gallery, what advice was possible? President Carter cares about economics, wildlife conservation, prime farmland and government ethics, but will his staff let him rise to a veto? The Senate will have to vote again this month, and if the senators hold the line again, it goes back to the mercies of the House and the Appropriations Committee. The media have ignored this precedent-setting case, so the "little fish" caricature and the dam boosters' claims go on unchallenged.

With a knowing smile, a legislative aide to a pork-barrel, congressman leaned over the gallery rail and whispered to me and a group of Tellico-area farmers: "Will Rogers was right. Anyone who cares about laws and sausages shouldn't watch them being made."

Mr. PLATER. Thank you, Mr. Chairman.

STATEMENT OF DR. ZYGMUNT PLATER

I am Zygmunt Plater, a law professor at Wayne State University. I have also been voluntary counsel for a group of farmers and sportsmen in Tennessee on various projects over the past six years. My comments are applicable to the Columbia Dam on the Duck River in Tennessee which you are well aware of. But also as a teacher, I hope my comments will have more general application.

What you are talking about today are Federal subsidies for water projects in a very critical fiscal time. That raises important questions about how the water project subsidy program over the past 30 years should continue in the future and I hope that my testimony can raise some constructive points.

Let me give you three quick examples of a problem that may indeed exist. You get most of your information from agencies of the Federal Government that want to build subsidized projects, supported by private interests that will get a share of those subsidies. There, of course, is a logical danger that that presentation will not see true.

There are a number of examples I could point to. The first is energy. Aubrey Wagner used to come here every spring and in the 1976–77 hearing he told you there was a critical need for more capacity for electric generation in the Tennessee Valley area and asked you to take account of TVA's increased building program which indeed went on. The citizens argued, backed up by a GAO study, that the TVA was already overbuilt. If you read the Reagan transition report, it appears that it was the citizens not the TVA economists who were giving you accurate testimony.

A second case is the TVA Columbia Dam. Remember TVA never claimed a positive cost benefit ratio for this project, but justified it

by lumping it together with the Normandy Dam upstream which did have. The citizens came in and said that Columbia, which has no generators, would not produce real benefits, and the costs to farmers who were going to lose 12,000 acres of their land to be flooded and another 20,000 to be resold to industry was not financially justifiable. Well, the Columbia Dam went on. The Normandy Dam had been built. The committee has funded just as TVA has asked.

I think it is important to note what has happened there as well. The Government Operations Committee has published a book, which I suspect you know about, which is the first indepth analysis of TVA's claims with TVA's own figures. It indicates on TVA's own figures the project is not worthwhile.

I would like to tell you about Normandy as well. TVA told you that Normandy was justified because there would be 400 industrial jobs there five years after closure. Today, five years after closure, the citizens were right, not one single job had been created by an industry coming to the shores of that lake. I think you get the drift of the point.

Tellico is another example as well. For six long years I fought with citizens who had fought for 12 years saying TVA's justifications were incorrect. I don't know if the committee realizes it but out of the courts and out of the agency reviews, out of the GAO studies and finally the unanimous economic review by the committee that you set up for the endangered species act, it was clear Tellico does not have generators and would produce a paltry 23 megawatts at a cost of $150 million—which as you know from your energy projects, is a sad joke—at a cost of 340 farm families who were going to be condemned not primarily to be flooded for recreation, but so their land could be resold at a profit by TVA.

Well, the citizens said that that did not make economic sense either. As I say the GAO, the Cabinet level committee repeated that as well. But the committee chose to go along with TVA. Today that beautiful river, because of the appropriations rider, has been destroyed, the last stretch. The farmers are all off the land and of course there is no industry that has moved in to buy the land. So it is a double insult to the farmers I represented.

Mr. BEVILL. Your time is up. Would you wrap it up in briefly.

Mr. PLATER. Sure. The lessons I draw from this are, number one, that citizen input, outside economists who are not paid by the agency are relevant to your consideration and should not be ignored. Number two, that the committee should look at follow up of past projects. Have you ever considered where the claimed benefit cost ratios of projects which you have been asked to fund have in truth produced those benefits? Number three, is continue to zero budget the Columbia Dam as the Reagan budget has done. Number four, constructive suggestion: Perhaps we can invent a better pork barrel, subsidize energy conservation, water resource for the northeast, rebuilding sewage and water supply facilities and so on.

My testimony goes into these points longer. But my final one is this: We are in a critical economic time, so wasteful projects are economically subversive. But this whole program is also subversive of the legal and political process in which we live. The rider which took 42 seconds and overroad all Federal, State and local laws that

had been applied to the Tellico project, did not take account of the economics, did not take account of the hearts of the people in Tennessee that were being broken for a project that was shown on the facts not to be able to be justified in economic terms.

I would suggest that the lessons of the past continue to be important for the future. In economics that is especially important and it is your committee's special charge.

I would like to be constructively helping in that process rather than criticizing the products of the economics of the 1940s port barrel project that is still with us today.

Thank you.

Mr. MYERS. Professor, do you represent Wayne State today?

Mr. PLATER. No, I am here on my own behalf. But as I indicated I was counsel for the citizens of Tennessee who were working on this project over the years.

Mr. MYERS. I hope you are a better law professor than you are one who understands the rules of the House when you made the statement on page eight when you cite the violations of the rules by this committee.

Mr. PLATER. That is right. But if you would like to debate the parliamentary point——

Mr. MYERS. No, no, you came to present your case. I explain to you, I hope you understand the law better than you do the rules of the House.

Mr. PLATER. Are you questioning my interpretation of the rules? Because I think you are criticizing my interpretation of the rules.

Mr. MYERS. I am not criticizing, I am saying you are wrong.

Mr. PLATER. According to the House Parliamentarian.

Mr. BEVILL. Your time is up. We have to move on.

Thank you very much.

Mr. PLATER. I would like to note for the record, sir, that if Mr. Myers wants to question——

Mr. BEVILL. If you have any further statement you can submit it. The record will be open for five days.

MONDAY, MARCH 23, 1981.

GREEN BAY HARBOR, WISCONSIN

WITNESS

HON. TOBY ROTH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. BEVILL. Next is Green Bay Harbor, Wisconsin.

I see our colleague Toby Roth here. You may proceed as you wish.

STATEMENT OF CONGRESSMAN ROTH OF WISCONSIN

Mr. ROTH. Thank you, Mr. Chairman.

I want you to know that I appreciate the time that you have given me, you and the members of your committee. I know your time is at a premium. I would like to make it real short, just a couple of sentences.

The appropriations to complete the 1962 Green Bay Harbor project is a subject of great concern to my office and the Eighth District of Wisconsin. It is my understanding that the post authorization change, the final document needed for the Corps of Engineers to show capabilities, is about to receive final approval and that approval should be received before you begin markup of the appropriations bill.

The Corps has indicated it then will show capabilities for fiscal 1982. Your inclusion of this project in the markup session for fiscal year 1982 would be greatly appreciated.

[The statement of Mr. Roth follows:]

SUMMARY—GREEN BAY HARBOR, WISCONSIN, 1962 MODIFICATION

REQUEST

Support for the approval of funds in U.S. Corps of Engineers fiscal year1982 budget for the required construction of the project in line with the Corps of Engineers capabilities. Estimated cost of project at $3.8 million. First phase, fiscal 1982, $1.7 million dredging. Second phase, contemplated fiscal year 1983, $2.1 million dredging completion and bridge modification.

STATUS

The Green Bay Harbor project was completed in 1973 except for the portion from 150 feet downstream of the CNW bridge through and to 1,700 feet upstream of the bridge. The uncompleted work was authorized by Congress in the 1962 River and Harbor Act (Public Law 87-874). In 1979, funds were appropriated by the Congress to study the completion of the project. A detailed design memorandum recommending construction of the project was forwarded by the Corps of Engineers to the Chief of Engineers in Washington, D.C. in August, 1980. Further required documents will be submitted by the Detroit Distict to the Chief's Office before the end of March, 1981. The Corps of Engineers has indicated that they will show capabilities for the project before the end of the markup session on the fiscal year 1982 budget.

Mr. BEVILL. We have made your entire statement a part of the record.

Mr. ROTH. Thank you. I want you to know, Mr. Chairman, I think you and your committee are doing a great job.

Mr. WATKINS. I yield my time to the gentleman from Indiana.

MONDAY, MARCH 23, 1981.

CENTRAL ARIZONA PROJECT

WITNESS

FRANK WELSH, EXECUTIVE DIRECTOR, CITIZENS CONCERNED ABOUT THE PROJECT

Mr. BEVILL. We now take up the Central Arizona project. Mr. Welsh, we are ready for you now. You may proceed as you wish.

Mr. WELSH. Thank you, Mr. Chairman, members of the committee, my name is Frank Welsh, Executive Director of the Citizens Concerned About the Project, an Arizona-based citizens taxpayer group.

As my testimony notes on the first page we have repeatedly said, Arizona has plenty of water for its people, for its future growth. Here we are quoting the recently completed Hudson Institute report from the famous Herman Kahn which even goes beyond

what we have stated before, saying Arizona has enough water to support California's present population.

Arizona's water supply without the CAP can support a population greater than the largest most populous State in this Nation. We go on to say the city of Tucson has admitted it will not dry up and blow away if the CAP is not completed. Therefore the CAP must be justified on economic purposes.

As we pointed out previously, Dr. Power in his definitive study of the CAP shows that the benefit cost ratio is less than 35 to one. This goes further than President Carter's rapid analysis in 1977 which showed the benefit cost ratios ratio at today's discount rate was something like .58 to one. I have included with my testimony a recent letter from Dr. Power which shows that delaying this project will essentially have no effect on the project in real dollar terms. I have also enclosed an article from Fortune Magazine, February 23, 2982, entitled, "Ending the Southwest Water Binge," stating, "Fears to the contrary there is no real water shortage yet and won't be if the price of water is allowed to seek its own level."

There is a free market approach to water that we have been advocating all these many years. I would like to note that in the middle of the first page of the Fortune Magazine article it goes on to say, "The proposed budget for fiscal 1982 that the Reagan Administration inherited contains at least $1 billion for western water projects and gives the new President an opportunity to show he is serious about cutting Federal spending."

So there is one thing I would like to correct in this article. It says the CPA, $2.2 billion CAP, is one-third completed. The first part of the CAP to be built and one-third of the money spent to date was for the Navaho power plant which can continue to produce low cost energy for Arizona.

The act, we deduct, itself, therefore is less than 25 percent completed at this date. Therefore it is not too late to go with the suggestion of Fortune Magazine to delay or Power's suggestion to delay, Fortune Magazine's suggestion to stop it. That would give you time to propose even more constructive alternatives to this project than we have in the past.

I have enclosed an article from the National Audubon Magazine to show that the concept we came up with last year for straightening Arizona's and California's water problems through free market methods is catching on elsewhere. Essentially what we are saying is since two-thirds of the CAP water will come from California, from the water Los Angeles is presently using, why doesn't Arizona sell its water to California, that California is presently using? This would save billions of dollars in the Central Arizona Project, billions of dollars in the Delta Peripherial Canal and Lord knows how many hundreds of millions of kilowatts of energy if we keep pumping water uphill.

On Orme Dam probably the most controversial part of the CAP, that is the reason I was not back last year because we had a so-called flood. I must point out that the local entity has done what it must do. It has essentially solved most of the problems itself. It has built or is building and has authorized a dozen large bridges. If those bridges had been in place in the last three years, 99 percent of the people in Phoenix would not have known there was a

"flood." So we are solving the problem. The problem still remains, two, three years ago, that we have several unsafe dams upstream of Phoenix. You recall that was ignored until such time as the February 1980 flood, when the Salt River project panicked the residents of Phoenix by saying one of their dams might fail. You will recall it created quite a bit of panic.

So let me end by saying that here in the Central Arizona project we have at least one sacred cow that has escaped from Mr. Stockman's thundering herd. Thank you. I would be glad to answer any questions.

[The statement of Mr. Walsh follows:]

TESTIMONY TO THE U.S. CONGRESS, PUBLIC WORKS APPROPIRATIONS SUBCOMMITTEES

My name is Frank Welsh, Executive Director of Citizens Concerned About the Project. We fully support President Reagan's plant to fight inflation through massive cuts in the federal bugdet. We also agree with Federal Reserve Chairman Paul Volcker that the cuts may not go far enough. For years our organization, which is primarily citizen, taxpayer-oriented, has been asking for reduction in spending in the area where we are most familiar. Our special interest is our pocketbook. Unlike other "selfish" interest groups, as the President calls them, who say cut everyone's project but ours, we ask that our special project, the Central Arizona Project (CAP), be cut even more than proposed.

We would prefer across the board cuts in all items, except perhaps defense. It certainly looks bad to substantially reduce funding for the handicapped, school lunches, youth job programs and educational aid while leaving water projects virtually unscathed. The President proposes curbing low interest loans, like 9 percent for students, while permitting construction to continue without delay on no-interest and low interest water projects, like the 3 percent CAP.

Here is at least one sacred cow that has escapted from Budget Director David Stockman's "thundering herd." The President's promise to not cut programs for the truly needy is admirable. We ask that you cut funding for a project that is truly unneeded and will be detrimental to the truly needy. Reducing welfare for the poor can surely be questioned when welfare for the rich is not reduced, especially when welfare for the rich will be paid for by the poor. The poor in Arizona will have their water bills and property taxes raised to pay for water they don't need.

Most people have been lead to believe that Arizona has a water shortage and that if the CAP is not completed soon, our cities will dry up and blow away. Nothing could be farther from the truth. Herman Kahn's prestigious Hudson Institute summarized Arizona's water supply in its 1979 report called Arizona Tomorrow:

"If all agricultural water was reallocated to municipal uses in 1970, the state could have supported a population of over 25 million people (compared to an actual 1,775,000 in 1970). Note that this is in 1970, not 2012. Moverover, this scenario does not incorporate the development of new water supplied from the Central Arizona Project or others coming on line after 1970."

Thus Arizona's present water supply can support a population greater than California, our most populous state. Even the mayor of Tucson, purportedly the largest city in the nation totally dependent on groundwater, admitted to this Subcommittee in an April 5, 1978 statement: "I do not intend to indulge in the kind of scare tactics sometimes employed when matters of water projects are discussed. Tucson will not dry up and blow away without the CAP." In a May 1977 report to the city, the consulting engineering firm of Black & Veatch found Tucson's available water supply to be adequate for many centuries, adding that "losses which may result from litigation are relatively small in comparison to available supplies."

The attached article, excerpted from the 2/23/81 issue of Fortune manazine, suggests that it is not water shortages but artificial water pricing due to massive federal subsidization that is the real culprit of the southwest's water problems. It points out that the southwest is only short of cheap water, discussed the waste and mismanagement that is occurring and proposes free market pricing of water as the solution. The removal of federal subsidies should encourage conservation, just as with oil and natural gas decontrol.

An upcoming article in an even more widely read magazine describes our proposal to sell California our CAP water (which she is already using). The attached 1/81 article from the National Audubon Society shows that this idea is catching on, especially as an economic alternative to California's controversial Delta Peripheral Canal. This concept would save the federal, Arizona and California governments

billions of tax dollars and billions of kilowatt hours of energy. The simplicity of these solutions is particularly appealing because they utilize the free enterprise system—that's the American way—of solving our water problems.

The enclosed letter to the editor (Arizona Republic, 3/7/81) by Dr. Thomas Power presents some additional arguments for reducing or even eliminating funding for the CAP. Dr. Power wrote the definitive report on this project and found the benefit/cost ratio to be less than 0.35 to 1.0. As he points out in his letter, it is foolish to throw good money after bad by continuing to fund this project. As of September 1980, $640 million has been spent on the CAP. Of that, one-third of the cost was used to build the Navajo power plant. If President Reagan halts CAP construction, this plant will continue to provide energy for Arizonans. Therefore, the aqueduct is less than 25 percent completed and by stopping the CAP now, we will be saving the 75 percent that would be wasted.

As for Orme Dam, the most controversial part of the CAP, the alternatives study has come up with several solutions that are less costly and can be accomplished much more quickly. We are concerned that the government seems more interested in spending as many tax dollars as possible rather than solving the flood problem for the lowest cost possible. Hopefully, the new Administration will change this. We also hope the President will maintain this philosophy that local government should solve its own problems. The Arizona local governments have done just that by passing floodplain regulations and building bigger bridges to solve most of the problem. The remaining problem can be solved if the irrigation district/municipality/utility/monopoly known as the Salt River Project will use its six existing dams for flood control as well as storage.

[From the Arizona Republic, Mar. 7, 1981]

Arizonans Should Bite the Bullet

Editor:

It probably would be unreasonable to expect consistency from the conservatives whose passion for eliminating federal government spending programs and ending federal government involvement in what are basically state problems helped put Reagan in office and Republicans in control of the Senate.

It is only fair, I suppose to allow conservatives, like liberals, to have their own "legitimate" dependencies upon the federal dole and to scream loudly in anticipation of their pet ox being gored in the orgy of budget cutting they themselves initiated.

But there is some limit to how loose such embarrassed conservatives can be allowed to get with arithmetic and facts. Your recent editorial on the Central Arizona Project certainly has trespassed beyond that limit.

In order to contrive the "fact that "approximately 70 percent of the federal funds invested in the CAP will be repaid by the people of Arizona," one has to ignore the interest subsidy the nation's taxpayers would give Arizona. In a period of 12 percent inflation and 20 percent interest rates, a 50-year no-interest or 3.34 percent interest loan is as free a lunch as most of us could dream of. If the going interest rate were only 7 percent, the gift to Arizona would amount to $5.5 billion over the repayment period. Assumedly, fiscally responsible people do not wish to simply hide the federal subsidies; they wish to limit or end them.

The $778 million already invested in CAP would not be entirely lost. It includes the $230 million invested early in the last decade in the Navajo power plant at Page. This plant will continue to function, generating relatively low cost electricity at a profit which can easily pay off the remaining costs. That $230 million investment in electric generation is worth approximately $500 million today if one looks at replacement costs. Thus most of the federal investment will not be lost. Besides, a responsible investor, which one would hope conservatives would insist the government be, does not "throw away good money after bad" just because an investment mistake was made earlier. No federal project could ever be ended if that logic was applied to each.

If "every year of delay can add as much as $100 million in inflated costs" to a $2.1 billion project, the project is keeping ahead of the 12 percent inflation rate and its real cost to the taxpayer is declining with each passing year by 7.24 percent! The mere passage of time is not making the project more costly in real terms. Responsible money managers certainly would want to distinguish between real and nominal changes in costs.

If "fiscal restraint" and "evenhandedness" in budget cutting mean anything, CAP will be one of the first casualties of the conservative fight to control the federal

government. If it servives, the message to other special interest groups will be clear, and the battle to control the monster we all find on our backs will be lost.

THOMAS MICHAEL POWER,
Professor and Chairman, Department of Economics,
University of Montana, Missoula, Mont.

[From Audubon Conservation Topics West, December/January 1980-81]

MORE WATER, LESS PORK

While sounding like political "double-speak" there may be a way of providing more water to arid Southern California without building additional billion dollar water project boondoggles! Such an intriguing idea has been posed by the Maricopa Audubon Society of Phoenix, Arizona. Their proposed alternative would.

Eliminate the need to divert water from Mono Lake.

Reverse the dangerous overpumping of Owen's Valley groundwater.

Make unnecessary the development of the Peripheral Canal and its associated impacts on San Francisco Bay, the delta and north-coast free flowing rivers.

Postpone the nightmare time of thirsty Californians looking to the Columbia River for water.

The Arizona Audubon chapter proposes to scrap the Central Arizona Project (CAP) and sell Arizona's future water entitlements for the Colorado River to California. Both the economic and ecological arguments for their plan appear strong.

Why had Maricopa Audubon made such an environmentally-sensitive proposal for California? Because it would keep intact the remnant riparian forests along the Salt and Verde Rivers in Arizona, which provide habitat for the eight remaining pairs of desert-nesting Bald Eagles left in the Southwest.

One of the largest of the pork-barrel water projects in history, the billion dollar CAP was originally authorized under the Reclamation Act which was meant to aid the small family farmer. Paradoxically this "reclamation" project is now being promulgated as a rescue project for two of the most prosperous cities in the nation, Tucson and Phoenix.

By not building the CAP dams and canals and selling Arizona's water entitlement to California there would be sufficient revenue for Arizona to eliminate state property taxes and to develop a trust fund to bring the state's groundwater overdraft into balance and develop effluent reuse and water recycling programs.

[From Fortune Magazine, Feb. 23, 1981]

ENDING THE SOUTHWEST'S WATER BINGE

(By Julia Vitullo-Martin)

To most Americans the semiarid and desert regions of the Southwest evoke sharply contrasting images—the old one of cowboys roaming the dusty terrain in search of waterholes, and the more recent one of verdant new communities whose growth is dizzying even by Sunbelt standards. The whole region, which stretches from western Texas to the southern California coast, seems a threatened paradise, with agriculture, industry, and urbanization fast approaching the limits dictated by scant rainfall.

The statistics sound scary. Arizona claims that its supply of water already falls short of its needs by 2.3 million acre-feet a year; an acre-foot of water, or 326,000 gallons, is enough to cover an acre to a depth of one foot. California is said to have a shortage of three million acre-feet, and West Texas four million.

Yet profligate waste goes on amid all the water worries: gardeners in Beverly Hills hosed down sidewalks during the 1978 drought; farmers routinely use irrigation water far more lavishly than they really need to; desert developments like Arizona's Fountain Hills feature enormous fountains—in this case the world's largest, shooting water skyward at 7,000 gallons a minute. Arizona, the second-fastest-growing state in the country with an estimated population jump of 53 percent during the seventies, ranks eighth in the nation in per capita water use.

BILLIONS FOR DAMS

The waste goes on because the Southwest's water is underpriced. As Fortune said of the entire country 15 years ago ("Water Shortage Is a Frame of Mind," April 1965), the Southwest is not running out of water—it's running low on cheap water.

The region's problems differ from those of large parts of the Northeast and Midwest currently suffering water shortages; these are a temporary affliction caused by subnormal rainfall in parts of the country that usually get more than they need. In the Southwest, limited rainfall is a permanent condition. But subsidies—mainly from the federal government, which has spent tens of billions on dams and canals—have kept the price artificially low. Because water is priced far below its replacement cost—the cost of providing additional supplies—it is being squandered.

The Southwest's reaction to its artifical water shortage is to cry out for even more federal spending, on projects ranging from the one-third-completed, $2.2-billion Central Arizona Project to a $26-billion dream of bringing water from the Mississippi to western Texas. The proposed budget for fiscal 1982 that the Reagan Administration inherited contains at least $1 billion for western water projects—and gives the new President an opportunity to show he is serious about cutting federal spending. The same opportunity was bungled by Jimmy Carter, who in the early days of his Administration made a "hit list" of water projects, a lot of them in the West, and then bowed to political pressure and allowed many of them to go ahead.

NEEDED: A WATER MARKET

New projects could be avoided for years if the price of water were allowed to move toward its replacement cost, which is 50 times what some farmers are currently paying. This would happen if all users whose water supplies exceed their needs were allowed to sell to those who don't have enough. Amazingly, the buying and selling of water is restricted in most of the region, and this encourages those with a surplus to use it wantonly.

NOT A PENNY FOR INTEREST

One obvious reason is that most of the water comes from projects built years ago, at a fraction of today's costs, by the Water and Power Resources Service (WPRS), the federal agency concerned with western water supplies. But that's far from the whole story. By law, the fees collected by the WPRS, formerly called the Bureau of Reclamation, cover only costs defined as "reimbursable." Under this formula users repay some of the funds advanced to build the projects, but not all. Nor does Washington get a penny of interest on construction funds used in irrigation projects—quite an omission in a time of high interest rates.

The fees do not even cover the government's operating and maintenance costs. Many projects are designed to control floods as well as to supply water, and the law bars WPRS from charging users—even farmers in a flood plain—for any part of a project attributable to flood control. Finally, irrigation water is priced according to the ability of farmers in each area to pay. Small wonder, then, that many federal projects aren't taking in enough to cover even their narrowly defined reimbursable costs. California's Central Valley Projects loses $79,000 a day.

At the turn of the century, when Congress passed the Reclamation Act, it made sense for the rest of the country to help underwrite development in the Southwest. The region couldn't be opened up without water, and few private groups had the capital to finance projects themselves. But as the recent economic growth suggests, the region no longer needs favored treatment. Subsidies, moreover, are a needless drain on the federal government when it is running huge deficits. And underpriced water, whether from federal projects or any other source, is bad for the Southwest.

DRIP, NOT DITCH

Because water is so cheap, its use is based on its price and not its supposed scarcity. Many farmers, for example, use inferior land to grow low-value crops that require large amounts of water, like alfalfa and sorghum. Similarly, many farmers use cheap, open-ditch systems of irrigation, which use almost six times as much water as the more expensive sprinkler systems, and 100 times as much as drip irrigation, which allocates controlled amounts of water to each plant. The General Accounting Office concluded in a 1976 study that more than 50 percent of all the country's irrigation water is wasted.

Water-saving irrigation systems require a relatively large capital investment—roughly $1,000 per acre for drip systems—but in the long run, farmers can come out ahead by increasing their yield per acre-foot of water or growing higher-value crops. So long as water is cheap, however, many farmers see little reason to make the switch. As a result, the Southwest's farm economy as a whole is producing less food than it might, and less wealth. The Rand Corp. estimated in 1978 that California alone was losing between $60 million and $370 million annually from the inefficient use of water.

Farmers are not the only careless users of water. The Los Angeles region today bothers to clean up only 60,000 acre-feet a year of its 550,000 acre-feet of potentially reusable wastewater, while insisting that the State build a $1-billion canal to bring south another 600,000 acre-feet from the northern part of the State. Even State governments are wasteful.

The West's extravagant use of water has also reduced water quality to the point that some farmland—including land in California's San Joaquin Delta, one of the most productive agricultural regions in the country—is being poisoned by water-borne salts. State and federal projects take so much fresh water from the delta to send south that its water table has been dropping, permitting ocean water to move farther into the water table from San Francisco Bay. Similarly, the naturally saline Colorado River is so overused by the time it leaves the Southwest and enters Mexico that its water is highly salty—too salty for agricultural use, says Mexico.

GRANDFATHERING THE RIGHTS

If the Southwest is to avoid a true water shortage from which it might never recover, the waste will have to stop. The way to stop it, as with any limited commodity, is to introduce the discipline of the marketplace.

It is impossible to create a market for water as efficient as the market for pork bellies or Seventh Avenue dresses. For one thing, it would be politically difficult if not illegal to sweep away the great patchwork of water rights granted over the years to farmers, cities, industry, and political jurisdictions. These rights, which in many cases still have decades to run and involve prices ludicrously below replacement costs, would have to be "grandfathered." The only exception might be water from sources that are "overappropriated," most notably the Colorado River. The total claims on this river's water, though never fully exercised, exceed the total flow into the Southwest by at least two million acre-feet and therefore may someday have to be cut across the board.

Any reform of water pricing, therefore, would have to be accompanied by some kind of restraint to keep users from depleting the common groundwater. The water table is falling in at least some sections of all western States. Pima, the county around Tucson that relies entirely on wells, is pumping groundwater five times as fast as nature replenishes it. The Ogallala Aquifer—one of the country's largest underground revervoirs, extending 160,000 square miles under eight States—gets recharged hardly at all. West Texans, who are heavy users, are "mining" its water at the rate of four million to six million acre-feet a year.

Some economists, including William Martin at the University of Arizona, see nothing wrong with using water faster than nature replenishes it. "There's no reason to avoid mining water any more than we avoid mining coal, or copper, or any depletable resource," says Martin. "Economically, resources do us no good just lodging in the ground."

AN OBVIOUS BUYER

Most economists who push for a free market want to permit users to sell any water they have, conserved surplus and all. Richard Howitt, an economist at the University of California at Davis, suggests that if all California farmers were able to sell the water they didn't need, enough water might be freed up to eliminate the need for more government water projects, at least in the near future. "No one knows," he says, "what farmers would do if they were given clear title to their water and permitted to sell it. But suppose the farmers of the Imperial Valley wanted to sell some of their water—say 300,000 acre-feet. An obvious buyer would be the Metropolitan Water District of Southern California, which as the system in place for transporting the water cheaply. The farmers would make a profit, and the water district would get more water."

TOO GOOD TO THROW AWAY

Economist Lee Brown of the University of New Mexico argues that full market pricing would induce more southwestern cities to treat waste water, which can then be used for most purposes other than drinking swimming.

The Southwest's mines require tremendous amounts of water. 25 gallons to produce a pound of copper. Even water at $160 an acre-foot, however, would not put the mining industry out of business. Some companies have already been forced to buy land at up to $2,500 an acre just for the groundwater, and then must pay pumping and delivery costs of $40 to $80 per acre-foot to lift it. Furthermore, mines have the technology to reuse about 30 percent of their water, and higher prices would induce them to recycle even more than they do now.

But what about agriculture, which uses about 90 percent of the West's water? Most experts doubt that calamity is in the cards. The University of Arizona's Martin says that without additional water at subsidized prices, 25 percent of Arizona's acreage would go out of production. But by his estimate, the net value of the farm crop would fall only 12 percent.

THE HAND ON THE SPIGOTS

There may be less time for facing up to the Southwest's water problems than is commonly realized. Just to the north, in the states that lie upstream on the Colorado, water usage is rising. The rise could turn into a surge if a lot of shale-oil plants, which consume tremendous quantities of water, get built. If this happens, upstream "donor" states will claim more Colorado River water than they have to date. It is only because of the nonexercise of these claims that the Southwest has been spared a shortage under the present wasteful pricing system.

Even before those shale-oil plants begin to appear to the north, Ronald Reagan may show his hand on water policy in ways that the Southwest may not like. If Reagan's policies in his Sacramento days are any guide, we will finish up construction projects already under way but initiate no new ones. When he was stumping California as a candidate, Reagan applauded water projects, but while he was governor not a single new dam or aqueduct was started. Since Governor Reagan turned down the water spigots, there's no reason to believe that President Reagan will keep them wide open.

Mr. BEVILL. The Chair recognizes Mr. Myers.

Mr. MYERS. Mr. Welsh, how many people, how many members do you have, Citizens Concerned about the Project?

Mr. WELSH. Dues paying members, somewhere in the 500 range. Volunteers depending on the issue and public hearing, in the thousands and more.

Mr. MYERS They pay annual dues?

Mr. WELSH. The volunteers don't. The annual dues are in the hundreds range.

Mr. MYERS. How many do you have here in Washington?

Mr. WELSH. Just myself. We were told several times before that we should not spend our money and waste energy coming here.

Mr. MYERS. I cannot advise you on that. I don't know how to spend my own, let alone yours.

The CAP was initially authorized by Congress 12 years ago with the overwhelming support of both Senators, and Congressional delegation. Since that time I believe it has had the support of all Congressional delegations, Senators, House Members, the Governors. It has had the overwhelming support to our knowledge of most, anyway, of the businesses locally. Are you saying all those people have been wrong all those years about this project?

Mr. WELSH. I would never say they are wrong. I would say that the facts have not been getting out until recently. When we first started in 1973 looking at this project most people in Arizona thought the CAP was the Civil Air Patrol. They thought they had a water shortage. They thought they did not have to repay the CAP. We find increasing concern about the Central Arizona Project, and especially Orme Dam, as people become more and more aware of the facts.

Mr. MYERS. There is presently a Central Arizona Water Control Study under way. Would your organization be willing to adhere to whatever the recommendation is they finally make? Are you going to go along with them?

Mr. WELSH. Our organization has been working closely with this organization to make sure the study is as good in the time frame permitted. Already this study has come up with the alternatives to

Orme Dam that are something like $200 million, whereas Orme is half a billion dollars.

Mr. MYERS. Will your organization accept their recommendation?

Mr. WELSH. I think we have to take a look at it before we make that determination.

Mr. MYERS. Thank you.

[Additional information follows:]

SUPPLEMENTAL TESTIMONY

During cross-examination following my testimony on March 23, 1981, Congressman Meyer asked whether our group would support the findings of the Orme Dam Alternatives (CAWCS) study. We have real problems with the methodology employed by the Federal agencies doing the study. They seem interested only in maximization of benefits. We as a primarily taxpayer organization are in favor of a least cost alternative, especially one that would alleviate our flood problem as soon as possible.

We are also concerned about the agencies' method of determining the value of water that might be produced by Orme Dam. They assume that entire farms will go out of production and are attempting to use values in excess of $65 per acre foot. We have cited five independent studies that show that the value of additional water is only $15 per acre foot.

The latter value would apply to Central Arizona Project water—Orme water would be in addition to that and would therefore be worth considerable less. These studies use the classic economic theory which holds that the least valuable crops would go out of production in the event of a reduction in water supply.

Recent efforts to tout Orme as an energy producer are also spurious. Using energy to pump Colorado River water uphill 1,200 feet to Orme and then dropping it around 100 feet to produce energy indicates that Orme is a net consumer rather than a producer of energy.

MONDAY, MARCH 23, 1981.

CORPS OF ENGINEERS BUDGET

WITNESS

ROBERT MOHR

Mr. BEVILL. Next is Mr. Robert Mohr.

Mr. Mohr, you may proceed as you wish.

STATEMENT OF ROBERT MOHR

Mr. MOHR. Thank you, Mr. Chairman.

I would like to read my statement. It is very brief.

My name is Robert Mohr. I live in Hall County in north Georgia. I thank you, Chairman Bevill, and this distinguished committee for allowing me to make a statement concerning a grave problem.

Our home and property are adjacent to a narrow strip of Army Corps of Engineers controlled government property located between our home and Lake Sidney Lanier. The Corps has now, for the first time, licensed a Georgia corporation for profit to use and maintain a road and boat-launch ramp on the government property directly between our home and the lake. Corps reaction to my objection to this unprecedented and unneeded licensing has brought me before this committee.

In defending our home against the Corps and its agents, I have doumented, through the Freedom of Information Act, that in an

attempt to justify this unprecedented action, the Corps has been wasteful, unbridled, self-serving and corrupt to the highest Corps office. I use our home and this problem only as a reference to describe documented Corps actions.

Corps waste is demonstrated by the volume of paperwork in which the Corps has engaged in attempting to justify this unprecedented action. Glaringly wasteful of money and manpower are a four-man token inspection of the project by Colonel West from South Atlantic Division on December 12 and a five-man inspection by District Engineer Colonel Ryan from Mobile on January 26. No inspection reports were written, primarily because the project does not conform to the license, the intent of the license or the Corps-approved platt.

Although it functions in the private sector, the Corps is responsible only to the Defense Department. Recourse to Corps harassment and other actions is difficult because of the size and complexity of the agency, and because of its taxpayer-funded legal force. In our case, while we awaited an appeal process promised us by Robert Solheim of the South Atlantic Division, the project in front of our home was "railroaded" through to near completion by the Division. When we requested the process under the Freedom of Information Act, we were simply told that no such process exists.

The Corps uses its budgeted funds to expand Corps power and influence into the private sector. It is purchasing unneeded private property around Corps projects. In our case the Corps has effectively transferred the access to the lake from our home to a corporation controlled by associates of the Resource Management.

We reported to the Resource Manager that an Athens boat dealer was using the government property in front of our home as an extension of his business with no remuneration to the public. Instead of stopping this activity, the Resource Manager attempted to grant an unrestricted license which would permit the business activity to continue with still no remuneration to the public from the boat dealer. The license was granted by the Mobile District Engineer with some restrictions. The remuneration to the public from the corporation is $22 per year. When I requested a GAO Fraud Hot Line investigation of these actions, the South Atlantic Division Engineer assigned the investigation to a Division lawyer. No investigation of evidence was conducted, and the lawyer used questionable statements from those being investigated as the sole defense of their actions. The GAO investigation consisted of two in-house reports. They differed so greatly that these differences were alibied by the Corps' Chief Counsel. The Division Engineer who thusly took care of GAO problems is now the Corps' Chief Engineer.

I have documented Corps personnel making false statements to us, to each other and to Senator Sam Nunn and former Senator Herman Talmadge.

I urge this committee to support and recommend maximum Corps budget cuts. Reducing the Corps budget to minimum operating expenses will stop its unwarranted expansion into the private sector. Also, and equally important: We should spend our defense dollars for the defense of our Nation—not to enlarge a self-serving agency.

[The information has been retained in committee files.]

Mr. BEVILL. Thank you very much, Mr. Mohr.

I notice Congressman Ed Jenkins, our good friend and colleague, was very anxious for you to have whatever time you needed. We were delighted to accommodate him and schedule you. We appreciate your testimony. Certainly the committee will consider the entire report.

Mr. MOHR. Thank you, sir. I cannot tell you how honored I am to be here and tell you that Congressman Jenkins has been such a help to me. There is no description for it. It is people like that that make this country what it is.

Mr. BEVILL. He is a very outstanding member of Congress.

MONDAY, MARCH 23, 1981.

ILLINOIS PROJECT

WITNESS

HON. ROBERT McCLORY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. BEVILL. I see our good friend and colleague Congressman Robert McClory is in the committee room. We will be glad to hear from you, Bob.

STATEMENT OF CONGRESSMAN McCLORY OF ILLINOIS

Mr. McCLORY. Thank you very much, Mr. Chairman, members of the committee. Thank you for the opportunity to again appear before your committee in connection with the several projects in my Congressional District which I am very interested in.

Mr. BEVILL. You don't have any pork barrels, do you, Bob?

Mr. McCLORY. No. As a matter of fact, we have very, very modest projects that are in the interest of conserving the natural environment and protecting what we have against destruction.

Three of these projects have been included within the recommended budget which you have before you—the Fox River and Tributaries; Waukegan Harbor, Illinois operation and maintenance; and the Waukegan Harbor Dike Disposal operation and maintenance. Two additional planned projects are not within the present budget recommendation before you—the Illinois Shore of Lake Michigan Study and the Illinois Shore Waukegan to Illinois-Wisconsin State line.

Mr. Chairman, I beg your indulgence to briefly explain the purpose of these proposals.

One: The Fox River and Tributaries—$383,000. This is an urgently needed multi-purpose project directed toward flood control, elimination of pollution, expanded recreational use of this waterway and eventual utilization of these waters for domestic needs. If funded, it is anticipated that by the end of fiscal year 1982 the Corps of Engineers will have produced a selected flood control alternative and will have a draft environmental impact statement on that alternative. The study would be approximately 70 percent

completed by the end of fiscal year 1982. Approximately $120,000 in fiscal year 1983 should totally complete this project.

Two: Waukegan Harbor, Illinois operation and maintenance—$388,000. This project contemplates stone placement along the breakwater and some other structural repairs. The large stones will replace stones that have shifted or been displaced. Also, a walkway with handrails is in need of repair and being made suitable for handicapped persons.

Three: Waukegan Harbor Dike Disposal operation and maintenance—$108,000. I am advised that Waukegan Harbor has not been dredged for several years, but due to the discovery of PCBs in the Waukegan Harbor the EPA will not allow the Corps to dredge it. The Corps has a method for handling polluted material but has not yet developed a plan for handling hazardous material such as PCBs.

These funds would be used to try to locate a place which can be modified to accept the PCBs and to design such facilities and then dredge to place or dump the hazardous materials in an accepting facility. That is, of course, extremely important to my constituents. What to do with the PCBs in the Waukegan Harbor is a major concern to all of us. And it can be a big problem.

Mr. BEVILL. Jack Edwards is having that problem down in Mobile.

Mr. MCCLORY. We appropriated last year $1½ million for the EPA, I believe, to develop a way of getting rid of the PCBs there. This I understand is the highest concentration of PCBs anywhere.

So this is along the line of trying to get rid of those.The district flows down and goes along the entire Cook County and Chicago area.

Four: Illinois Shore of Lake Michigan study—$300,000 total, $133,000 in my Congressional District. Two portions of this study relate to my district:

(a) Interim 4, Stage 1—$32,000—for the purpose of studying the effects of Waukegan Harbor and the Great Lakes Naval Training Center harbor structures on the adjacent shores. In addition to the effects of wind and tide, the Corps also wants to study the effects of manmade structures on erosion of the shoreline and beaches.

(b) Interim 4, Stage 2—$101,000—for the purpose of completing a coastal hydraulic analysis of the impact of the Waukegan Harbor and Great Lakes Naval Training Center on the shoreline erosion problem.

In other words, an initial analysis should allow the Corps of Engineers to make educated guesses of problem areas and then the second stage would be to conduct actual hydraulic analyses of structures selected for further study. A demographic study of the area would also be included. I am advised that the other portion of this funding involves the Casino Beach at the southern end of Lake Michigan in my colleague Harold Washington's district. Needless to say, control of beach and shoreline erosion is critically important along the entire Lake Michigan shoreline.

Five: Illinois Shore, Waukegan to Illinois-Wisconsin State Line—$125,000. A step 1 preliminary report has just been completed which investigated 14 alternative small boat harbor plans. I understand that the results of this Step 1 study showed that the best site

for such a small boat harbor would be the Illinois Beach State Park area. Fiscal year 1982 funds would be used to select one alternative harbor plan within the Illinois Beach State Park area and begin developing that plan. The intent is to find the most economical alternative harbor and to develop environmental data regarding the selection. The study would then be completed in fiscal year 1983.

Mr. MYERS. Pardon me, didn't we put money in there a couple of years ago for that study?

Mr. MCCLORY. Yes. You have put money in there before. It was for studying the entire area between Waukegan and the Wisconsin line. The Corps of Engineers now has settled on the area of Illinois Beach Park. This is to determine where in Illinois Beach Park to establish this.

Mr. MYERS. We approved one at Waukegan, didn't we, a safe boat harbor four or five years ago? Wasn't that approved?

Mr. MCCLORY. It is a lot longer than that. What has happened there is that the Waukegan Harbor has been greatly expanded through State funds. It is being greatly expanded, but not through funds that have been appropriated by this committee.

Mr. MYERS. Several years ago we put money in for Waukegan Harbor, I am sure.

Mr. MCCLORY. I am sure you have. Of course, as I say, these are navigable waters. There are large ships that flow into—that pass through into the Waukegan Harbor. There are oceanic, transAtlantic ships that use Waukegan Harbor to a very limited extent. They have a gypsum plant there and they have a cement plant there, I believe. That is the principal use that is made of the harbor.

Anyway, this small boat harbor project, or the study for it, would be completed the year after.

We try to bring before the committee useful projects that have a great public interest, but I am sure you do not regard them as large in terms of money, but they are large in terms of importance to my district and my people.

Mr. BEVILL. You notice this subcommittee always considers your requests. I am sure it will again. We appreciate your coming before us.

Are there any questions by anyone?

Thank you very much, Bob.

Mr. MYERS. Thank you.

Mr. BEVILL. The committee will stand adjourned until 10 o'clock tomorrow.

TUESDAY, MARCH 24, 1981.

CENTRAL ARIZONA PROJECT

WITNESSES

HON. JOHN J. RHODES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA
HON. MORRIS K. UDALL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA
HON. BRUCE BABBITT, GOVERNOR OF THE STATE OF ARIZONA, ACCOMPANIED BY WESLEY STEINER, DIRECTOR, DEPARTMENT OF WATER RESOURCES, STATE OF ARIZONA
CHARLES WETZLER, CHAIRMAN OF THE BOARD, CENTRAL ARIZONA PROJECT ASSOCIATION
T. RICHMOND JOHNSON, EXECUTIVE DIRECTOR, CENTRAL ARIZONA PROJECT ASSOCIATION
MORLEY FOX, WASHINGTON REPRESENTATIVE, CENTRAL ARIZONA PROJECT ASSOCIATION
KARL ABEL, CHAIRMAN OF THE BOARD, SALT RIVER PROJECT
MIKE RAPPAPORT, DIRECTOR OF GOVERNMENTAL AFFAIRS, SALT RIVER PROJECT
HOWARD WUERTZ, CHAIRMAN OF THE BOARD, CENTRAL ARIZONA WATER CONSERVATION DISTRICT
BURR SUTTER, CHIEF COUNSEL, CENTRAL ARIZONA WATER CONSERVATION DISTRICT
KEL FOX, CHAIRMAN, ADVISORY BOARD TO THE DEPARTMENT OF WATER RESOURCES
JOHN SMITH, CHAIRMAN OF THE BOARD, MARICOPA-STANFIELD IRRIGATION DISTRICT
MAURICE LANGLEY, CONSULTING ENGINEER, MARICOPA-STANFIELD IRRIGATION DISTRICT

Mr. BEVILL. The committee will come to order.

We are pleased to have with us this morning our distinguished colleagues Congressman John Rhodes and Congressman Mo Udall, and I see Governor Babbitt has come in and we are pleased to have you.

If you will, just come up to the table here and present your case as you wish.

STATEMENT OF CONGRESSMAN RHODES OF ARIZONA

Mr. RHODES. Mr. Chairman, it is a real pleasure and honor for me to be here today and to introduce to the subcommittee some very important citizens of the State of Arizona.

In the room we have Mr. Charles Wetzler who is Chairman of the Board of the Central Arizona Project Association.

Would you please stand as I call your name?

T. Richmond Johnson, Executive Director of the Central Arizona Project Association.

Morley Fox, who is the Washington Representative of the Central Arizona Project Association.

Howard Wuertz, Chairman of the Board, Central Arizona Water Conservation District.

Burr Sutter, Chief Counsel, Central Arizona Water Conservation District.

Kel Fox, Chairman of the Advisory Board to the Department of Water Resources.

John Smith, Chairman of the Board, Maricopa-Stanfield Irrigation District.

Maurice Langley, Consulting Engineer, Maricopa-Stanfield Irrigation District.

Congressman Bob Stump is unable to be here today because of an Armed Services Committee hearing. He asked me to inform you, Mr. Chairman, that he associates himself with my formal statement which I will submit for the record.

Mr. BEVILL. Yes. Permission is granted. And we are certainly pleased to have all of these distinguished citizens here and that you have called their names which will be in the record showing that they are in attendance here today on behalf of this project.

Mr. RHODES. Mr. Chairman, as we also do, to show—and the chairman is well aware of—the extent to which the State of Arizona is behind the Central Arizona Project I am pleased and honored to be able to introduce my good personal friend, the Governor of the State of Arizona, the Honorable Bruce Babbitt.

Bruce, will you take over?

STATEMENT OF GOVERNOR BABBITT OF ARIZONA

Governor BABBITT. Congressman Rhodes, thank you.

Mr. Chairman, it is a pleasure to be back with you. This is the fourth year I have been back with the aid of the Congressional Delegation and I must say it is extremely satisfying for me to be here on behalf of all of the folks in Arizona to tell you that we are making a lot of progress and, with the help of this committee and Congress, this project which has been the central fact of Arizona's developmental future for the last 30 years is now progressing toward completion.

The Granite Reef Aqueduct, as you have seen with your own eyes, Mr. Chairman, is now very near to completion and that is the aqueduct from the river up to Phoenix.

Construction has now begun on the Salt, Gila portion, the intermediate section into the agricultural area, and we are now moving toward the planning and finalization of the last leg uphill to Tucson of Congressman Udall's hometown, which is certainly an integral part of this project.

The President's budget proposal for this fiscal year, as I understand, proposes $186,500,000 for the project. All things considered I think that is a very reasonable request; it is one we can support; it is certainly one that we would urge the committee to support.

I would like, Mr. Chairman, briefly to comment on a few of the specific things that we have been doing in addition to watching with great satisfaction the progress of construction.

The first important item that has occurred in the past year has been the passage of a groundwater code by the Arizona Legislature. It has been our understanding from day one that the quid pro quo, Arizona's contribution to this effort, had to be some groundwater management to halt the overdraft that has been going on to balance the groundwater supplies in Arizona, so once this project is complete we will have a water management system that will serve the State indefinitely without depleting groundwater supplies.

After months and months of very difficult negotiations the Arizona Legislature met last June, passed a groundwater code which I can tell you without any question is the most comprehensive and thoroughgoing water management law that has ever been passed in the United States.

We did that with a lot of help from the Department of the Interior and with the explicit understanding that it was necessary as a demonstration of our commitment to the water management that was necessary, and it will be necessary even when this project is complete.

As the project moves toward the final phases, inevitably the issues and the emphasis change somewhat. Increasingly the Tucson leg, the final uphill segment to the south, is going to be the focus of both the funding and the design work.

There are going to be some additional decision points on the size and specific location of that Tucson Aqueduct that will in turn wrap into the need for preparing an environmental impact statement.

Some of the facts of the original design with respect to the Tucson leg of the aqueduct have been changing over the years. These projects are inevitably something of a moving target.

The so-called San Pedro Aqueduct, which would have brought water down from the south into Tucson, has been eliminated. That has in turn ramifications for the design of the remaining main aqueduct coming uphill from the north. And I think that in the very near future we will all be together on the necessary design changes.

Mr. BEVILL. Will that require an environmental impact, just those changes?

Governor BABBITT. Under the present law, I think it is clear, Mr. Chairman, that it will. If there are no changes made, I think it is quite clear that it will. And I will refer you to Mr. Udall on that score.

The other thing we are working on hard now is the distribution system. Once the main aqueduct is in place, the issue becomes the fine distribution network to get the water out to the specific irrigation projects.

I spent a year and one-half working with the Interior Department under Mr. Andrews attempting to get a final settlement of all of the water allocation issues, including allocations to the five central Arizona Indian tribes.

We made it about 90 percent of the way, but I must tell the committee in all candor that we didn't make the final 10 percent. There were some sharp disagreements about precisely how the various users should be meshed together.

Mr. Andrews did not accept the State's position. That resulted in a lawsuit which I have reluctantly filed at the end of last year.

My own view is litigation is a very poor way to solve any problem when it comes to reclamation issues.

I have since met with Secretary Watt. I must tell you that we have had some very productive meetings. I am confident that Mr. Watt is going to be able to work these remaining issues out with us and that without any delay in the project, and without any further difficulty we are going to get these issues worked out, we are going

to get them thrashed out the way we ought to, which is by meetings between the Arizona Water Department and the Secretary of the Interior.

We do have a request from the Maricopa-Stanfield Irrigation District for the authorization to use the sum of $2 million from the distribution authorization to begin planning their distribution and delivery system in central Arizona and Pima County. It is a small amount.

It is important to get the design under way so they will be ready with a system at the projected delivery date in 1986. I would urge your attention to that issue.

Lastly, we have before you the Corps of Engineers' requests for flood control. Mr. Chairman, again I know you are personally aware of the flood control issue in Arizona. It is something of an irony to be here on the one hand saying we live in a desert, we need supplementary water supplies, and in the same breath be telling you although it rains seldom in the desert, when it does it all comes at once and we find ourselves knee deep in water with some of the worst flood control problems anywhere in the West.The President's budget has a request of $12 million for the Corps of Engineers. We would respectfully ask that you consider adding another $1.8 million to get that up to $14 million.

It is a relatively small amount, but a very important amount because in that other $2 million are design and feasibility and cost benefit analysis for three very important areas, the West Phoenix area, Rillito Creek in the Tucson metropolitan area, and the upper Hell Gate River in eastern Arizona.

What can be done, or what the configuration of flood control projection will be in those areas, of course we do not know. But we are so eager to see the money authorized to at least get the Corps studies back so we can lay the issues to rest once and for all.

Mr. Chairman, I do have a written statement. I have letters of endorsement from everybody in Arizona. And perhaps more importantly from the Metropolitan Water District in California. If I may, I would like to have leave to submit those for the record.

Mr. BEVILL. Yes. Permission is granted.

[The statement of Governor Babbitt and attached information follows:]

STATEMENT OF GOVERNOR BABBITT

This is my fourth annual appearance before this Committee as Governor of Arizona to speak in support of funding for the Central Arizona Project, which has been in process of construction since 1972. I do so again this year with the same conviction that what I ask is right and essential for the well being of the people of our State and in the best interest of the Nation as a whole.

It is my understanding that the President's budget for fiscal year 1982 proposes an appropriation of $186,500,000 for continuing constuction of the CAP, and that that amount of funding is expected to meet the requirements for maintaining the project completion schedule. That being the case I strongly support the recommended appropriation.

I appreciate the fact that the Congress has to date provided funds for CAP construction at a rate commensurate with the work capability of the Water and Power Resources Service. Although that has produced results that fall short of the original estate that the project could be completed in ten years, I am pleased that construction has progressed as well as it has. As you well know, delays are extremely expensive due to rising costs. It is, therefore, in the best interests of the Federal Government, and of project beneficiaries who must repay the reimbursable costs of construction, that the project be completed as quickly as possible.

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All but 43 miles of the 190-mile Granite Reef Aqueduct is now essentially completed or under contract for construction. Work on the Salt-Gila Aqueduct is now underway with contracts for the Salt-Gila Pumping Plant, and Reach 3 of the Aqueduct. We hope to see contracts awarded in the 1982 fiscal year for work on additional reaches of the Salt-Gila Aqueduct, and on the remaining three reaches of the Granite Reef Aqueduct.

There area some problems which have delayed the design and the Environmental Impact Statement for the Tucson Aqueduct. These should be resolved very soon, so that construction in that esssential part of the project can proceed in schedule.

Arizona's recommendaions for the allocation of project water have not been acted on by the Secretary of the Interior pending a determination of the quantities of water to be delivered for use on Indian reservations.

It is no secret, I suppose, that I made a great effort to resolve this problem in cooperation with the former Secretary of the Interior, but with no real success. I am continuing that effort with Secretary Watt, and I believe the problems may soon be resolved to the satisfaction of all concerned so that project water can be allocated to non-Indian uses in the very near future.

We have arrived at the point where we must begin design and construction of the facilities necessary to treat and move project water from the aqueduct to the ultimate users. I am requesting that $2 million of the total CAP appropriation be designated as the first appropriation of the $100 million authorized in 1968 for non-Indian distribution systems and identified specifically for the Maricopa-Stanfield Irrigation Distribution System Project. The Maricopa-Stanfield Irrigation and Drainage District has filed its distribution system loan application with the Water and Power Resources Service and is prepared to proceed.

In the interest of saving water and energy I ask that you give favorable consideration to an appropriation of $300,000 to the Yuma Mesa Irrigation and Drainage District, Gila Project, and the Unit B Irrigation and Drainage District, Yuma Auxiliary Project, under their respective, repayment and rehabilitation and betterment obligations to the United States, to permit installation of an additional regulatory pump and additional pumping capacity at the Yuma Mesa Pumping Plant. The addition of this pump will increase pumping flexibility and save energy.

Last year I reported to you that our State Legislature was in the process of preparing a new groundwater management law which has for many years been advocated, if not actually demanded, by the Federal Government in association with the Central Arizona Project.

I can assure you that it was not a simple task. I spent a great deal of my time personally in the effort to arrive at an equitable and generally acceptable solution of the many problems involved. So did the many legislators who served on the Study Commission.

That law—and I believe it is a sound law—was enacted in June of 1980, and the new Arizona Water Resources Department, headed by Wesley Steiner, is moving as quickly as possible to fully implement it. Among the new law's many provisions, four Active Groundwater Management Areas are established, covering the Central Arizona Project service area.

It is not possible, in the time allowed, for me to outline the many details of the law, but I can assure you that Arizona now has in place one the the best, most forward looking, water management and conservation laws of any state in the Nation.

It does not, and can not, reduce the urgency of our need for the Central Arizona Project. The two things, working together, can, however, maximize the values of each in the search for an improved water base for our changing and growing economy.

If I might for a moment turn to funding for the Corps of Engineers activities in Arizona, I want to strongly support the $12.1 million which in now in the President's budget. In 1978, 1979 and again in 1980 Arizona experienced disastrous flooding, flooding that brought home dramatically the need for expedited construction of the flood control program initiated a few years ago by the Corps in the Phoenix metropolitan area. We must have these projects as soon as possible. I understand that the Corps has identified capabilities of an additional $1.8 million on ongoing projects with a major portion of that amount associated with the New River Unit that will provide protection for the western portion of the Phoenix area. Six hundred thousand dollars of that capability involves studies on Rillito Creek in Tucson and on the Upper Gila River near the Arizona-New Mexico Border. Unless the President's budget is modified there will be no funding for any work on these locally acute flood problems. Your consideration of additional funds for these problems would be greatly appreciated.

I am also concerned that only $100,000 has been included to permit completion of Corps participation with the Water and Power Resources Service in the Central Arizona Water Control Study, In the event the flood control and regulatory storage alternative selected as a result of the study required continued Corps' participation, I ask that the Corps' study capability in Arizona be increased by $750,000.

ROBERT P. WILL
ATTORNEY AT LAW
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WASHINGTON, D. C. 20024
(202) 554-2470

STATEMENT OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ON APPROPRIATIONS FOR THE CENTRAL ARIZONA PROJECT
FISCAL YEAR 1982

March 24, 1981

The Metropolitan Water District of Southern California appreciates this opportunity to appear before this Committee to express its support for the Administration's fiscal year 1982 appropriation request for the construction of the Central Arizona Project.

My name is Robert Will and I am the Washington Representative of the Metropolitan Water District.

The President's program for the Water and Power Resources Service (WPRS) proposes an expenditure of $186.5 million for the year beginning October 1 to continue the construction of this multi-purpose water development project for the State of Arizona. We in Southern California, who are partners with Arizona and Nevada in the Lower Colorado River Basin served by the Colorado River, support this vital water delivery system to serve our Arizona neighbors.

The proposed funding is in keeping with the commitment of the WPRS to make the first delivery of water to Phoenix and Pinal County in 1985 and to Tucson in late 1988 or early 1989. WPRS construction program needs to be maintained in order to meet these goals.

Metropolitan strongly urges your support of the budgeted amount for the Central Arizona Project for fiscal year 1982.

STATEMENT OF THE

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

MARCH 24, 1981

My name is Howard Wuertz of Coolidge, Arizona. I am the President of the Central Arizona Water Conservation District and present this statement on behalf of the District.

In 1968, Congress enacted the Colorado River Basin Project Act (P.L. 90-537) which authorized the construction of the Central Arizona Project. Among other things, it provided that the Secretary of the Interior could contract for the repayment of the costs of the Project either with individual water using entities or with a single political subdivision of the State of Arizona authorized to levy assessments against real property. The Secretary, in combination with the Office of Management and Budget, elected to follow the latter course and so advised officials in Arizona.

In 1971, the Arizona legislature enacted the necessary statutory authority for the creation of a multi-county water conversation district. Pursuant to this authority, the District was formed, composed of the three Central Arizona counties of Maricopa, Pima and Pinal.

The District was authorized by law to contract with the Secretary for the repayment of Project costs which might be allocated to it plus its share of operation,

maintenance and replacement costs. In addition, the District was given authority to levy an ad valorem tax at a rate not to exceed 10¢ per $100 of assessed valuation on the taxable property within the District boundaries. It also may subcontract, in conjunction with the United States, for the sale of water to water users within the District and make charges therefor.

Shortly after the formation of the District, negotiations were undertaken with representatives of the Department of the Interior. These culminated in a repayment contract which was executed on December 15, 1972. Pursuant to this agreement, the District has undertaken to repay to the United States the costs of the Central Arizona Project which may be allocated to it plus appropriate charges for operation, maintenance and repair charges. The District is ready and willing to fulfill its obligations under such contract, and for several years has levied an ad valorem tax to assist in meeting these obligations.

The Water and Power Resources Service has set a completion date of 1985 for those portions of the Project which will deliver water into Maricopa and Pinal Counties and 1987 for the completion of the works necessary for the delivery of water to the Tucson area. It is estimated that, because of inflation, any delay in this construction schedule will add millions of dollars to the cost of the Project. The bulk of this additional burden would have to be borne by the water users and taxpayers of Central Arizona. It is imperative

that there be appropriate for FY 1982 all funds which reasonably might be expended by the Water & Power Resources Service in meeting the proposed construction schedule. We earnestly urge the Congress to include these necessary funds in the Interior Department appropriation bill.

At the present time the Department of the Interior and the Corps of Engineers are jointly conducting studies to determine the best alternative for providing regulatory storage for the CAP and flood control on the Salt and Verde Rivers to protect Phoenix metropolitan and downstream areas. The preferred plan will be identified in 1981 and the final environmental impact statement will be filed with the Environmental Protection Agency in 1982. Serious flooding has occurred on the Salt and Verde Rivers in recent years and there is a possibility of a reoccurrence of floods in the very near future. The Department and the Corps should be directed to commence, as soon as the preferred plan is identified, and to complete at the earliest possible date advanced engineering and design studies of the preferred plan.

I wish to thank you for the opportunity to appear and present this statement to the committee.

Office of the Mayor and City Council

February 26, 1981

The Honorable Tom Bevill
Chairman
Subcommittee on Energy and Water Development
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Bevill:

The purpose of this letter is to emphasize the extreme importance to the cities of central Arizona that the completion of the Central Arizona Project represents. As the Mayor of Scottsdale, a city of 88,000 people, located in the Phoenix metropolitan area, I can assure your subcommittee that this property is vital to the maintenance of the standard of living and the quality of life for the people who now reside in our area.

The State of Arizona has recently enacted one of the most progressive and environmentally sound groundwater statutes in the nation. The Arizona Groundwater Code not only provides for a management system which will guarantee a rational and judicious allocation of this precious resource, but will, in fact, roll back the amount of groundwater pumping which will deplete this resource if unchecked. In other words, we are pursuing a policy which will not only stop the depletion but will actually allow for the replenishment of our groundwater. The importance of such a policy for a state in the arid area of the southwest cannot be overemphasized.

However, the success which the citizens of this state will experience will depend heavily on the completion of the Central Arizona Project. That source of supplemental surface water provides the only viable means by which our groundwater preservation program can be effective.

Its effectiveness will be measured also as to how successful we can be in preserving the quality of groundwater in central Arizona. We are experiencing the necessity to shut down water production from some wells in this valley because of deteriorating quality. Again, the Central Arizona Project is key to this effort. The Central Arizona Project could very well be the deciding factor as to whether some existing residents will have water in the future.

There are other factors involved which need not be belabored in this letter. I have attempted to limit my emphasis solely to the groundwater quality and quantity issues which tie directly into the CAP. We respectfully urge that the Congress give favorable consideration to the complete funding for this project.

Respectfully yours,

Herbert R. Drinkwater
Mayor

HRD/fm

cc: Senator Dennis DeConcini
Senator Barry Goldwater
Congressman John Rhodes
Congressman Morris Udall
Congressman Eldon Rudd
Mr. Rich Johnson, Central Arizona Project Assoc.

CITY OF TUCSON
OFFICE OF THE MAYOR

LEWIS C. MURPHY
MAYOR

250 WEST ALAMEDA
P. O. BOX 27210
TUCSON, ARIZONA 85726
PHONE: (602) 791-4201

March 6, 1981

Senate and House Appropriations
Subcommittee on Energy and
Water Development
Washington, D. C.

Dear Committee Members:

The importance of the Central Arizona Project to all the water users in eastern Pima County cannot be overstated. The damage occurring as a result of the overdrafting of the ground water aquifer, varying from two to ten feet per year, causing differential subsidence in our urbanized area is potentially inestimable. Ground water levels in the Tucson area have dropped to a level where continued pumpage at current rates will create a situation where significant subsidence is predicted by experts.

Tucson's water demand will exceed the supply from current sources in 1988 if no new source is developed. This supply vs. demand projection is based upon slower growth than has been actually occurring. Although urban water use only represents twelve (12%) percent of the total region's use, Tucson has implemented one of the few successful water conservation programs in the United States. The citizens have voluntarily reduced the system's peak day demand from 152 mgd to 115 mgd for the last three years. More importantly the average daily per capita consumption has been reduced twenty-nine (29%) percent over a six year period from 205 to 146 gallons per capita per day. Tucson's commitment to conserve has been well demonstrated by continual support of a conservation ordinance, inverted rate structure, and an educational public relations program to communicate our critical water supply situation.

Tucson has and will continue to spend millions of dollars on its distribution, treatment, and storage facilities in changing our source of water supply from existing ground water sources to a proposed CAP surface water source. It is extremely important that a definitive commitment on the CAP be made as quickly as possible, to assure the continued orderly development of the receiving distribution system to assure a smooth transition in supply. Decisions need to be made as soon as technically possible on the allocation size, location, terminus, and storage of the Central Arizona Project in the Tucson area.

The continued delay in the project over unresolved issues still to be defined are continually causing inflation to drive up costs. The longer the delay, the greater the cost.

The Central Arizona Project has been nearly half completed without including Environmental Impact Statements, Arizona ground water laws or Indians' water rights claims. Someone should question the equity and the cost effectiveness of the delay created by initiating a whole new set of criteria for continued construction of a half completed project. Tucson is opposed to the introduction of these or any other new issues for insertion into the process at this time.

Sincerely,

L. C. Murphy

LCM/bf

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STATEMENT OF
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ON APPROPRIATIONS FOR THE CENTRAL ARIZONA PROJECT
FISCAL YEAR 1982

March 24, 1981

The Metropolitan Water District of Southern California appreciates this opportunity to appear before this Committee to express its support for the Administration's fiscal year 1982 appropriation request for the construction of the Central Arizona Project.

My name is Robert Will and I am the Washington Representative of the Metropolitan Water District.

The President's program for the Water and Power Resources Service (WPRS) proposes an expenditure of $186.5 million for the year beginning October 1 to continue the construction of this multi-purpose water development project for the State of Arizona. We in Southern California, who are partners with Arizona and Nevada in the Lower Colorado River Basin served by the Colorado River, support this vital water delivery system to serve our Arizona neighbors.

The proposed funding is in keeping with the commitment of the WPRS to make the first delivery of water to Phoenix and Pinal County in 1985 and to Tucson in late 1988 or early 1989. WPRS construction program needs to be maintained in order to meet these goals.

Metropolitan strongly urges your support of the budgeted amount for the Central Arizona Project for fiscal year 1982.

CITY OF PHOENIX • OFFICE OF THE MAYOR

MARGARET T. HANCE
MAYOR

February 24, 1981

The Honorable Tom Bevill, Congressman
Chairman of Subcommittee on Energy
and Water Development
House Committee on Appropriations
Washington, D. C. 20515

Dear Congressman Bevill:

I would like to take this opportunity to express the importance to the City of Phoenix of the early receipt of Central Arizona Project (CAP) water. Last year, we provided water service for over 750,000 residential customers and nearly 25,000 commercial, industrial and governmental accounts. In total, we delivered over 75 billion gallons of about 230,000 acre feet of water! By 1985, we expect the demand to grow to 85 billion gallons.

While we have access to large quantities of good quality surface water from the Salt River Project (SRP), we do not have sufficient water of adequate quality to meet our growing needs in areas outside of the SRP. The preliminary allocations of CAP water will provide only about 65% of Phoenix' needs in these areas starting in 1985. Continued pumping and strict water conservation will be required to bring supply and demand into balance even after delivery of the Central Arizona Project water. Without the delivery of CAP water on schedule, our citizens would face economic hardships brought about by the City's inability to provide adequate water service to all of its customers.

The City of Phoenix respectfully requests that you consider the foregoing information during your subcommittee's deliberations on the Central Arizona Project funding. Thank you for your attention on this important matter.

Sincerely,

Margaret Hance

Margaret T. Hance
M A Y O R

rlt
cc: Arizona Congressional Delegation

PHOENIX
METROPOLITAN
CHAMBER of COMMERCE

RESOLUTION

Whereas, the Phoenix Metropolitan Chamber of Commerce and its Congressional Action Committee are vitally concerned with water supply in Central Phoenix;

Whereas, the long-term dependable supply of water in Central Arizona is inadequate for meeting the economic needs of this fast-growing area: and

Whereas, the Central Arizona Project, authorized by the Congress in 1968 and presently under construction affords the best means of substantially alleviating the problem;

Be it resolved, that the Phoenix Metropolitan Chamber of Commerce reaffirms its support for legislation to appropriate whatever funds are required to maintain a construction completion schedule for delivery of water at the earliest possible time.

Be it therefore further resolved, that the Chamber encourages the endorsement and support of the Arizona Congressional delegation in urging the Congress of the United States for resolution of these needs, including, but not limited to as outlined in this resolution.

Respectfully submitted this 4th day of February, 1981.

PHOENIX METROPOLITAN CHAMBER OF COMMERCE

By _____

Attest:

_____
Secretary

Mr. RHODES. Thank you, Governor.

Mr. BEVILL. Talking about floods out there, you know my colleague Eldon Rudd and I flew right over those floods.

Mr. RHODES. I know you did.

Mr. BEVILL. So I am very familiar.

Mr. RHODES. I remember when the chairman was out there I was supposed to have had dinner with him one night and I could not get there because I could not get across the river. I was on one side and he was on the other.

Mrs. BOGGS. You are sure he didn't arrange that?

Mr. BEVILL. He has always denied it.

Mr. RHODES. The next person from Arizona that I would like to call on is my good and distinguished friend from the Second District, the Honorable Morris K. Udall.

Mr. BEVILL. Good to have you with us, Mo. The man that should have been President.

STATEMENT OF CONGRESSMAN UDALL OF ARIZONA

Mr. UDALL. We will see if there is a draft out here. I will try to make myself available.

Mr. MYERS. In retrospect, I don't think you have any argument about that.

Mr. UDALL. I accept the nomination.

Glad to see you are maintaining the high quality of membership on this subcommittee. Mrs. Boggs, one of the great ladies of our time, and Eldon Rudd. And even John Myers. He makes a contribution from time to time.

I am back again with the delegation. I have a prepared statment that is not very long, and I will turn it in, if I may have that permission, Mr. Chairman.

Mr. BEVILL. Permission granted.

[The statement of Mr. Udall follows:]

STATEMENT OF CONGRESSMAN MORRIS K. UDALL

Mr. Chairman, Members of the Subcommittee, I join the Governor and other members of the Arizona delegation in urging your support for funding to continue construction of the Central Arizona Project as planned and scheduled.

In particular, I wish to speak to the critical role the CAP will play in the future of Tucson and Pima County.

As I have told this Committee in the past, Tucson is one of the largest cities in the world, if not the largest, to be supplied solely by groundwater. Even though the citizens of Tucson have undertaken serious, successful conservation programs, the area continues to experience a critical groundwater overdraft problem: studies indicate that 4 times more water is pumped out of the basin annually than is replenished by natural recharge.

In order for the city and county to accommodate the phenomenal growth they experienced in the 1970s, and to meet the anticipated growth of the 1980s, the Central Arizona Project must be completed to Tucson and it must be completed on time.

I have worked hand in hand with the rest of the delegation to achieve our present progress: the aqueduct is almost completed to Phoenix and work has begun on several reaches of the Salt-Gila segment.

In turn, the delegation has always maintained a united front in its support of the Tucson Aqueduct. At long last the Tucson Aqueduct seems more a reality than a dream: the fiscal year 1982 budget anticipates that the Environmental Impact Statement on Phase A of the Tucson Aqueduct will be completed, that preconstruction activities will continue and that acquisition of rights of way begin. I thank the governor and the delegation for their unfaltering commitment to bringing the CAP to Tucson on schedule. I urge this Committee to approve the requested funds.

Mr. UDALL. I will just hit a couple of points.

The delegation, the Governor, were organized today and were prepared, and we have a good deal of unanimity in Arizona to finish up the Central Arizona Project.

You perhaps more than any other member of Congress, except the Arizonans, have seen this from its inception and have been a true friend of ours and have spent time coming to look at our problems, and I suggested once at one of these hearings we make you an honorary citizen of Arizona.

I don't know what that would involve, but we really do appreciate your continuing interest and your willingness to accept the construction of the project as planned and scheduled.

Just a word about Tucson. We are one of the fastest growing cities in the country. I keep saying, and I think it is true, that it is the largest city in the world that has no surface water supply, no river, no lake, stream. We get all our water from under ground and the groundwater overdraft situation has degenerated to the point that mother nature puts in one bucket and we pump out four every year.

Clearly this kind of overdraft can't go on. The Governor and the legislature have made a heroic attempt to write a good, tough groundwater law we are now putting into effect, and there will be a weeping and wailing and gnashing of teeth as this is accomplished.

And the State recognizes we cannot come to Congress and ask for the kind of help on the CAP you have been giving us until we are willing to get our own water budget balanced and until we are willing to do the things that need to be done.

It is important to Tucson we keep the project on schedule. It is important that we get the major decisions made about the size of the aqueduct and the place that it will terminate. These are administrative decisions we think that might be handled without legislation. We hope we can do it in that fashion.

But the important thing is to keep the project on schedule, and to see that Tucson's dream of having some supplemental water is brought about through this legislation, and through the final construction of the Central Arizona Project.

So that is my testimony, Mr. Chairman, and we again urge your favorable consideration of what is perhaps the most important issue facing our State.

STATEMENT OF CONGRESSMAN RHODES OF ARIZONA

Mr. RHODES. Mr. Chairman, I, too, have a statement which I would like to submit for the record, if I may, and I will paraphrase it.

[The statement of Mr. Rhodes follows:]

STATEMENT OF CONGRESSMAN JOHN J. RHODES

Mr. Chairman and members of the Subcommittee, it is always a pleasure to appear before your panel and I wish to commend you for the willingness you have shown over the years to assist in resolving many of the water problems that exist in Arizona. Unlike past years when these ongoing problems were accentuated by floods, hit lists, etc.; I am pleased to note that this year we are not faced with any major crisis.

As you know, the Administration has requested $186.5 million for fiscal year 1982 to maintain the ongoing construction activity on the Central Arizona Project. The Department of the Interior has assured us that these funds are adequate to keep the construction on schedule for initial water deliveries to the Phoenix metropolitan area by 1985.

We in Arizona are very much aware of the Subcommittee's longtime support for this project and are grateful. As a result of your efforts, much has been accomplished. While there is still a great deal left to be done, the promise of water to be delivered from the Colorado River is no longer a dream. Accordingly, I urge the Subcommittee to consider favorably the Administration's funding request for the Central Arizona Project.

The fiscal year 1982 appropriation request contemplates the completion of the Central Arizona Water Control Study by the middle of next year. It is anticipated that by October of this year, the study will have reached a point where the best alternative for regulatory storage of CAP water and flood control for the Phoenix area will be identified. Decisions from this study relating to regulatory storage will be important to the sizing of the Tucson aqueduct, the last leg of the main CAP aqueduct system. Additionally, the Department of the Interior has indicated that the annual delivery capabilities of the Central Arizona Project can be increased as much as 30 to 40 percent in some years with adequate storage located in the vicinity of the Phoenix metropolitan area. I am hopeful that the Subcommittee will have an opportunity to act on a request for funds to initiate construction of this very important feature during consideration of the fiscal year 1983 budget request.

I would like to comment briefly on the request of the U.S. Army Corps of Engineers for $4.1 million to continue the construction of the Indian Bend Wash project. This dollar figure will enable the Corps to award the final construction contracts leading to the completion of the overall project by January, 1983. You can be proud as we in Arizona are of this unique seven mile long, open space greenbelt floodway system through the City of Scottsdale. The project transforms a natural water channel into a park and recreation area. At the same time, it returns the investment in flood damage prevention. Indian Bend Wash is an outstanding example of a city, state and federal partnership.

Mr. Chairman, you and the Subcommittee have always been responsive to the unique water problems in Arizona. I want to thank you for the recognition you have given to the needs of our state.

Thank you.

Mr. RHODES. Actually I am supporting the Administration's request for funds for the Central Arizona Project, and I won't be repetitious because I think the Governor and my colleague Mr. Udall have done a very good job of filling in whatever information was necessary.

But the chairman of this committee knows about as much about this project as any living man, and I would feel that it would be a real redundancy for me to elaborate on it.

I would like to call to the minds of the committee, however, that there is a really fine flood control project that is almost on the point of being completed, the Indian Bend Wash Project.

This has resulted in the unique seven-mile long open space green belt floodway system through the City of Scottsdale instead of the traditional concrete ditch which the City didn't want and wouldn't have, and so we are able to do it the other way.

It has proved to be a very effective method of handling floods and also a very definite addition to the beautiful area of Scottsdale.

There is in the budget $4.1 million to continue the construction of the Indian Bend Wash, and I support that amount of money.

So, thank you again, Mr. Chairman, and members of the committee, for the opportunity to be here with you, and on behalf of the Governor and Mr. Udall and all of the Arizonans present, we appreciate the attention that you individually and, in fact, the whole committee, including my good friend John Myers, have paid to our problems through the years.

We feel very fortunate in having had the attention of this committee for that number of years.

We also feel very fortunate in having the gentleman from Arizona's Fourth District, Mr. Rudd, as a member of this subcommittee, and I know you will, as I have, find him to be a delightful person in his efforts to be completely objective at all times.

Mr. BEVILL. We are delighted to have him on this committee, and I believe you were the last Arizonan to serve on this committee.

Mr. RHODES. I was the latest Arizonan. Thank heaven not the last.

Mr. BEVILL. The latest. That is a better word. That is fine.

Are there any questions or comments?

Mr. MYERS. Mr. Chairman.

Mr. BEVILL. I am glad to hear John Myers has a friend, though. You are the only one that has come in here and really called him your friend.

Mr. MYERS. We just got started. I hope.

Governor Babbitt and my colleagues, please accept my apologies for getting here late.

I might add, I guess I wouldn't be here today if it weren't for John Rhodes giving up his seat. He held this very seat up until just a few years ago. John, I was right where you were coming in requesting some flood control projects along the Wabash.

Mr. RHODES. Did pretty well, too, didn't you?

Mr. MYERS. We never got them. But I think I can do better than that.

As you were talking about bringing the Chairman out to Arizona to see a flood, I don't need to come to Arizona to see a flood; I can just go home any weekend in the spring and see the Wabash out of its banks, so that is quite familiar.

Mr. BEVILL. I went out all prepared to talk to a water group about the drought and actually the flood was up over the runway and all over Phoenix, and I think of 14 bridges, 13 of them were blocked with the flood; isn't that right, John?

Mr. RHODES. That is absolutely right.

Mr. BEVILL. He is a teetotaler, too.

Mr. RHODES. We are always glad to have him come back by. We just hope he doesn't repeat the same performance.

Mr. MYERS. You can bring Tom south for a rain dance.

Mr. BEVILL. They need flood control. Senator Goldwater says the Old Salt River just keeps meandering around. We build a bridge and the first thing we know the bridge is sitting high and dry and the Old Salt River is over here somewhere else.

You do have some real problems with water; you really do.

Mr. RHODES. We do indeed. No doubt about it.

Mr. RUDD. Mr. Chairman.

Mr. BEVILL. Yes, Eldon?

STATEMENT OF CONGRESSMAN RUDD OF ARIZONA

Mr. RUDD. I would be remiss if I didn't say that I personally appreciate the sensitivity of this committee and particularly you, Mr. Chairman, to our problems in Arizona, and the trouble you have gone to to educate yourselves about what we are doing in

Arizona and what we need to do, and, of course, we cannot survive without water in our desert area in Arizona.

So I wanted to state that deep appreciation to you for the things that you are aware of and the support you have given us in the past.

And I am also very pleased to welcome a great number of good Arizonans who are here today also to express their support for the problems we have in Arizona; and the ways we are going to solve them, and, of course, the Arizona Delegation; John Rhodes more than once has shown his great leadership in trying to solve those problems; and Mo, of course, likewise, most of the time we are on the same track together. And, Governor, thank you for your interest in this and the problems that you have attempted to solve in the past.

I think we are all aware of what we are trying to do, and it is like a murky glass at times as to how we are going to get there, but with the determination of the Arizonans who know what our problems are and the determination to solve them, I think we are going to get there.

So I thank you for being here, all the good Arizonans for being here and you, my colleague, Governor, for the efforts you have expressed, that you would put forth to solve our problems.

Mr. BEVILL. The chair recognizes Mrs. Boggs.

Mrs. BOGGS. I would like to commend the Governor and the State of Arizona for recognizing the necessity of working with the problems that were pointed out by the Congressonal Delegation.

I think that the major drought that we have suffered all over the country this year has pointed out to us that we have to work together very significantly in all of the problems of water, when we have too much of it and when we have too little of it, and the management of it in between, and it takes the cooperation of the States with the Federal Government and the States among themselves to be able to accomplish this.

Arizona certainly has shown the way and we are very grateful to you.

Mr. BEVILL. I know the people of Arizona are very proud of their Congressional Delegation. You have a great group representing you here.

If there are no further questions, I see our time is up, and thank you very much.

Governor BABBITT. Thank you, Mr. Chairmnan.

STATEMENT OF CONGRESSMAN RUDD

Mr. RUDD. Mr Chairman, it is a pleasure to welcome Governor Babbitt and our colleagues Congressman John Rhodes and Morris Udall.

I have long been a strong supporter of the Central Arizona Project since it was authorized, and I am confident that this Subcommittee will provide necessary funds to keep its construction on schedule or ahead of schedule.

I am also hopeful that one beleaguered unit of the CAP—namely, a dam at the confluence of the Salt and Verde Rivers norhteast of Phoenix—will eventually receive the full support it deserves for

regulatory storage as well as flood control for the people of Arizona.

I have vigorously supported a structure at the confluence of the Salt and Verde Rivers ever since my days as a Maricopa County Supervisor during the early 1970's.

Such a structure is the most reasonable and perhaps the only cost-effective, sure way to protect the greater Phoenix area from the ravaging fllods which occurred three times in two years since 1977.

In 1957, the U.S. Army Corps of Engineers studied all the known alternatives to Orme Reservior in order to find a way to solve the flood problems along the Salt River.

Because of the existing controversy at the time between Arizona and California, regarding rights to Colorado River water, the Corps could not make a firm recommendation for flood control storage at the confluence of the Salt and Verde Rivers.

But when Orme Reservior was authorized by Congress as a unit of the CAP—to be built by the Bureau of Reclamation—the Corps updated its information regarding flood control benefits for Orme, and reported the benefit-cost ratio at 1.8 to 1—ample justification for construction.

In light of the new "inflow design flood" data developed by the Water and Power Resources Service, which confirm earlier Corps of Engineers data that much greater floods than previously anticipated are possible in Arizona, flood control structures such as that planned for the confluence of the Salt and Verde Rivers become even more vital, and even more justifiable in terms of a benefits and costs.

Because of our concern about the safety of dams, a new, modified or higher Roosevelt Dam is now needed. A modified Stewart Mountain Dam, and even a new Cliffs Dam may also be needed for reasons of safety.

But none of these projects for water storage and to improve the safety of Arizona dams—or a combination—can satisfactorily replace the need for a structure at the confluence of the Salt and Verde Rivers.

The proposal for levees through Phoenix and along the Gila River was studied by the Corps of Engineers as a possible alternative to Orme Dam in 1957, and found unsatisfactory.

Levees would provide no flood protection beyond the reaches along the levees, and the many miles of levees that would be required for local flood protection were judged to be not economically justified by the Corps.

A structure for both regulatory storage and flood control at the confluence of the Salt and Verde Rivers is the only sure solution for the problems we face. Such a structure has already been authorized by Congress as part of the CAP.

It would be foolhardy, indeed, to abandon this structure for some other less effective solution. Orme Reservoir still stands out as the most cost and operationally effective project for flow regulation and flood control.

It is my firm hope that our State leaders will join those of us on the Congressional delegation who already support construction of such a facility, so that we can make a united case for prompt

construction, both to the Department of the Interior as well as to this committee.

TUESDAY, MARCH 24, 1981.

WATER RESOURCES PROJECTS

WITNESSES

B. JOSEPH TOFANI, PRESIDENT, WATER RESOURCES CONGRESS, WASHINGTON, D.C.

CHARLES L. THOMSON, PAST PRESIDENT, WATER RESOURCES CONGRESS, SOUTH EAST COLORADO WATER CONSERVANCY DISTRICT, PUEBLO, COLORADO

Mr. BEVILL. Next we have Mr. Tofani, water resources projects. Mr. Tofani and Mr. Thompson, we are delighted to have both of you here, and if you will just submit your statement for the record, and summarize, we will appreciate it. However you want to do it. If you want to do it that way.

[The statement of Mr. Tofani follows:]

TESTIMONY OF B. JOSEPH TOFANI, PRESIDENT WATER RESOURCES CONGRESS

Mr. Chairman and members of the Subcommittee, the Water Resources Congress appreciates the opportunity to present its views concerning the proper development and management of our nation's water resources.

I am B. Joseph Tofani, President of the Water Resources Congress, and I am appearing on behalf of Mr. Ival Goslin, consulting Engineer of Grand Junction, Colorado, Chairman of our Board of Directors and Mr. Sam Collins, Vice President and General Manager of the Sabine River Authority of Texas and Vice-Chairman of our Board.

The water Resources Congress is a nationwide organization and dedicated to the wise use and proper management of our water resources. We believe adequate water supply for all uses is a necessary ingredient to economic stability and growth.

We appreciate the efforts of this committee in its many struggles to appropriate adqequate funds to provide for the projects to meet the water requirements of our nation.

It is difficult to come before this subcommittee at this time and plead for additional funds for water resources, when we are asked to make sacrifices to curb run-away inflation, balance the budget and increase defense spending. However, we are disappointed that many worthwhile projects cannot be initiated at this time or are being delayed. This Committee and the Congress are in the best position to determine the rate of progress we should be maintaining toward meeting our water requirements at this time.

As you are aware, many forces over the past few years have tried to discredit the water program. They have also practiced a divide and conquer strategy by attempting to stop a few projects or drastically curtailing others. I am sure they will try again. We urge this subcommittee as an absolute minimum to hold to the President's budget request for both the Army Corps of Engineers and the Water and Power Resources Service of the Department of Interior.

Concerning our water resources development and management program, we appear to be in a holding pattern. But perhaps this period of making time can be turned to our advantage by taking time-out to reflect, study and develop a water program.

Each passing day we find new uses for our finite water supply. And as we find these uses for water we encounter more complex problems to solve. As we know, this country is blessed with sufficient water but unfortunately we face severe problems of availability and distribution in certain areas and at certain times.

We tend to forget nature does not run out of water, people do. Nature does not plan for the wise use of water, people do.

The last twelve months have witnessed the return of parched fields and low water supplies. And this time around the shortage is not peculiar to the West. It is also

occurring in the water rich East, New Jersey and New York, Pennsylvania plus the northern plains are finding their water supplies running low. Add to this, the deteriorating water supply systems of many of our older cities, which will require multi-million dollar and in some cases billion dollar programs to rehabilitate these systems and it is easy to understand the massive water problems facing this nation.

Today, our nation and our people are paying a tremendous price for our imported energy. While the price is having an effect on our economy, the country is surviving. But what if we had a similar problem in water how would this nation survive? I do not believe we could buy our way out of a water crisis.

I need not remind this Subcommittee that water projects are getting more difficult to justify and more difficult for the American people to understand their importance when compared to our social programs which have had top billing in the past few years. It will not be an easy task to turn things around.

Today's energy crisis gives evidence that a new demand has been placed on our water. While some of our national leaders preach that the path to energy security leads to alternate energy development this is only part of the solution. We know that energy security can become a reality only if there is a parallel and aggressive effort to develop essential water resources that will be required to achieve this goal. Almost every source of energy proposed requires tremendous quantities of water—water that is largely unavailable at the present time for such use.

Rest assured that as our country continues its growth, water for energy will not be the last requirement we will place on our water resources. There will be others, as the history of our nation has demonstrated over the past century and a half.

We must consider not only future needs but we must continue to provide and improve on methods for meeting existing water needs. We cannot rely solely on conservation as some define the term, as less demand; we must practice true conservation which is wise use.

In carrying out our water program in recent years we played a numbers game. We have never established a program, a goal, or an objective in the development of our water resources, but rather we justified each individual project by so-called benefit to cost analysis.

However during the 60's and 70's new programs were approved. No benefit to cost analysis, but total programs with goals, objectives.

So I think it is time that we develop a water program to meet the needs of our nation.

I would like to say a few words about multiple use of water. Flow regulations went out the window when the Clean Water Act was passed. An assumption was made by many, that controlling waste by treatment plants at the source would soon make every stream swimable and fishable. They forgot about the non-point source of pollution and also forgot the efficiency of waste-treatment plants.

They also forgot that by storing water in times of plenty and then releasing it during periods of scarcity, not only improves the quality of the water but it also increases the quantity and provides for environmental needs. I feel sure that multiple use, water supply and water quality environmental use in the streams is much more cost effective than solely a large number of sophisticated treatment plants and some way yet to be found for dealing with non-point sources.

During the early years of our nation, water resources development evolved in a piece meal fashion. It has continued in that fashion for 166 years. With every water crisis a slight interest develps in water resources and then quickly fades away.

I think the time has come for this country to develop a water program and not continue the piece meal approach. Time is running out before we face a water crisis. I believe a reconstructed Water Resources Council with different functions could be useful in such an undertaking. Some sort of a mechanism is needed to develop and coordinate a water program.

The Administration is proposing abolishing the present Water Resources Council which we all know has not been useful in our water program. In its place the Administration is proposing a Cabinet Council on Natural Resources and Environment.

The Council would be chaired by the Secretary of Interior, with the Secretaries of Agriculture, Transportation, Housing and Urban Development and Energy as participants. The Department of Army, through the Corps of Engineers which is the lead Federal agency in the field of water resources, is not included and we believe if the Executive Branch chooses such a forum, the Army should be included.

We also understand that the Department of Interior is contemplating an Office of Water Policy. Again we believe that any Water Policy office should include agencies that have a responsibility in water resources.

If either of the aforementioned groups become a reality we would in effect have a Water Council without any input from the Legislative Branch. Most of the water

people agree that the present Council has not been a success for several reasons. Most importantly, I believe, is that it has been under the exclusive direction of the Executive Branch. In order to develop a program to meet our water requirements, Water Council must have a certain amount of independence but must also be responsible to both the Executive and Legislative Branches. The duties of the Council must be spelled-out so that its main responsibility is to develop a water program and keep it current.

In the past we became too concerned with certain details of the program but not the program itself. We spent too much time on benefit to cost analysis, attempting to justify periods of amortization, interest rates, types of benefits, cost sharing and the like. We never considered what the objectives of a water program should be. In effect we put the cart before the horse. We worried abut all the details of justifying a project. I believe if we had developed a water program for each of our major river basins, the details as to responsibility, who should pay, and so on, would flow from the type of program developed.

We need to develop a water program NOW! If we delay, it will be too late.

One final assessment. We are not making full use of our water resources. While our nation and population continue to grow, our water development is not keeping pace. In fact it is grinding to a slow but sure halt. Our economy will do the same, if we fail to set a direction, an objective and a program to support the adequate development of water resources to meet the needs of this nation.

STATEMENT OF B. JOSEPH TOFANI

Mr. TOFANI. It is a very short statement.

Mr. BEVILL. That will be very good.

Mr. TOFANI. Mr. Chairman and members of the subcommittee, the Water Resources Congress appreciates the opportunity to present its views concerning the proper development and management of our Nation's water resources.

I am B. Joseph Tofani, president of the Water Resources Congress. Mr. Gossin chairman of our board, could not be here today—and Mr. Sam Collins, vice chairman, could not be here, but we do have a past chairman here, Mr. Tommy Thomson of Colorado. Another chairman, Mr. Behrhorst, could not make it, either. He is testifying over in the Senate, and Mr. Chambers from Mr. Myers' area could not be here today either.

So I am the pinch-hitter.

Mr. MYERS. You had a lot of no-shows, did you not?

Mr. TOFANI. I sure did.

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The last 12 months have witnessed the return of parched fields and low water supplies. And this time around the shortage is not peculiar to the West. It is also occurring in the water-rich East; New Jersey and New York, Pennsylvania, plus the northern plains are finding their water supplies running low. Add to this the deteriorating water supply systems of many of our older cities, which will require multimillion-dollar and in some cases billion-dollar programs to rehabilitate these systems, and it is easy to understand the massive water problems facing this Nation.

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They also forgot that storing water in times of plenty and then releasing it during periods of scarcity not only improves the quality of water but it also increases the quantity and provides for environmental needs. I feel sure that multiple use, water supply, and water quality environmental use in the streams is much more cost-effective than solely a large number of sophisticated treatment plants and some way yet to be found for dealing with nonpoint sources.

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The Council would be chaired by the Secretary of Interior, with the Secretaries of Agriculture, Transportation, Housing and Urban Development, and Energy as participants. The Department of Army, through the Corps of Engineers, which is the lead Federal agency in the field of water resources, is not included, and we believe if the executive branch chooses such a forum, the Army should be included.

We also understand that the Department of Interior is contemplating an Office of Water Policy. Again we believe that any water policy office should include agencies that have a responsibility in water resources.

If either of the aforementioned groups become a reality we would in effect have a Water Council without any input from the legislative branch. Most of the water people agree that the present Council has not been a success for several reasons. Most importantly, I believe, is that it has been under the exclusive direction of the executive branch. In order to develop a program to meet our water requirements, a Water Council must have a certain amount of independence, but must also be responsible to both the executive and legislative branches. The duties of the Council must be spelled

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Mr. BEVILL. Very good statement. I agree with you too that the Corps should certainly be included in that proposal.

Are there any questions or statements?

Thank you very much.

TUESDAY, MARCH 24, 1981.

WATER RESOURCES PROJECTS

WITNESS

ANNE MARIE GIBBONS, LEGISLATIVE REPRESENTATIVE, AMERICAN PUBLIC POWER ASSOCIATION

Mr. BEVILL. Ms. Anne Marie Gibbons.

Ms. Gibbons, we have allotted you 5 minutes, and you may proceed as you wish, and just put your full statement in the record, and handle it as you wish.

[The statement of Ms. Gibbons follows:]

Statement of the
American Public Power Association
on
Fiscal Year 1982 Appropriations

Submitted to the
Subcommittee on Energy and Water Development
House Appropriations Committee

March 24, 1981

My name is Anne Marie Gibbons. I am Legislative Representative of the American Public Power Association. The American Public Power Association is a national organization representing more than 1,400 publicly owned electric utilities in 48 States, Puerto Rico, the Virgin Islands, Guam, and American Samoa. About 14% of all U.S. consumers obtain their electricity from local publicly-owned electric systems. I am pleased to submit the Association's views on various aspects of the energy budget to the Energy and Water Development Subcommittee of the House Appropriations Committee concerning Fiscal Year 1982 budget requests.

APPA is especially interested in budget requests for hydropower development. Congress has granted public power systems a preference in buying Federal power from Federal dams, and in obtaining licenses and permits from FERC for hydropower development. Money budgeted for Federal hydro projects will be returned to the Treasury through the sale of electricity, together with interest. About one fifth of the money budgeted for the Federal Energy Regulatory Commission will be returned to the Treasury through license and filing fees. We believe future receipts are relevant and should be considered when evaluating funds budgeted for these activities.

Since it is essential that the nation continue to emphasize the use of renewable resources we ask this Subcommittee to examine carefully the reduction in budget for the hydroelectric regulation at FERC, and the elimination of small scale hydro loans at the Department of Energy.

This statement concerns the following FY 1982 budget requests:

Federal Energy Regulatory Commission - $82 million.

Army Corps of Engineers - $3.1 billion.

Federal Power Marketing Administrations - $243.6 million.

Water and Power Resources Service - Portions of the budget relating to power.

Department of Energy Small Scale Hydro Feasibility Loans - $10 million.

FEDERAL ENERGY REGULATORY COMMISSION

The Federal Energy Regulatory Commission request for FY 1982 is $82 million, which is a $5 million increase over FY 1981 appropriations, but almost $4 million less that the Carter Administration's FY 1982 request. It is important to note that in FY 1982, almost one fifth of the Commission's budget request, $14.7 million, will be returned to the U.S. Treasury. These funds will be collected from license and filing fees. APPA is particularly interested in the amount requested for electric power regulation, which is $18 million, and the amount requested for hydro regulation, which is $13 million.

Electric Power Regulation - With respect to electric power regulation, a majority of public power systems buy wholesale power from private power companies which they distribute to their retail customers. Almost 700 public power systems buy all their power requirements from investor owned utilities. An additional 225 buy part of their power from investor owned utilities. The rates charged by the private power companies for this wholesale power are regulated by FERC. As of Feb. 1, 1981, wholesale rate cases pending before the Commission number 199. Obviously, the length of time that it takes FERC to determine whether a rate charged by a wholesale supplier is just and reasonable affects the economic health of many public power systems.

In addition to wholesale rate regulation, the Commission's responsibilities in the electric power area were increased under the Public Utility Regulatory Policies Act of 1978 to include gathering cost of service data; ordering physical interconnecting between transmission systems to provide for the sale or exchange of electric power, if in the public interest, and ordering electric utilities to provide transmission service to permit noncontiguous utilities to buy or exchange power; studying power pooling; reviewing automatic fuel adjustment clauses; issuing rules on small power producers and cogenerators; gathering information on interlocking directorates.

APPA recommends a funding level which will allow FERC to carry out its wholesale rate regulation and PURPA responsibilities in an effective manner.

Hydro Power Regulation - The Commission has requested $12.8 million for hydro regulation which includes issuing permits and licenses for hydroelectric projects, enforcing terms and conditions of the licenses, and inspecting dams under its jurisdiction for safety purposes. The request is $794,000 less than the amount appropriated last year, and almost $4 million less than the amount requested in the Carter budget for FY 1982.

A significant number of public power systems are interested in hydroelectric development and have obtained preliminary permits and licenses from FERC. The renewed interest in development of hydro sites has resulted in increased applications for preliminary permits and licenses and an increased number of competing applications for the same sites.

The workload at FERC reflects the renewed interest in hydro. More than six times the number of preliminary permits filed in FY 1979 were filed in FY 1980, and the increase continued in FY 1981. In FY 1980, 501 preliminary permit applications were filed, and in FY 1981, 1,200 applications are expected to be filed. As of March of this year there were 760 preliminary permit cases pending.

It is anticipated that about 50% of the preliminary permits will result in applications for a license to a hydro facility, and consequently the preliminary permits issued in FY 1980 will result in a significant increase in hydro license applications. The growth of hydro licensing activity is seen in the following data: the Commission received 13 license applications in FY 1978, 25 in FY 1979, and 63 in FY 1980. About 120 applications are expected in FY 1981 and about 170 in FY 1982.

APPA has been unable to learn the impact of the close to $1 million reduction from funds budgeted for FY 1981 for hydro regulation, or the purposes for which the original request for an additional $4 million would be used. However, in light of the increasing workload in the hydro section, it is important that there be a justification for such reductions. FERC's rationale as expressed in its budget request is that the Administration will seek to have legislation enacted to exempt hydroelectric projects generating less than 15 megawatts from licensing regulation and to phase out the Commission's activities in the area of hydropower resources analysis. This explanation should be examined since the passage of this legislation is not guaranteed and increasing the exemption to 15 mw projects may not reduce the workload as anticipated.

Currently, FERC has authority under Section 408 of the Energy Security Act of 1980 to exempt small hydroelectric projects under 5 mw at existing dams from Federal Power Act licensing requirements. However, there are potential problems for hydro developers in taking advantage of the license exemption which could result in the exemption process not being used. By being exempt from the license process, a developer also loses the protection and priority rights which a license affords. The developer is subjected to conditions and objections of Federal and State environmental agencies - which under the licensing process had to defer to FERC. The current exemption applies to developers with a property interest in the site. Consequently, there is a possibility of misrepresentation as to the applicant's property right which could necessitate more staff to verify statements made in exemption applications.

The Administration has not requested appropriations for the Hydropower Resources Analysis section, proposes its termination, and suggests that legislation will relieve FERC's responsibilities. In FY 1981, $2.2 million was appropriated for Hydropower Resources Analysis. Almost all the money appropriated for hydropower resources analysis is reimbursable from fees collected. Its duties include reviewing and determining the amount an owner of a downstream dam should pay the government for benefits provided by a Federal headwater improvement. In 1980, $3 million was collected for these headwater benefits. The average amount collected over the years is $4 million a year. Another of its functions is to review and approve rates charged by all Federal power marketing administration - which amounts to about 40% of all hydropower rates. There are currently 8 power marketing rates pending that would increase rates by $343.2 million a year. The section also appraises hydroelectric projects which are to be licensed to determine , as required under Section 10(a) of the FPA, whether the project will be best adapted to a comprehensive plan for "the improvement and utilization of water power development and for other beneficial public uses..." The section also inventories hydropower resources throughout the country. The responsibilities of this section are comprehensive, essential aids in the licensing process, and in hydro development in general. These functions, authorized by the Federal Power Act, should not be eliminated from FERC until another apparatus is in place to handle these responsibilities. APPA recommends that money be restored to the FY 1982 budget for Hydropower Resources Analysis.

APPA believes that it is important that FERC be able to keep up with the increased number of hydro permits and licensing applications so that our hydro resources are developed in a timely manner. We recommend that the subcommittee closely examine the budget request to determine if the reduction will allow the Commission to operate effectively in the hydro area and we suggest in view of the increased workload that it would be prudent to appropriate the additional $4 million requested in the original budget.

CORPS OF ENGINEERS

The Corps has not requested funds for construction of new power projects in FY 1982. Their amended FY 1982 budget request is $3.1 billion. There has been about a 7% decrease in the Corps 1982 revised budget, but these reductions, according to the Corps, do not affect the completion dates of hydro power projects. APPA supports the Corps budget request for general investigations, continuing construction, and operation and maintenance of hydropower projects. APPA feels that funds for power projects are one of the country's most worthwhile and cost-effective investments, since these projects will help reduce our dependence on foreign oil and money budgeted for power will be returned to the Treasury through the sale of electricity.

Specific Corps Projects Supported by APPA

Libby Additional Units, Montana - The Corps has requested $14.6 million in the FY 1982 budget for work on four additional units at the main Libby Dam, located on the Kootenai River in Montana. The project would provide 420 mw of capacity, would save the equivalent of 3 million barrels of oil a year, and would supply needed peaking power for the northwest. The Corps did not request money for the reregulating dam downstream from the main dam, pending reauthorization by Congress. Startup of all four generating units is expected by May 1984.

Harry S. Truman Dam and Reservoir, Missouri - The Corps has requested $14.5 million for construction, and $2.8 million for operation and maintenance for the Harry S. Truman Dam and Reservoir located on the Osage River in Missouri. This is a 160 mw project which is 85 percent completed. About $2.7 million of the 1982 budget requests would be used to begin construction on structural measures to lessen the stream impacts of the hydropower project.

Richard B. Russell Dam, Georgia - The Corps has requested $81.4 million for FY 1982 for this 300 mw installation located on the Savannah River, which will help meet the increased power requirements of the Southeast. An additional $325,000 is requested for operation and maintenance. Areas to be served by the project include all of South Carolina, North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The first power on line is expected in 1984. The total estimated cost of the project is $348 million. The dam is 64% completed.

Chief Joseph Additional Units, Washington - The Corps has requested $10.3 million for FY 1982 for work on 11 units with a capacity of 968 mw at the dam located on the Columbia River 51 miles downstream from the Grand Coulee Dam. The entire project is scheduled to be completed in September, 1983. These additions provide essential power needed by the Federal systems to serve the electric requirements of the region.

New Melones Lake, California - The Corps has requested $12.7 million for FY 1982 for advancing construction of this 300 mw capacity plant. The project, located on the Stanislaus River, will provide needed power to the San Joaquin Valley. The project is scheduled for completion September, 1984. Power has been on line since April, 1979.

Bonneville Second Powerhouse, Oregon and Washington - The Corps has requested $51.3 million for FY 1982 for continued construction of the 558.2 mw capacity 8-unit second powerhouse located on the Columbia River. Power on line is scheduled for May 1981. The entire project is scheduled to be completed in July 1982. The project is now 83% completed.

McNary Lock and Dam Second Powerhouse, Oregon and Washington - The Corps has requested $1.7 million for surveys for a proposed six unit, 742 mw capacity second powerhouse. FY 1982 funds would be used to continue the planning and engineering studies to refine the recommended plan of improvement and project cost estimates. The turbine selection and design will be initiated, the size of the fish propagation facilities will be determined and preliminary design work will be started.

Dickey-Lincoln School Lakes, Maine - The Corps has not requested funds for the Dickey-Lincoln project. Last year, $795,000 was appropriated for completion of advanced engineering and design studies of the proposed project in northern Maine which would provide 830 mw of capacity and 17% of New England's peaking requirements in the late 1980's. The study will be completed this year. If the study is favorable, APPA urges Congress to appropriate funds for construction of the project. Approximately 98% of the $810 million project would be recovered by the government through the sale of power. The Corps has estimated that the value of the power from the project is increasing, as a result of oil price hikes at a rate four times faster than the cost of constructing the project.

FEDERAL POWER MARKETING ADMINISTRATIONS

APPA supports the FY 1982 budget requests of $243.6 million for the four power marketing administrations - up $68.5 million from last year's appropriations. The budget includes $3.5 million for the Alaska Power Administration; $7.2 million for the Southeastern Power Administration; $21.2 million for the Southwestern Power Administration; and $211.2 million for the Western Area Administration. The fifth power marketing administration, Bonneville, requires no appropriations since it operates on a self-financing revolving fund basis.

All five of the Federal power marketing administrations sell electricity generated by Federal hydropower projects to publicly-owned systems. Municipalities are given preference in the sale of this power. This fiscal year, all five administrations will market about 225 billion kilowatt-hours, and revenues are expected to be $1,553 million.

It is interesting to note that the revised budget has not reduced the original FY 1982 Carter budget request for the power marketing administration. One of the probable reasons for this is that part of the revenues derived from selling power and transmission services flow back to the Treasury with interest and part are used to offset annual operation and maintenance costs. Since their inception, the power marketing administrations have proven a valuable resource collecting a total of $10 billion in revenues. These revenues are from electric ratepayers not taxpayers.

The Federal power marketing administrations play an extremely important role in the area of energy delivery. Their requests are reasonable and should be appropriated for FY 1982.

DEPARTMENT OF INTERIOR'S WATER AND POWER RESOURCES SERVICES

The Water and Power Resources Services constructs and operates facilities to irrigate land and furnish water supplies in 17 western states. Some of these projects produce power which is marketed by the Federal power marketing administrations. APPA supports portions of the budget relating to power including $54.9 million of the operation and maintenance budget which would be allocated to power, and $1.7 million of the investigations budget which would be allocated for studies examining the potential of increasing hydropower at existing facilities.

SMALL HYDRO PROGRAMS

The Department of Energy has not requested funding for the hydro demonstration and feasibility study loan programs for FY 1982. The Administration plans to terminate the programs during FY 1981 and has requested a $20 million reduction for the feasibility loan program and a $5 million reduction for demonstration. The Energy Security Act authorized these programs through FY 1982. APPA feels these programs have aided in renewing interest in small scale hydro. They are important because many small scale projects border on the economic margin. Federal feasibility funds increase the likelihood that these projects will be economically feasible today rather than sometime in the future. They should be funded through FY 1982, at which time Congress can make a determination during the authorization process as to whether the programs should continue.

STATEMENT OF ANNE MARIE GIBBONS

Ms. GIBBONS. Thank you, Mr. Chairman. My name is Anne Marie Gibbons. I am legislative representative for the American Public Power Association. At this point, I would like to summarize my statement and request that my full statement be included in the record.

APPA is a national organization representing more than 1,400 publicly owned electric systems throughout the United States. About 14 percent of all U.S. consumers obtain their electricity from public power systems.

This statement concerns fiscal year 1981 budget requests for hydropower development, marketing, and regulations. This area includes the following: the Federal Energy Regulatory Commission; Army Corps of Engineers; Federal Power Marketing Administrations; Department of Interior's Water and Power Resources Services; and the Department of Energy Small Scale hydro loans.

With respect to the Federal Energy Regulatory Commission, APPA is especially interested in two areas—one is electric power regulation, and the other hydropower regulation. It is important to note that in fiscal year 1982, FERC will return about $14.7 million to the Treasury from license and filing fees.

The Commission has requested $12.8 million for hydro power regulations, which is almost $1 million less than the amount appropriated last year, and almost $4 million less than the amount requested in the original fiscal year 1982 budget.

We have been unable to learn the impact of these reductions. However, in light of the increased workload at FERC it is important that this reduction be justified. For example, FERC reviewed 501 preliminary permit applications in fiscal year 1980, and expects 1,200 in fiscal year 1981.

FERC's rationale for the reduction is that the administration will seek legislation to exempt hydroelectric projects generating less than 15 mw from licensing regulations and to phase out the Commission's activities in the area of hydropower resources analysis. This explanation should be examined since the passage of such legislation is not guaranteed, and increasing the exemption to 15 mw may not reduce the workload as anticipated.

With respect to hydropower resources analysis, APPA recommends that money be restored to the fiscal year 1982 budget. The responsibilities of this section are essential to the licensing process and to hydro development in general. In fiscal year 1981, $2.2 million was appropriated. Its duties include reviewing and determining the amount an owner of a downstream dam should pay the Government for benefits provided by Federal headwater improvements. In 1980, $3 million was collected for headwater benefits. It also reviews and approves rates charged by all Federal power marketing administrations—which amount to about 40 percent of all hydropower rates. It also appraises hydropower projects that are to be licensed to determine if the project satisfies the statutory requirement that it is best adapted to a comprehensive plan for improvement and utilization of water power and for other beneficial public uses.

With respect to the Corps of Engineers, APPA supports the specific projects mentioned in my testimony. We feel funds for

power projects are one of the country's most worthwhile and cost-effective investments, since these projects will help reduce our dependence on foreign oil and money budgeted for power will be returned to the Treasury through the sale of electricity.

APPA supports the requests of $243.6 million for the four power marketing administrations. The revised budget has not reduced the original fiscal year 1982 request, which we feel is a reflection of the fact that the revenues derived from selling power and transmission services flow back to the Treasury with interest.

Small Hydro Programs. One of the most unfortunate proposed cuts is funds for small-scale hydroelectric loans at the DOE. About 130 loans have been made for feasibility studies and licensing. Twenty studies have been completed, and all 20 have recommended that development proceed. These loans are repaid to the Government at 7¾-percent interest rate. It is clear that small-scale hydro projects can have a very beneficial impact on our economy with a very small investment.

That concludes my summary.

Mr. BEVILL. Thank you very much.

Any questions?

TUESDAY, MARCH 24, 1981

WATER RESOURCES PROJECTS

WITNESS

HON. TOM PETRI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. BEVILL. I see our colleague, Congressman Tom Petri, walked in. We will take him next so he can get back to work, if we may.

You may just submit your statement and proceed as you wish, Congressman.

[The statement of Mr. Petri follows:]

STATEMENT OF REPRESENTATIVE PETRI

Mr. PETRI. Thank you very much, Mr. Chairman. I will submit my statement in full for the record and just abbreviate briefly.

I did appear on behalf of the same projects which are now a large number of new projects, but ongoing maintenance operations in my district, and I want to express my appreciation for the consideration that the committee extended to these projects, which are very important and have been going on for many years, and are vital to many of the business and recreational interests of our part of Wisconsin. The consideration you have shown for these projects appears in last year's budget deliberations.

With that I, until there are any questions on them, I would just rely on the written statement that I submitted.

Mr. BEVILL. All that will be fine.

Are there any questions or any statements by anyone?

If not, very good.

Mr. MYERS. We know where to find him if we need him.

Mr. BEVILL. We like these good, short witnesses, Tom.

[The statement of Congressman Petri follows:]

STATEMENT OF THE HONORABLE THOMAS E. PETRI

Mr. Chairman, I am most grateful for this opportunity to testify before this distinguished Committee on behalf of the following public works projects in Wisconsin's Sixth Congressional District:

	Budget fiscal year 1982	Corps capability	Purpose of funding
Fox River	$1,511,000	$1,511,000	Operations and maintenance.
Manitowoc Harbor	374,000	374,000	Do.
Sheboygan Harbor dike disposal	3,700,000	3,700,000	Do.

FOX RIVER

I'm privileged to appear in support of the Fox River project. The Budget request for this project is $1,511,000 for operations and maintenance. The Corps has indicated a like capability.

This is not a request for new construction. The money is needed for normal maintenance for the river, to allow daily operations on the Fox to continue. The Fox is a complex system which includes several rivers and lakes, the largest being Lake Winnebago.

19 locks and 9 dams are located on the Fox. The Menasha lock, which is located in my congressional district, is the busiest lock in the system with 4,420 water craft passing through it each year. Funds would provide for channel maintenance, flow regulation and necessary dredging of the mouth of the Fox River to remove many thousand yards of material. The normal operation of the river also requires the hiring of seasonal employees for the navigation season, and full time personnel to operate the locks and dams, as well as: condition and operation studies, water control management by Corps personnel, contract for gage readers, technical and district overhead, and engineering work on dredging plans.

The Fox River is a major industrial waterway in Wisconsin. Its maintenance has a major effect on the five areas listed here:

(1) On flood control—with noticeable savings in property damage and protection to agricultural lands;

(2) On commercial transportation—allowing industries to transport materials and goods;

(3) On hydroelectric power—to help meet the demand and offset the critical fuel and energy shortage;

(4) On fishing and recreational boating—which enhances the area as a tourist center in a state where tourism is one on the largest industries, and

(5) On the water supply—for municipal and rural water systems including service to many communities.

Those of us who live in the Fox River area are grateful for the Committee's favorable actions on past requests to maintain the Fox River system. We will appreciate your continued support for the full budgeted amount.

MANITOWOC HARBOR

I would now like to turn the Committee's attention to the Manitowoc Harbor in Manitowoc County which is budgeted for $374,000 for operations and maintenance. The Corps has indicated a like capability.

Allowing the Manitowoco Harbor to continue to operate in its present manner will be a great step toward insuring the economic future of the Manitowoc area, its growth and properity, and its continued success in development. Recreational boating, an important industry in Wisconsin, is enhanced by two 4-lane boat launching ramps, allowing boaters to launch their crafts into Lake Michigan.

More important, Manitowoc Harbor has significant commercial value. Over 650,000 tons of different types of products have been shipped or recieved by boat last year, including: coal, cement, barley and limestone. The harbor also has car ferry service across Lake Michigan. The ferry, in addition to rail cars, carries automobiles and passengers.

One user of the harbor is the Manitowoc Company. The company constructs cranes which are shipped all over the world. Gross sales for this company come to

about $150 million each year. The Manitowoc Company is Manitowoc's major employer.

Another concern, Medusa Cement Company, received 40 shiploads of cement from Michigan in 1978 totaling approximately ½ million tons of material. The company has no viable alternative of shipping the cement by water. These and many other examples which I could mention show how vital the harbor is to Manitowoc's economy. Over 1,000 dependent or related jobs are based on the harbor's normal operation. This amounts to job wages in excess of $15 million.

We respectfully ask the committee to bear in mind these important local considerations and decide favorably for the total budgeted amount.

SHEBOYGAN HARBOR DIKE DISPOSAL

Finally, I would like to turn the committee's attention to the Sheboygan Harbor Dike Disposal which is budgeted for $3,700,000.

The United State Environmental Protection Agency has determined that there are PCB's in the Sheboygan Harbor sediments, along with other material which make the sediments dredged from the harbor bottom unsuitable for open-lake disposal. The Corps is working out arrangements with the EPA and the Wisconsin Department of Natural Resources to determine the precise way of disposing of the material in a confined disposal facility. The Corps has completed all design work on the project. The disposal facility will help to insure that the harbor can continue to operate.

To give you an idea of the harbor's overall significance, I would like to point out that without an adequately dredged harbor the C. Reiss Coal Company, which employs 189 people, could be forced out of business. C. Reiss supplies the Kohler Company with its fuel. The Kohler Company employs over 5,000 people in the Sheboygan area. The failure to construct the facility would eventually result in the closing of the harbor and have disastrous effects on the local economy. Of the many hundreds of thousands of tons of material shipped through the harbor each year, $6.60 is saved for each ton brought in through the harbor compared to the cost of rail shipment.

Thank you, Mr. Chairman and Members of the Committee, for your past assistance and for allowing me time to speak on behalf of these vital projects.

Mr. BEVILL. Mr. John Downs, president, National Association of Dredging Congractors.

We are glad to have you with us, Mr. Downs, and just submit your statement and proceed as you wish.

TUESDAY, MARCH 24, 1981.

WATER RESOURCES PROJECTS

WITNESSES

J. A. DOWNS, PRESIDENT, NATIONAL ASSOCIATION OF DREDGING CONTRACTORS; CHAIRMAN OF THE BOARD, GREAT LAKES INTERNATIONAL, INC.

J. W. BEAN, PRESIDENT, C. F. BEAN CORP.

E. P. TANZBERGER, VICE PRESIDENT AND CHIEF FINANCIAL OFFICER, C. F. BEAN CORP.

K. T. DEXTER, WASHINGTON REPRESENTATIVE, NATIONAL ASSOCIATION OF DREDGING CONTRACTORS

Mr. BEVILL. We are glad to have you with us, Mr. Downs, and you just submit your statement and proceed as you wish.

Mrs. BOGGS. May I welcome Mr. Bean and Mr. Tanzberger from our district, and we are pleased to have them with us.

Mr. BEVILL. Yes; we are pleased to have you with us.

STATEMENT OF J. A. DOWNS

Mr. DOWNS. Mr. Chairman, my name is Jack Downs, president of the National Association. You recognized Mr. Bean, president of the C. F. Bean in New Orleans, and Eric Tanzberger, his right-hand man. Mrs. Dexter is our Washington representative of our association.

We would like to submit our statement and touch on a few points that are in it.

Mr. BEVILL. That will be fine.

[The information follows:]

Testimony of National Association of Dredging Contractors
Before the Energy and Water Subcommittee
Committee on Appropriations
U.S. House of Representatives
March 24, 1981

Mr. Chairman, my name is J.A. Downs. I am President of The National Association of Dredging Contractors. I am also Chairman of the Board of Great Lakes International, Inc., Oak Brook, Illinois. With me this morning is Mr. J.W. Bean, President of C.F. Bean Corporation, New Orleans, Louisiana; Mr. E.P. Tanzberger, Vice President and Chief Financial Officer of C.F. Bean Corporation, New Orleans, Louisiana; Mr. F.R. Hazard, Executive Vice President, Great Lakes International, Inc., Oak Brook, Illinois; and Ms. K.T. Dexter, Washington Representative, The National Association of Dredging Contractors, Washington, D.C.

I would like to say at the outset that we fully appreciate the need for budget restraints and we support what the President is doing to turn this country around. We are here to make positive proposals for staying within the budget request for the Corps of Engineers "Operation & Maintenance" fund and at the same time provide $70 million more needed for critical maintenance dredging at key ports and harbors in the United States. We believe this can be accomplished by eliminating or deferring certain items listed in the revolving fund request and allocating these funds to priority maintenance projects.

There has been serious funding shortfall in recent years in the Corps' maintenance dredging funding requirements. The funding shortfall for maintenance dredging for FY 1981 will be over $70 million. In FY 1982 the funding shortfall will increase to $125 million. This means that the ports and harbors of the United States are not being properly maintained.

The $125 million funding shortfall for maintenance dredging in FY 1982 will, for example, adversely affect the Ports of Baltimore ($2,381,000), Norfolk ($4,632,000), Mobile, Ala., ($2,000,000), New Orleans ($9,000,000), New York ($7,600,000), and Philadelphia ($10,860,000). The dollars quoted represents the unfunded maintenance dredging requirements for FY 1982, which total 20 million cubic yards for these six (6) ports alone.

The budget request for FY 1982 provides only $351 million for maintenance dredging work. Although the FY 1982 request is 6% higher than the funds appropriated in FY 1981, 19 million cubic yards less maintenance dredging will be done.

The funding limitations have had an adverse effect on both the Corps and industry. The Corps recently informed industry that the existing funding shortfall keeps the Corps from advertising 30 million cubic yards of hopper dredge work under the Industry Capability Program in FY 1981. You will recall that the Conference Report for FY 1979 directed the Chief of Engineers to make available not less than 30 million cubic yards of hopper dredging work per year for industry to bid for the following 3 fiscal years, subject to industry capability. The net result of the Corps' recent analysis is that only 20 million cubic yards of hopper dredge work will be available to industry to bid on in FY 1981.

Industry currently has seven (7) hopper dredges in operation -- including 1 large class, 4 medium class, and 2 small class. Industry's eighth hopper dredge, which is a medium class, will be on line in September 1981. Industry will also have three (3) more hopper dredges available in 1982. Industry has fulfilled its commitment to Congress to build hopper dredges and other new dredging plant, but we are deeply troubled and concerned about the lack of dredging work available for industry to bid.

The existing seven (7) industry hopper dredges have a workload capacity to remove over 40 million cubic yards of material annually. Yet in FY 1981 and FY 1982 there will only be 20 million cubic yards made available by the Corps for industry to bid. This means that industry's hopper dredges will be idle and tied-up to the docks for long periods of time. Currently, C.F. Bean Corporation of New Orleans has been unable to find work on the East Coast, the Gulf, or the West Coast for its new 5,500 CY hopper dredge. T.L. James has tied-up its new small hopper dredge for the lack of work.

At the same time, the Corps continues to fully fund and utilize its hopper dredges, contrary to the intent of Public Law 95-269. The law requires that this work be put out for competitive bidding by industry where industry has the capability to perform the work. The Corps has been slow in retiring its old hopper dredges even though the 5-year Industry Capability Program has demonstrated that in most cases industry can do the work more economically. The hopper dredging requirements in FY 1981, according to the Corps figures, total about 64 million cubic yards. Only 20 million cubic yards are being made available to industry to bid on and 44 million cubic yards or more are being set aside for government plant.

The construction of deep-draft ports in the United States to a minimum project depth of 55 feet to handle exportation of coal and other bulk commodities is still several years away. Galveston is the only Port which has the present capability to start construction any time soon. It is conceivable that Galveston could start construction this year with private capital if authorizing legislation providing for reimbursement is enacted in this session of Congress.

The American Dredging industry has the full capability to handle all of the dredging involved in planned future construction of deep-draft ports in the United States. By 1982, industry hopper dredges alone will have the capacity to remove over 75 million cubic yards of material annually. Corps' studies also show that industry has more than a sufficient number of hydraulic dredges and hopper dredges to perform this work. The Corps estimates that 60% of the deep-draft port work will be done by hydraulic dredges and 40% by hopper dredges.

Furthermore, if additional equipment is required to meet unprojected future requirements, the American dredging industry will build the necessary dredges. Industry can respond quickly as the needs arise. We can build new hopper dredges and hydraulic dredges in 18 months or less. Industry does not require 2 or 3 years or longer for design and construction of its equipment. Industry can also construct equipment for 50% less than the Corps.

In view of tight budget restraints and the serious need to increase the FY 1982 budget request for critical maintenance dredging, the construction of the medium class hopper dredge and other floating plant items should be deferred at this time. This action would enable the Committee to reallocate the funds to provide $70 million more for high priority maintenance dredging projects. The justification for such deferrals is as follows: The medium class hopper dredge was estimated to cost $74,450,000. Initiation of construction was scheduled to begin in FY 1980. As of this time, little if any construction has begun on the dredge. Sun Shipbuilding Co. recently announced that they were withdrawing from the ship building business and that they were subcontracting construction of this dredge to Bath Iron Works. We understand that most of the machinery for the dredge has been ordered. This equipment could easily be placed in storage. Normally the cost of the machinery is about 25% to 35% of the cost of construction. Deferral of the construction of this dredge would provide nearly $40 million for critical maintenance dredging projects.

The deferral of construction of the "other floating plant" would provide over $30 million for reallocation to priority maintenance projects. We would strongly urge the Committee to delete Item (1) Tug No. 2-105' Replacement for the Tugs TWO RIVERS and LUDINGTON (new) at a total estimated cost of $4,100,000 and Item (5) DERRICKBARGE WARREN (continuing) at an estimated total cost of $7,000,000. There is no need for the Corps to acquire this equipment. Industry has the necessary plant and equipment on the Great Lakes to perform this work. We have been trying for years to get the Corps to put this work out for competitive bids.

The serious funding shortfall for maintenance dredging in FY 1982 is a compelling reason for earmarking dredging funds under the O & M appropriation. The continuous diversion of maintenance dredging funds for other uses has created chaos in the management and efficient performance of the program. We strongly urge the Committee to reject last year's language in the Senate Report and earmark a total dollar figure mandated to be spent on maintenance dredging in the O & M appropriation.

* * *

This concludes my testimony. Thank you, Mr. Chairman.

NATIONAL ASSOCIATION OF DREDGING CONTRACTORS
LIST OF WITNESSES TO APPEAR BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

J.A. DOWNS	PRESIDENT, NATIONAL ASSOCIATION OF DREDGING CONTRACTORS CHAIRMAN OF THE BOARD, GREAT LAKES INTERNATIONAL, INC.
J.W. BEAN	PRESIDENT, C.F. BEAN CORPORATION
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TESTIMONY
Before The

COMMITTEE ON APPROPRIATIONS
ENERGY AND WATER SUBCOMMITTEE
U.S. House of Representatives

By

J.A. Downs, President
National Association of Dredging Contractors

March 24, 1981

Testimony of National Association of Dredging Contractors
Before the Energy and Water Subcommittee
Committee on Appropriations
U.S. House of Representatives
March 24, 1981

Mr. Chairman, my name is J.A. Downs. I am President of The National Association of Dredging Contractors. I am also Chairman of the Board of Great Lakes International, Inc., Oak Brook, Illinois. With me this morning is Mr. J.W. Bean, President of C.F. Bean Corporation, New Orleans, Louisiana; Mr. E.P. Tanzberger, Vice President and Chief Financial Officer of C.F. Bean Corporation, New Orleans, Louisiana; Mr. F.R. Hazard, Executive Vice President, Great Lakes International, Inc., Oak Brook, Illinois; and Ms. K.T. Dexter, Washington Representative, The National Association of Dredging Contractors, Washington, D.C.

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The serious funding shortfall for maintenance dredging in FY 1982 is a compelling reason for earmarking dredging funds under the O & M appropriation. The continuous diversion of maintenance dredging funds for other uses has created chaos in the management and efficient performance of the program. We strongly urge the Committee to reject last year's language in the Senate Report and earmark a total dollar figure mandated to be spent on maintenance dredging in the O & M appropriation.

* * *

This concludes my testimony. Thank you, Mr. Chairman.

Mr. DOWNS. First, we do fully appreciate the need for budget restraints, and we support the President on what can be done to turn this country about.

We are here to make certain positive proposals, trying to stay within the budget request for the Corps of Engineers' operation and maintenance fund at this time to provide the moneys for the critical dredging needs for the ports around our country.

The shortfall in the dredging operations in maintenance dredging projects of the Corps of Engineers this year is approximately $70 million. Next year as now scheduled, it is about $125 million short. The budget request for fiscal year 1982 actually provides for approximately 19 million cubic yards less of dredging than envisioned in this present year.

We believe to provide the funds, the $70 million this year, there can be certain deferrals made in the revolving fund construction program. Specifically, we believe that the medium class hopper dredge, for which the Corps of Engineers has recently transferred the AA contract from Sun Ship up to Maine, can be deferred.

There are certain other minor items of floating plant and equipment; but there is also big money and some things we think might be deferred and some actually canceled to provide the funds for the critical dredging we think must be done to keep our country moving.

Second, the question has been asked of the American dredging industry's capability of meeting and handling the dredging requirements should the deepwater port program develop as we presently envision it. I can assure you that the industry does have the equipment today. They have proven they can build it rapidly; they can finance it and build it as needed and, in fact, some several years ago the dredging industry committed themselves to building certain hopper dredges. I think it was in fiscal year 1979 we made a statement here we were building six hopper dredges to move into the Corps program. Today there are seven dredges built and operable in the country today. Two of them, by the way, are tied to the docks lying idle, brand new, but they are tied up because of the lack of work.

The Corps recently informed the industry that the existing dollar shortfall has prevented the Corps from advertising the 30 million cubic yards that were directed in the conference report of fiscal year 1969. In spite of the fact that work continues to be set aside for all of their hopper dredges today, the 30 million yards envisaged and directed by the conference report today is only approximately 20 million yards. This is the workload provided for the private industry today with the new equipment.

In spite of this, I would say the industry is committed to a building program; they are building, and we expect to see several more vessels on line within the next year or year and one half, and by this time next year I expect there will be two more brand new modern hopper dredges ready to move into the field.

I believe those are the important points in my statement. We appreciate being here.

Mr. BEVILL. Very fine. Are there any questions or statements by anyone?

Mrs. BOGGS. Mr. Chairman.

Mr. BEVILL. Mrs. Boggs.

Mrs. BOGGS. Chairman Bevill and I and several other members have introduced legislation to establish fast-track procedure for the construction of deep-draft ports so we can improve our coal export capability, and it is very encouraging to hear you say that the seven hopper dredges have come on line and others are in the making, because if this legislation is enacted to authorize the deepening of several ports, let us say five ports, do you think that the American dredging industry and the Corps have the capability to accomplish this work, or do you think there might be a need to bring in some of the larger foreign dredging contractors?

Mr. DOWNS. I can answer that question positively, and we have spent a little time preparing for just such a contingency here. We envisage the program, taken from the Corps figures, should five ports come on line more or less at the same time, and the five ports that we speak about are Hampton Roads, Baltimore, Mobile, New Orleans—that is only four.

Mr. BEVILL. I believe it is four.

Mr. DOWNS. Four ports; all right.

Mrs. BOGGS. Five could come on line.

Mr. DOWNS. In looking at that program, the Corps envisaged those to be done possibly over a period of 3 years each, and we have looked at the capacity of the industry over the past few years, our present capacity and the way we look at it in the future, and we can assure you industry in its present-day form can handle a job such as that.

Over the past 3 years industry has continued to be approximately 50 percent occupied.

If those new ports come in from the Corps' own figures, this would be approximately 150 million yards that would be done per year. The additional maintenance would be something like 60.

We put in the normal Corps workload, if we look at private and overseas work of the Corps, this adds up to something a little over 5 million cubic yards, and we say the capability of industry today is something like 680 million yards, so we still would be only 75 or 78 percent occupied. So I think we can assure you that the industry has that capability and will be able to meet the challenge when it arrives.

Mrs. BOGGS. That is very encouraging.

Could you give us any kind of an estimate of the negative impact on our waterborne commerce with the shortfall in funds for maintenance dredging?

Mr. DOWNS. The figures I do not have, Mrs. Boggs, but certainly we recognize today there are ships waiting outside the ports to come in and load; they cannot come in fully loaded. This happens in Hampton Roads, it happens in New Orleans, and we see it in ports around the country. That is why I call the maintenance dredging critical. Without this being done it is definitely going to harm our economy. I do not have the figures at hand to back those statements up, but I know idle ships tied at anchor means dollars.

Mrs. BOGGS. I know you have had another problem in the industry and that is with the experience of the spiraling fuel costs in being able to execute Corps projects. Could you comment on that?

What has been the industry's recent experience with the problem of spiraling fuel costs in executing Corps projects?

Mr. DOWNS. We have had severe troubles through the years. Through the help and assistance of people on the Hill here and the Corps there was one project in which an escalation clause was written into a contract, and that is presently being studied. But over a long-term period of time we advocated the use of such a formula in order to minimize the risktaking and thus the estimate on the part of a contractor over 3 years as to what the fuel costs would be. It has been a bothersome problem; but overall it is someting we have been able to handle and I think will be handled in the future.

Mrs. BOGGS. I know that you propose the deferral of the construction of the Corps medium class hopper dredge. Has not all but $12.5 million in funds for this dredge been appropriated and committed?

Mr. DOWNS. I speak from limited personal knowledge, and am not sure of all of the figures. I know the total estimated cost was approximately $75 million. I know there was $19 million or $20 million in fiscal 1980 that was used to define initiation of construction. The 40-odd million dollars, $49 million for fiscal year 1981 has been somewhat delayed, though I do believe the long-term purchases for that type of equipment have been bought, and are on order. When Sun Ship went out of business on that type of work, and moved up to Maine, they transferred the contract to Maine, and the actual physical construction of the hull of the ship today is zero, or very little has been done. So I believe that much of those monies are still to be expended, and that all of that machinery I speak of, which is control equipment and so forth, can be very easily stored and held over.

Mrs. BOGGS. You do not think that is a wasteful practice of putting it off?

Mr. DOWNS. I think in the present light of holding the budget, the maintenance dredging of those ports to keep the ports open and preventing the tying up of ships lying at anchor waiting to come in is more important than a year's loss of time in that medium hopper dredge. Industry has more than enough to fill the gap. So of the two evils that is certainly one we can envisage and would do less harm in the overall program.

Mrs. BOGGS. Thank you very much.

Thank you, Mr. Chairman.

Mr. BEVILL. Yes, thank you very much, Mr. Downs, for your presentation.

TUESDAY, MARCH 24, 1981

WATER RESOURCES PROJECTS

WITNESS

JAMES FISH, EXECUTIVE DIRECTOR, GREAT LAKES COMMISSION

Mr. BEVILL. Next we have Mr. James Fish, Great Lakes Commission.

Mr. Fish, we are pleased to have you and just submit your statement, if you have not already submitted one, and we will make that part of the record and proceed as you wish. You are allotted 5 minutes.

[The statement of Mr. Fish follows:]

TESTIMONY, MARCH 24, 1981, SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT,
COMMITTEE ON APPROPRIATIONS, U.S. HOUSE OF REPRESENTATIVES
DELIVERED BY JAMES FISH, EXECUTIVE DIRECTOR, GREAT LAKES COMMISSION

The Commission was formed in 1955 by the eight States which border on the Great Lakes. Among other responsibilities, it represents the collective views of the eight States to Congress on water resources issues. The Commission's concerns range from regional economic issues such as industrial development, employment, imports and exports, ports and shipping to the resources management issues of water supply, water quality and fisheries management. This compact commission was instrumental in gaining passage of the original Water Resources Planning Act in 1965. Following that, our Commission led the way in formation of the Great Lakes Basin Commission permitted under the Act, and we sit on that Commission. In short, the Great Lakes Commission has had a continuous involvement since 1965 with the Water Resources Council and a river basin commission formed under the provision of the Water Resources Planning Act. The Great Lakes Commission is funded solely by annual appropriations from each of the member States and receives no Federal funding for operations, projects, or programs -- nor has the Commission sought Federal funding for any special projects of its own.

My statement on water project funding must necessarily begin with a report on the general feelings expressed in the Great Lakes water development community. Simply put, water managers in the Midwest see major projects and programs going forward in the South and West -- and very little happening in their own area. Appropriations for one project in the South or West generally exceeds the total funding for the Great Lakes hydrologic region. While water managers and elected leaders in the Midwest would not deny development to any other area, there is constant frustration over the minimum activity in the Midwest. Further, current discussion of user fees is not surprising to the Great Lakes water transportation community. For over twenty years, users of the St. Lawrence Seaway have paid the price of a user fee -- to the tune of $67 million U.S. funds. We operate a transportation system which has returned capital to the U.S. Treasury for each of its 22 years of operation.

Great Lakes Projects

I have attached an annotated listing of proposed and supported water project funding. I will not detail it in this testimony, nor do I necessarily expect it to be included in the record of this hearing. It is submitted for use by Members of the Committee and staff as you proceed in your scheduled mark up. During the course of your hearing, you will also hear specific testimony from Great Lakes States. Both New York and Ohio have indicated they plan oral testimony and Illinois plans to submit a written presentation.

There are several areas of the proposed budget that should be emphasized, however. First, operations and maintenance at approximately 57% of the Great Lakes budget represents the largest category of outlay in the system. In addition to maintaining the system, critical to retaining the investment already made by Federal, State and local governments, this category also provides the basis for ongoing environmental studies crucial for such efforts as season extension in the St. Mary's River reach of the system.

The diked disposal funding, a major requirement on the Great Lakes system at 20% of the budget assures that polluted materials will be adequately managed over extended periods of time. Because most the the diked disposal areas are being constructed to serve existing projects, it can be safely stated that well over 75% of the proposed Great Lakes civil works budget is committed to maintenance of the system. This is in comparison to a national program which applies only about 37% to O & M and 58% to new construction.

This disparity for the Great Lakes system leads many in the region to be concerned about the national approach to water management, water policy and program coordination, which will occupy the balance of my presentation.

Water Management Coordination

The need for water management coordination has been established in studies beginning with those initiated by President Theodore Roosevelt in 1908. In the years since, many government financed studies, including the National Commission on Water (1969-73) recommended strengthening Federal coordination.

The need for coordination was exemplified in the report of the U.S. Water Resources Council, "Planning and Cost Sharing Policy Options for Water and Related Land Programs" (November 1975). In this comprehensive summary of Federal and federally assisted water and related land programs the study team found "a total of 7 departments and 7 independent agencies -- including 18 agencies within the 7 departments -- with a water function or involvement." These activities were financed through 70 appropriations accounts. A total of 12 major water resources categories were identified with 32 subpurposes, representing a full range of financial assistance options to effect the purposes.

Since 1975 there has been no major change in this diversity of Federal involvement. Clearly, if water problems are to be solved, coordination in policy development, planning and implementation is a requirement.

The Water Resources Planning Act

The Great Lakes Commission believes that the Water Resources Planning Act must be completely revised if the Water Resources Council is to meet the policy coordination expectations of the Congress and the needs of the present water situation. As authorized in 1965, the Council simply did not have the authority needed to perform as envisioned. Reformed, the Council can provide a vehicle for effective coordination of Federal water policy.

For several years, the States individually and collectively have gone to the Congress and requested reform of the Water Resources Planning. Act. Each year since 1975, they have been told that such reforms will come "next year." This "next year" -- 1981 -- has potential for widespread national drought, and there is substantial need for the kind of Federal policy development and coordination that a reformed Council can provide. With a new Administration and a new approach in Congress, it should be possible to deal with this need, particularly since recommendations for reform have been developed which have widespread support by the States and which reflect recommendations from numerous studies since 1965.

Because of the recurring impasse in water legislation, last year the Great Lakes Commission formulated its own draft legislation to revise the Water Resources Planning Act. Following intense discussions among the States, this legislation was refined and recommended by the staff group for the National Governors' Association Subcommittee on Water Management, of which 22 States are members. This legislation would make the Water Resources Planning Act a much more effective policy instrument and would involve the States directly in the policy decisions. Essentially, the legislation would:

- o provide an independent WRC Chairman
- o reform Council membership
- o legislate a role for the States
- o provide annual reports to Congress on program and project needs including project lists developed by States
- o provide for Congressional review of major WRC rules, such as Principles and Standards revisions
- o reform the appointment and reporting process for river basin commissions so as to make them more responsive to States' needs
- o expand and redirect the State grant program

Other than the staff of the NGA Subcommittee, headed by Governor Scott Matheson of Utah, this legislation is also supported by a recent survey taken by the Interstate Conference on Water Problems which indicates that 40 States and several intra state organizations essentially support the draft. Additionally, the Western States Water Council also completed a survey just recently of the 12 member States, and the eight responding indicated support for this legislation. I haven't compared the surveys, but it would seem that at least 45 States support it. Copies of the draft legislation have been submitted to the authorizing Committee members. Please note that the current draft does not include an independent review of water projects as proposed by the previous Administration.

Water Resources Planning Act Relationships to Block Grant Concept

It is understood that Congressional committees may also take up a block grant proposal proposed in the Senate by Senators Dominici and Moynihan (S.621). Because this represents a different approach to the water projects process, a short review of comments about that proposal may be helpful. Since S.1241, a predecessor bill, was first introduced (May 1979), the States have been debating the merits of the bill, but with no resolution. Some States -- those with large land areas and/or populations -- do support the bill. The remainder either are opposed or have been unable to reach any definitive stance. Also, there has been no economic analysis of the impact of the bill on the respoective States. Serious doubts have been expressed that there can be resolution and agreement on the merits of this proposed legislation early in this session.

S.621 and its predecessors bills call for administration of the block grants to the States by the Water Resources Council. Discussions among the States about the block grant proposal have generally concluded that the three titles of the Water Resources Planning Act -- policy coordination among Federal agencies, regions, State/Federal planning and program coordination, and water planning/management matching grants to States would be required to support this legislation. A reformed Water Resources Planning Act, in place before block grants for water programs is initiated, should assist in effective implementation of the new block grant approach. There is excellent support for the NGA/GLC legislation and there is pressing need to resolve the impasse over the Water Resources Planning Act. With the changes needed and now possible, and with a drought situation looming, I sincerely believe that Congress should and can act swiftly to replace the current mechanism, as a first step to resolving water policy issues.

Water Policy Set by Interior?

There has been much criticism of the Water Resources Planning Act and the Water Resources Council over the past several years. Some is fully justified. However, much of the Council's excellent work has been totally ignored in the negative atmosphere. Secretary Watt, for example, has presented the Council as an organization committed only to stopping projects, singling out the independent project review imposed by President Carter as a reason for Council dissolution. The independent review can be eliminated by a two line executive order. Secretary Watt has also campaigned to have water policy transferred to Interior on this basis. The essential issue is: should the Department of the Interior determine water policy? It should not, in the view of the Great Lakes Commission. We fail to understand the drive to place water policy in the hands of a single mission oriented agency -- Interior -- when that agency's experience is primarily limited to western programs. There is no expertise in ports, waterways, or waste water treatment. Experience in flood control is limited and primary municipal supply experience is limited to hydrologic characterization. The eight Great Lakes States are flatly opposed to such a proposal. Most other States are also opposed, including a number of Western States.

Water Resources Planning Act and Policy Reform

A reformed water Resources Council could and should take up immediately, water policy reform, including analysis of the block grant proposal, particularly the economic impact on States as well as other pressing issues such as the Principles and Standards which would continue to affect large, interstate projects. Reform legislation for the Council could direct it to work closely with the Congress and the States to review of water policy and programs and recommend changes. A definite (but realistic) deadline could be set. Such a study and recommendations would provide the Congress with a true test of the ability of the Council to perform.

Overall, a reformed Water Resources Planning Act and the reformed Water Resources Council should provide a continuing coordination mechanism between the numerous Federal agencies involved in water management. When conflict between agencies is identified, and cannot be resolved through administrative processes, the Council would bring it to Congress for consideration and resolution. Most importantly, active strong coordination should help both State and Federal agencies to eet future water needs -- whether through new development or improved management of existing sources.

Given sufficient authority and cooperation, if the Council cannot provide this to Congress, the Congress would be fully justified in terminating the Water Resources Planning Act.

Appropriation Recommendations for Water Resources Management

1. That funds be made available for the Water Resources Planning Act, subject to passage of reforms along the lines suggested.

2. That the Administration proposed recision of water planning grants to the States (Title III) be rejected so State capacity may be continued to function.

* Projects & funding recommended by Great Lakes States

GREAT LAKES BASIN CIVIL WORKS PROGRAM
FY 1982 CARTER AND REAGAN BUDGET REQUESTS
AND CORPS OF ENGINEERS PROJECT CAPABILITIES

- Regional and State Projects -

	Carter FY 1982 Budget	Reagan FY 1982 Budget	C of E FY 1982 Capabilities
Total for Great Lakes	$105,017,000	$104,562,000	$126,376,000
Construction, Planning &			
Study Projects	22,477,000	22,022,000	27,047,000
Construction	13,815,000	13,815,000	15,805,000
Advance Eng & Design (Planning)	490,000	490,000	985,000
General Investigations	7,824,000	7,369,000	9,729,000
Special Studies	348,000	348,000	528,000
Operations & Maintenance	60,822,000	60,822,000	75,318,000
Diked Disposal Areas	21,718,000	21,718,000	24,011,000
Construction			
Navigation Projects	9,115,000	Except as noted on page 2 - Reagan Budget detail is the same as Carter Budget	10,895,000
Little Calumet River, Ill	115,000*		115,000
Cedar River Harbor, Mich.	-0-		380,000*
Knife River Harbor, Minn.	-0-		550,000
Cattaraugus Harbor, N.Y.	2,000,000*		
Irondequoit Bay, N.Y.	100,000*		100,000
Port Ontario Harbor, N.Y.	-0-		850,000*
Ashtabula, Ohio	5,300,000*		5,300,000
West Harbor, Ohio	1,600,000*		1,600,000
Flood Control Projects	3,700,000		3,910,000
Saginaw River, Mich.	500,000*		500,000
Danville, N.Y.	-0-		210,000
Ellicott Creek, NY	150,000*		150,000
Point Place (Toledo), Ohio	3,050,000*		3,050,000
Beach Erosion projects	1,000,000		1,000,000
Presque Isle (Erie) Penna.	1,000,000*		1,000,000
Advance Engineering & Design			
Navigation projects	235,000		465,000
St. Clair R. middle channel	-0-		65,000*
Black R., Alcona Co., Mich.	-0-		85,000

Cross Village, Mich.	85,000*		150,000
Forestville, Mich.	-0-		80,000
Geneva-on-the-Lake, Ohio	150,000*		150,000
Flood Control projects	255,000		520,000
Lower Clinton River, Mich.	155,000*		420,000
Reno Beach, Ohio	100,000*		100,000
General Investigations			
Navigation surveys	2,879,000	2,789,000	3,394,000
Connecting channels	1,010,000*		1,010,000
Seaway locks improvement	400,000*		400,000
Great Lakes-Hudson River Waterway	300,000*		300,000
Lake Erie coast	-0-		120,000
Highland Park, Ill.	-0-		100,000
Illinois shore to Wis. line	-0-		125,000
Hammond, Ind.	-0-		100,000
Petoskey, Mich.	-0-		70,000
St. Joseph, Mich.	90,000	-0-	90,000*
Duluth, Minn. - Superior, Wis.	102,000*		102,000
Buffalo, N.Y.	500,000*		500,000
Cleveland, Ohio	202,000*		202,000
Lorain, Ohio	275,000*		275,000
Flood Damage Prevention surveys	4,945,000	4,580,000	5,535,000
Great Lakes, Metro areas	653,000		653,000
South end of Lake Michigan	100,000*		150,000
Chicagoland Underflow Plan	2,550,000*	2,185,000	2,550,000
Little Calumet River, Ind.	214,000*		214,000
Kalamazoo River, Mich.	-0-		200,000
Saginaw River, Mich.	295,000		295,000
Cattaraugus Creek, N.Y.	-0-		100,000
Oswego River basin, N.Y.	600,000*		600,000
Cuyahoga River basin, Ohio	50,000*		125,000
Fox River & Tributaries, Wis.	383,000*		383,000
Ohio western Lake Erie shore	100,000*		265,000
Beach Erosion	-0-		800,000
Illinois shore, Lake Mich.	-0-		300,000*
Lake Ontario shore	-0-		500,000*
Special studies	348,000		528,000
Lake Erie wastewater management	348,000*		348,000
Diversion of Lake Michigan waters	-0-		180,000*

3.

Operations & Maintenance		60,822,000	75,316,000
Connecting waterways; St. Marys, St. Clair & Detroit rivers & Lake St. Clair	(4- -4 projects)	16,809,000	19,865,000
Illinois	(3- -4 projects)	1,256,000	1,406,000
Indiana	(1- -1 project)	563,000	563,000
Michigan	(33- -37 projects)	16,096,000	22,090,000
Minnesota	(1- -1 project)	145,000	145,000
Minn.-Wis.	(1- -1 project)	1,978,000	1,978,000
New York	(4- -7 projects)	4,051,000	6,181,000
Ohio	(8- -10 projects)	15,525,000	16,785,000
Pennsylvania	(1- -1 project)	166,000	1,366,000
Wisconsin	(8- -11 projects)	4,233,00	4,939,000
Diked Disposal Areas		21,718,000	24,011,000
Detroit River		1,219,000*	1,219,000
Calumet River & Harbor, Il.		2,684,000*	2,684,000
Chicago Harbor, Ill.		1,342,000*	1,342,000
Chicago River, Ill.		2,684,000*	2,684,000
Waukegan, Ill.		108,000*	108,000
Indiana Harbor, Ind.		108,000*	108,000
Michigan City Harbor, Ind.		-0-	170,000
Alpena Harbor, Mich.		-0-	100,000
Big Ben Harbor, Mich.		-0-	100,000
Clinton River, Mich.		-0-	500,000
Frankfort Harbor, Mich.		-0-	523,000
Keweenaw Waterway, Mich.		-0-	100,000
Lexington Harbor, Mich.		-0-	100,000
Menominee Hbr., Mich. & Wis.		-0-	100,000
Monroe, Mich.		7,288,000*	7,288,000
New Buffalo Harbor, Mich.		-0-	100,000
Port Austin Harbor, Mich.		-0-	100,000
Presque Isle Hbr., Mich.		-0-	100,000
St. Joseph Harbor, Mich.		-0-	100,000
Rouge River, Mich.		397,000*	397,000
Saginaw River, Mich.		1,678,000*	1,678,000
Ashtabula, Ohio		220,000*	220,000
Sandusky Harbor, Ohio		-0-	200,000
Kewaunee, Wis.		290,000*	290,000
Sheboygan, Wis.		3,700,000*	3,700,000

GREAT LAKES BASIN CIVIL WORKS PROGRAM
FY 1982 CARTER AND REAGAN BUDGET REQUESTS
AND CORPS OF ENGINEERS PROJECT CAPABILITIES

OPERATION AND MAINTENANCE ACTIVITIES

- Regional and State Projects -

	Carter FY 1982 Budget	Reagan FY 1982 Budget	C of E FY1982 Capabilities
Regional waterways	16,809,000		19,865,000
Detroit River	5,316,000		7,757,000
Lake St. Clair	660,000		660,000
St. Clair River	823,000	No changes reported for Reagan Budget - All O&M supported to the extent funds available	823,000
St. Marys River	10,010,000		10,625,000
Illinois	1,256,000		1,406,000
Calumet Harbor & River	406,000		406,000
Chicago Harbor	462,000		462,000
Chicago River, North Br.	-0-		150,000
Waukegan Harbor	388,000		388,000
Indiana	563,000		563,000
Burns Waterways Harbor	563,000		563,000
Michigan	16,096,000		22,090,000
Arcadia Harbor	105,000		105,000
Black River (Port Huron)	551,000		551,000
Black River Harbor	156,000		156,000
Bolles Harbor	-0-		453,000
Caseville Harbor	557,000		557,000
Charlevoix Harbor	187,000		187,000
Cheboygan Harbor	793,000		793,000
Clinton River	-0-		253,000
Frankfort Harbor	1,566,000		1,566,000
Grand Haven & Grand River	578,000		945,000
Grand Traverse Harbor	566,000		566,000
Harbor Beach Harbor	727,000		727,000
Holland Harbor	232,000		490,000
Inland Route	189,000		491,000
Keweenaw Waterway	283,000		1,364,000
Lac LaBelle Harbor	192,000		192,000
Leland Harbor	149,000		149,000
Lexington Harbor	440,000		440,000
Little Lake Harbor	178,000		278,000
Ludington Harbor	111,000		111,000
Manistee Harbor	161,000		323,000
Monroe Harbor	758,000		758,000
Muskegon Harbor	321,000		453,000
New Buffalo Harbor	912,000		912,000
Ontonagon Harbor	460,000		730,000
Pentwater Harbor	234,000		234,000
Petoskey Harbor	-0-		100,000
Point Lookout Harbor	830,000		830,000
Port Sanilac Harbor	198,000		467,000
Portage Lake Harbor	233,000		233,000
Rouge River	1,157,000		1,157,000

Page Two

Saginaw River	1,862,000	No changes reported for Reagan Budget - All O&M supported to the extent funds available	3,411,000
Saugatuck Harbor	275,000		275,000
Sebawaing Harbor	26,000		26,000
South Haven Harbor	359,000		359,000
St. Joseph Harbor	750,000		1,282,000
Traverse City Harbor	-0-		164,000
Minnesota	145,000		145,000
Two Harbors	145,000		145,000
Minnesota-Wisconsin	1,978,000		1,978,000
Duluth-Superior Harbor	1,978,000		1,978,000
New York	4,051,000		6,181,000
Barcelona Harbor	-0-		300,000
Black Rock Channel	1,232,000		1,232,000
Buffalo Harbor	1,769,000		1,769,000
Olcott Harbor	-0-		200,000
Oswego Harbor	567,000		567,000
Rochester Harbor	483,000		1,983,000
Wilson Harbor	-0-		130,000
Ohio	15,525,000		16,785,000
Ashtabula Harbor	402,000		402,000
Cleveland Harbor	7,412,000		7,412,000
Conneaut Harbor	1,248,000		1,248,000
Fairport Harbor	865,000		865,000
Huron Harbor	392,000		392,000
Lorain Harbor	457,000		457,000
Rocky River Harbor	-0-		1,000,000
Sandusky Harbor	1,076,000		1,076,000
Toledo Harbor	3,673,000		3,673,000
Vermilion Harbor	-0-		260,000
Pennsylvania	166,000		1,366,000
Erie Harbor	166,000		1,366,000
Wiscor in	4,233,000		4,939,000
Ashland Harbor	622,000		622,000
Fox River	1,511,000		1,511,000
Green Bay Harbor	774,000		774,000
Kewaunee Harbor	430,000		430,000
Manitowoc Harbor	374,000		374,000
Milwaukee Harbor	166,000		166,000
Pensaukee Harbor	-0-		150,000
Port Washington Harbor	101,000		219,000
Racine Harbor	-0-		338,000
Saxon Harbor	-0-		100,000
Sturgeon Bay Harbor	255,000		255,000

Mr. FISH. Thank you, Mr. Chairman.

I believe that most of the members of the committee are familiar with the Great Lakes Commission, an interstate compact organization of the eight States bordering the lakes. I will begin with some background that I am sure you are very familiar with, that many representatives of the Great Lakes communities have expressed concern that new programs have not come into the Great Lakes in terms of civil works. This is not to deny anyone in any other area of the country. In fact, there is a growing support in our area for the deepwater ports improvements that have been mentioned here earlier. We support that because we are too interested in coal, having a projected export of the Great Lakes this year, without any new investment, of something over 6 million tons.

Attached to my testimony and not anticipated to be a part of the record is a complete listing of projects that have been indicated for support from the Great Lakes community.

You will also receive testimony from Ohio and New York, I believe, and some written testimony from Illinois, so I would not detail those.

I would indicate, however, that in my looking at the Great Lakes budget, approximately 57 percent of that budget is the maintenance that was described earlier in the immediate previous testimony.

Another 20 percent of that budget is for diked disposal areas, putting us in the neighborhood of 75 to 80 percent operation and maintenance. We fully support that kind of a program, and to protect the investment, but there is the continuing concern that that really does not compare to the rest of the country where the total budget is about 58 percent construction.

That disparity leads me to the overall concern of how do we manage the water in our Nation. As I listened to Joe Tofani testify I thought we might have come up here as a team because I think he described very well the need to coordinate the water resource management. You have seen the reports before, 7 departments, 7 independent agencies, 18 different subordinate groups within the agencies. Very clearly there needs to be something done to begin to move our management ahead, or we will not have the water.

The Great Lakes Commission believes that the Water Resources Planning Act must be completely revised if the Water Resources Council and the other programs under that Act are to be of assistance to us. We think that can be done. Our testimony includes some specific recommendations, and I believe probably most of the committee members have seen the draft of legislation which we have prepared last year, and which went through the National Governors Association process.

As it appears to us from two surveys that were not run by the Great Lakes Commission or the National Governors Association, one by the Western States Water Council and one by the Interstate Conference on Water Problems, probably 45 States currently support the concepts that are there. In that we think it would have a good opportunity to pass.

In terms of the block grant which is being proposed, which I do not suggest to take any stand on here today, because our States are certainly divided, however, a reformed——

Mr. BEVILL. You will have to kind of waffle that one.

Mr. FISH. It was not here, but in another committee last year I said I have this from Michigan, and this from Ohio, and they were diametrically opposed.

Mr. BEVILL. We find ourselves in that position quite often.

Mr. FISH. I know you do. You have my sympathy. We think a refined Water Resource Council would be critical to a full consideration of that block grant concept, and in probably all three titles, although we have a conflict on that in our area, and you will hear about that from Ohio when they testify.

The question of Interior being the water policy agency, I polled our States on Friday and Monday, and there was a clear position. No. We would prefer to have some independent body that would function, not a mission-oriented agency, and a deep concern was expressed about the Department of Interior because of their primarily western orientation, and certainly a feeling that they did not have the perspective that we would require.

Specifically, we are hoping you can provide funds for a reformed Water Resources Planning Act, and that through the appropriate action that the rescission of State planning funds that has been proposed can be rejected, I guess is the proper word, because that would cause, in fact, in some areas a layoff of State employees who will be necessary if we are going to proceed.

Mr. BEVILL. Thank you very much, Mr. Fish.

If there are no questions, I recognize Mr. Dubrow, Mr. Morgan Dubrow.

WITNESS

MORGAN DURBROW, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. BEVILL. Mr. Dubrow, National Rural Electric Cooperative Association

STATEMENT OF MORGAN DUBROW

Mr. DUBROW. Thank you, Mr. Chairman. I am pleased to be here on behalf of the thousands of rural electric cooperatives and the 25 million people they serve. Mr. Chairman, I just want to make two or three points. One of the things that I am very happy to see is that despite the fact we are unhappy about some of the budget cuts, I commend the Administration for not cutting out any of the hydroelectric projects and keeping them on schedule. I would like to say on behalf of the Water and Power Resources Service, that I would like to see some new funding of $6.8 million for hydro additions at six projects which I mentioned, Hoover Dam being one of them. I would also like to see $4 million for the Garrison Project so they can continue it up to the point where, if and when we get a favorable decision from Canada, the project can go forward.

I asked the committee to appropriate $4.3 million for Auburn Folsom South project to complete the study so if it is decided to do it we can go ahead.

As far as Dickey-Lincoln School project I asked the committee to urge the Army to complete the environmental impact statement so

that that dam will be in a position so that it can either go forward or final decision can be made on it.

Mr. BEVILL. That study will be finished when?

Mr. DUBROW. It is scheduled to be finished soon. There is one other program of the Water Resource Agency that was eliminated which I think ought to be restored For many years the Bureau of Reclamation has been engaged in a weather modification study and they collected a lot of valuable information and spent a lot of money. I think, without being critical, that it was a wrong decision to take away the $4 million to finish the analysis of that data and make it available so the states and the Federal government and anybody who lives in the midwest in the drought area will know whether or not weather modification will indeed work. I mentioned a number of projects which I will not reiterate here, but we also support the nuclear program and we support it across the board and we are pleased that the appropriations for it have been increased. One of the things that was left out in that program is high temperature gas reactor which has been an ongoing program and which ultimately could be a very valuable addition to our power resources. I asked for the committee to consider providing $40 million to keep that program going and $5 million for the recycle of the HTGR recycle program. The only other thing I would mention about the nuclear program is I would urge the committee communicate with the Department of Energy so that they can come to some kind of decision on what to do about the reactor storage and provide some funds to get that going so that we can be assured of continued construction in nuclear power plant. I also think—and I have been down there a couple of times and looked at it—it is really unwise not to have some funds for the Barnwell facility so we can at least use it for storage or later use it for plutonium manufacture or recycle or whatever we need to.

Mr. BEVILL. Your time is up. Would you wrap it up.

Mr. DUBROW. The only other thing I would ask Mr. Chairman, is that Mr. Endahl be allowed to submit a statement on some of the other research matters just on the record for the committee's use. I would also like to submit a statement for the record.

Mr. BEVILL. All right.

Mr. DUBROW. I thank you so much.

Mr. BEVILL. If you want to make it on the record the record will be open for five days.

Mr. DUBROW. Thank you so much. I appreciate the opportunity.

[The prepared statement of Mr. Dubrow follows:]

STATEMENT OF THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HOUSE OF REPRESENTATIVES
FY 1982 APPROPRIATIONS FOR FEDERAL POWER AND ENERGY FACILITIES

March 24, 1981

Mr. Chairman, my name is Morgan D. Dubrow. I am Senior Staff Engineer of the National Rural Electric Cooperative Association (NRECA). NRECA is the national trade association of about 1000 rural cooperatives which supply central station electricity to some 25 million people in the rural areas of 46 states. NRECA supports the overall budget for the Corps of Engineers and the Water and Power Resources Service (WPRS), formerly the Bureau of Reclamation, which will provide funds in FY 1982 for irrigation, flood control, navigation, hydroelectric power and other water uses. Our members are pleased that the Administration has submitted its budget request to continue the construction of hydroelectric facilities and other needed water resource development which will strengthen our economy, utilize a renewable resource, and reduce oil imports. Our cooperatives are helping the nation to conserve electric power by weatherization programs, load management, strengthening interconnections and pooling between power systems. The Department of Energy power marketing agencies and the utility industry need continued support in order to help meet our nation's electricity requirements. Achieving this objective we believe will require Congressional action to modify regulatory procedures and change or modify certain environmental laws. In my testimony last year I indicated that regulatory requirements and environmental constraints have reduced capital availability and caused the delay, deferment or cancelation of at least 120,000 MW of new power supply. Be it nuclear, coal or hydro, it could displace the oil equivalent of about 4.0 million barrels per day, which is roughly half our oil imports. This problem must be remedied before America can have energy independence. The utility industry needs Congress' support in going forward with the construction of new coal, nuclear and hydroelectric power facilities. Every 1000 MW power plant that can be brought on line could save importing some 10 million barrels of oil per year.

Our members commend the Congress for its support of water resource development and power supply. NRECA supports the Department of Energy's programs of research, conservation and supply of energy. We are pleased that the Administration budget submittals for nuclear programs are increased over last year. We urge the Committee to support the funding for nuclear programs such as safety, breeder reactors, expansion of enrichment plants, away from reactor spent fuel storage, reprocessing and storage of nuclear wastes, and completing the nuclear fuel cycle, high temperature and fast gas reactors, and especially the Clinch River Breeder Reactor Demonstration Plant. NRECA emphasizes the need for:

- New funding of $6.8 million for hydro additions at existing WPRS projects.
- Appropriation of $81.4 million for Richard B. Russell Dam.
- Appropriation of $14.6 million for Libby.
- Appropriation of $4 million for the Garrison Irrigation Project.
- Appropriation of $21.2 million for the Fryingpan-Arkansas Project.
- Appropriation of $4.3 million for the Auburn-Folsom South Project.
- Appropriation of $194.5 million for the Central Arizona Project.
- Completion of Environmental Impact Study for Dickey-Lincoln School.

- o Appropriation of $70.7 million for the Bonneville Unit in Utah.

- o Appropriation for nuclear energy of $737 million for breeders including $254 million for the Clinch River Breeder Reactor Demonstration Plant.

- o Appropriation of an additional $40 million for the High Temperature Gas Reactor and $5 million for the HTGR Recycle Program.

Last year, consumer demand for electricity in the agricultural areas of the nation again increased by some 5 percent, about twice that of the total electric industry. Many of our member systems experienced reduced growth in kilowatt-hour use in 1980, in large part due to conservation, the increased costs of electricity and a decline in business activity. However, there will be more demand for electricity to meet normal load growth and as a substitute energy source for oil and gas. Our members know that ample electric power resources are essential to defend the country, feed our people, produce food crops for export, and provide jobs and maintain our standard of living.

Restoration of Funding for Water Resource Projects

At our 39th Annual Meeting in San Francisco, January 29, 1981, our members again unanimously passed resolutions opposing the reduction and elimination of appropriations for a number of water resource and hydroelectric projects throughout the United States. We encourage the Congress to fund such worthwhile projects.

Planning for Water Resource Development

NRECA understands that funds have been denied the WPRS to continue the much needed orderly planning for new water resource development to meet the demands of an expanding population in many of the western states. Planning and future construction of such projects are consistent with the announced policy of the Secretary of the Interior for the Government "to meet the real needs of the people". The Administration has reduced planning funds by $1 million and eliminated funds for the HIFLEX Weather Modification Program. Large segments of the Great Plains region are experiencing severe drought and restoration of the $1 million for planning and $4 million for weather modification can be justified. All the basic weather data are available and this $4 million is sorely needed to complete the analysis of the data and to prepare the findings, conclusions and recommendations for the HIFLEX weather study, thereby making this valuable information available to the affected states and to WPRS.

New Construction Starts for Water and Power Resource Service Projects

NRECA supports a $6.8 million supplemental appropriation which would provide funds for advance planning and construction for hydroelectric additions to existing power plants at WPRS dams. Among these are the Buffalo Bill Dam Power Plant in Wyoming, Whiskeytown Power Plant in California, Yellowtail Afterbay Power Plant in Montana, Stony Gorge Power Plant in Colorado, and Prosser Power Plant in California. This $6.8 million supplemental request would provide funds needed to complete advance planning for the projects so that construction could be underway.

Accelerate Construction for Corps of Engineers' Projects

We understand that the President's FY 1982 budget does not delay scheduled on line dates for hydroelectric power at Corps' projects. NRECA urges the Committee to support appropriations for these projects such as McNary's 2nd powerhouse in Oregon.

NRECA also urges the Committee to appropriate funds to complete the planning and engineering for the Ben Franklin Project on the Columbia River in Washington and to complete planning and begin construction of the Bradley Lakes Project in Alaska.

Gregory County Pumped Storage

The Corps of Engineers is completing a study on the 1180-MW Gregory Pumped Storage Plant as an off channel facility which could be integrated with the hydroelectric units at the main stem power plants on the Upper Missouri River. NRECA suggests the Committee support the Corps' efforts to complete this study so that this valuable project can be authorized and constructed as early as practicable. This project has no significant adverse environmental effects, enjoys strong local support, has a benefit-cost ratio of about 2 to 1; it would increase the Missouri River main stem hydro capacity by 58 percent and offers oil savings of 2.4 million barrels per year.

Dickey-Lincoln School Project

NRECA suggests that the Committee urge the Corps of Engineers to complete the Environmental Impact Statement (EIS) for the Dickey-Lincoln School Project; this is essential prior to construction. The construction of this multipurpose project will provide 1140 MW of needed peaking power and reasonably priced energy for New England as well as firm power for our cooperatives in the State of Maine. Completion of this project will provide New England with a large water storage project to help abate future droughts. It also will provide much needed regulated fresh water supply for the New Brunswick region, thus improving stream and river regulation and providing groundwater recharge in the United States and in Canada.

Richard B. Russell Dam

Funds in the amount of $81.4 million should be appropriated in FY 1982 for continued construction of the Richard B. Russell Dam Project on the Savannah River between Georgia and South Carolina. It will provide 300 MW of needed base load hydroelectric power and as built can be expanded to add three 100 MW pumpback units, thereby increasing the power plant capacity to 600 MW. We support this appropriation for the installation of the 300 MW of base load and 300 MW of pumpback peaking power.

Garrison Irrigation Project

It is our understanding that 1982 funds were denied to continue construction of the Garrison Irrigation Project. We urge the Committee to provide $4 million needed by the Water and Power Resource Services to continue work on the Oakes Pumping Plant and Oakes Drains of this valuable irrigation development which can be done consistent with our commitments to Canada.

Fryingpan-Arkansas Project

We support the appropriation of $21.2 million in FY 1982 to WPRS for continuing work on the Fryingpan-Arkansas Project including Mt. Elbert pumped storage power plant facilities.

Auburn-Folsom South Unit (CVP)

We support the appropriation of $4.3 million in FY 1982 for the Auburn-Folsom South Unit. We need Auburn Dam which has a potential of 700 MW of hydroelectric power (300 MW hydroelectric and 400 MW pumpback). We urge the Committee to request a timely completion of studies so that a recommendation can be made to the Congress to go forward with this important project.

Central Arizona Project

We urge the Committee to appropriate $194.5 million required in FY 1982 to continue the orderly construction of the Central Arizona Project which is vital to the water supply for the State of Arizona. This would provide for the delivery of water to Phoenix and Tucson as scheduled.

Bonneville Unit, Central Utah Project

We request that the Committee appropriate $70.7 million in FY 1982 for construction of the Bonneville Unit of the Central Utah Project which has a potential of 144 MW of hydroelectric power.

Alaska, Columbia Basin and Other Pacific Northwest Projects

NRECA supports additional funding required to study multipurpose projects in Alaska and the Pacific Northwest and for expediting construction of hydroelectric projects. We support the $27.3 million for the Third Powerhouse at Grand Coulee and $17.5 million for irrigation on the Columbia River Basin Project. We also support the addition of generating units at Chief Joseph, Bonneville and Federal dams in the Pacific Northwest. The region faces serious and growing power shortages for the next 10 years under critical water conditions even with the completion of all scheduled Federal hydro additions in the region.

Federal Power Marketing Agencies (DOE)

NRECA supports the $244 million FY 1982 appropriation request for Federal power marketing agencies: $211.3 million for the Western Area Power Administration (WAPA), $7.2 million for the Southeastern Power Administration, $21.6 million for the Southwestern Power Administration, and $3.5 million for the Alaska Power Administration. We also support the Bonneville Power Administration (BPA) budget funded through its self-financing revolving fund procedures. We suggest that similar revolving funds for the other marketing agencies would be desirable and support proper legislation to achieve this end.

NRECA commends the five power marketing agencies for a job well done. We note that all funds, both appropriated and from BPA's revolving fund, are fully reimbursable to the Treasury and that these agencies have actively pursued a

policy to establish rates at a level that covers costs and meets repayment schedules.

NRECA again urges that the Western Area Power Administration have adequate funds and manpower to take care of proper housing, administrative management, legal support and other necessary services.

Support for Nuclear Programs

NRECA supports the FY 1982 budget request of $1,247 million for the nuclear program. We are pleased that this request represents an increase over last year because these funds are vitally needed if we are to help meet our power needs by building more nuclear power plants. We urge the Committee to provide all the funds requested and especially wish to support the following programs:

- o $737 million for breeder reactor systems including $254 million for the Clinch River Breeder Reactor
- o $678 million for the centrifuge nuclear regional facility, Portsmouth, Ohio
- o $299 million for the nuclear waste program
- o $38 million for the advanced nuclear systems
- o $70 million for conventional reactor systems
- o $7 million for interim fuel management program
- o $86 million for advance isotope systems
- o $10 million for uranium resource assessment

We also support restoration of the High Temperature Gas-Cooled Reactor (HTGR) program at the Department of Energy recommended level of $40 million and $5 million for the HTGR Recycle Program. This advanced reactor system is supported by many public and private utilities and rural electric cooperatives through an organization known as Gas-Cooled Reactor Associates. Several utilities have expressed interest in owning and operating the Lead Plant HTGR, an 800 MW electric co-generation system which will be completed by 1994.

We urge the Committee to confer with DOE to establish the level of funding which should be provided for the construction of an away from reactor (AFR) storage facility for spent fuel and to continue the Barnwell reprocessing plant.

NRECA also supports the budget for the Nuclear Regulatory Commission (NRC). In doing so, we urge that the Committee and the Congress encourage the NRC to resume licensing of plants each of which when on the line saves the equivalent of 30,000 barrels of oil per day.

We appreciate this opportunity to express our views.

Mr. MYERS. I have a comment. On page five you say several utilities have expressed interest in owning and operating the lead plants. HTGR. Those are private utilities?

Mr. DUBROW. They are a group of private utilities and about 100 cooperatives. There is a whole group of Texas utilities and some in the Southwest and some co-ops.

Mr. MYERS. They would build an HTGR generating station with their own funds?

Mr. DUBROW. That is what they say.

Mr. BEVILL. Next we have from the great State of Nebraska a lovely and very able colleague here, Mrs. Smith, who will introduce the Twin Loups Reclamation.

NORTH LOUP, NEBRASKA PROJECT

WITNESSES

HENRY LANG, PRESIDENT OF THE TWIN LOUPS RECLAMATION DISTRICT
STATE SENATOR DON WAGNER
CYRIL SHAUGHNESSY, ATTORNEY
DON KILDAY, PRESIDENT

Ms. SMITH. Coming to the table—and I do thank you very much Mr. Chairman, for this opportunity—we have four dedicated leaders who have worked many years to make this project a reality and in the audience we have other folks who have come 1,700 miles to express their support of the project. The project certainly has my strong support and it has the strong support of the entire area as evidenced by this book of resolutions and statements from the cities and organizations and state senators and many other folks. We have Henry Lang, President of the Twin Loups Reclamation District, Senator Don Wagner here bearing a message from the Governor, Cyril Shaughnessy, the attorney and Don Kilday, President.

[The information follows:]

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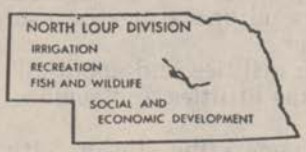
STATEMENT OF TWIN LOUPS RECLAMATION DISTRICT



TWIN LOUPS
RECLAMATION DISTRICT

St. Paul, Nebraska 68873

OFFICERS

President
Henry G. Lange
Ord
Vice President
Donald E. Kilday
Palmer
Secretary-Treasurer
Donald E. Hughes
Scota

DIRECTORS

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Richard Spilinek
St. Paul
Louis M. Cording
Palmer
Donald E. Kilday
Fullerton
A. L. Russell
Attorneys
Cyril P. Shaughnessy
Michael J. Shaughnessy
St. Paul

WITNESS LIST

North Loup Division, Pick-Sloan Missouri Basin Program
Nebraska
March 24, 1981
Before

Energy and Water Development
Subcommittee on Appropriations
United States House of Representatives

State Senator Donald L. Wagner, 41st Legislative District of Nebraska.

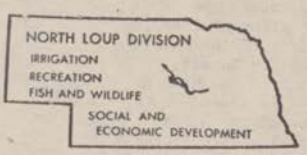
Henry G. Lange, Ord, Nebraska, President of the Twin Loups Reclamation District.

Donald E. Kilday, Palmer, Nebraska, President of The Twin Loups Irrigation District and Vice-President of the Twin Loups Reclamation District.

Cyril P. Shaughnessy, St. Paul, Nebraska, one of the attorneys for the Twin Loups Reclamation District and The Twin Loups Irrigation District.

Mr. Cyril P. Shaughnessy will make the presentation on behalf of the Twin Loups Reclamation District and The Twin Loups Irrigation District.

NORTH LOUP DIVISION
IRRIGATION
RECREATION
FISH AND WILDLIFE
SOCIAL AND
ECONOMIC DEVELOPMENT



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Cyril P. Shaughnessy
Michael J. Shaughnessy
St. Paul

STATEMENT OF CYRIL P. SHAUGHNESSY, ST. PAUL, NEBRASKA,
IN SUPPORT OF THE NORTH LOUP DIVISION,
PICK-SLOAN MISSOURI BASIN PROGRAM, NEBRASKA
BEFORE THE ENERGY AND WATER DEVELOPMENT
SUBCOMMITTEE ON APPROPRIATIONS OF
THE UNITED STATES HOUSE OF REPRESENTATIVES
MARCH 24, 1981

Mr. Chairman and Members of the Committee:

My name is Cyril P. Shaughnessy, and I reside at St. Paul, Nebraska. Our group appears here today in support of the continued construction of the North Loup Division, Nebraska Project. The Budget Allotment of $27,307,000.00 for Fiscal Year 1982 is sought for the continued development, conservation, and wise use of the our Water and Land Resources in the North Loup and Loup River Valleys of Nebraska.

It is my privilege to appear before you representing the Twin Loups Reclamation District and The Twin Loups Irrigation District. These Districts are the sponsoring organizations for the North Loup Division, Nebraska Project. This Multi-purpose Project is located in the Loup River Basin in Central Nebraska. This Project when completed will irrigate approximately 53,000 acres of land, provide ground-water recharge, and will provide not only a stable and economical water supply for irrigation purposes, but will open opportunities for new agri-business, stabilize employment, and provide much needed recreation, fish and wildlife.

With me today are Mr. Henry G. Lange, President of the Twin Loups Reclamation District, Mr. Donald E. Kilday, President of The Twin Loups Irrigation District, and Senator Donald L. Wagner from our 41st Legislative District of Nebraska. Senator Wagner was previously a Director of the Twin Loups Reclamation District for many years.

Mr. Chairman, permit me to express to you our sincere appreciation on behalf of the Districts for the confidence in us by continuing appropriations in Fiscal Year 1981. With these funds, land acquisition has moved to the point where over 92% of the Calamus Dam and Reservoir area has been acquired. Acquisition of right-of-way is approximately 60% completed for the first section

of the Mirdan Canal and has been started for the remaining canals and laterals in the Mirdan System. The excavation of the foundation of Calamus Dam is nearly complete. We are anxiously awaiting the awards of the major contract for the construction of Calamus Dam, now scheduled for August, 1981, and the contract for construction of the first section of the Mirdan Canal, now scheduled for September, 1981. In addition, the Water and Power Resources Service is preparing the design for the remainder of the Mirdan Canal and Lateral System and for the Davis Creek Dam. Activity in cultural resource assessment and mitigation continues. I would like to emphasize to the Committee that this Spring's habitat plantings around the Calamus Reservoir are beginning to be planted so that substantial growth will have occurred by the time the Calamus Reservoir will be filled.

By way of further explanation regarding the wildlife habitat, I wish to state that our Project authorization has provisions for 150 acres of habitat mitigation plantings at the reservoir sites. In order to proceed with mitigation features, along with construction of other features, approximately 17 acres of habitat is being planted this Spring. The purpose of these habitat plantings is to mitigate the loss of the existing wildlife habitat to be inundated by the Calamus Reservoir. Furthermore, planting early in the project construction state will also enable the habitat to get established prior to intensive public use.

The many letters which we are submitting here today from the people living within the Twin Loups Irrigation District and the Twin Loups Reclamation District indicate their continuing support for this very necessary Project. With the Fiscal Year 1982 appropriations, the Water and Power Resources Service can continue construction of the Calamus Dam and the First Section of the Mirdan Canal; complete land acquisition of the remaining Mirdan Canal and Lateral System; continue land acquisition for Davis Creek Dam and Reservoir; initiate land acquisition and design of the Geranium Canal and Lateral System; design Davis Creek Dam and continue design activities for the remaining canals and laterals.

Regarding construction, I do want to point out to this Committee that in the Summer of 1976 a Federal Environmental Lawsuit was filed in the The United States District Court For The Dstrict of Nebraska wherein the United States of America, the Twin Loups Irrigation District and the Twin Loups Reclamation District, Department of Interior, Water and Power Resources Service, and others, were made Defendants, which law suit basicially alleges that the Environmental Statement was inadequate. In March of 1980, a Hearing was had before the Honorable Robert VanPelt, one of the United States District Court Judges, in which the Plaintiffs were attempting to obtain a preliminary injunction to stop the construction of the North Loup Project. On June 11, 1980, Judge VanPelt overruled and denied "the motion of the plaintiffs for the issuance of a temporary restraining order or a preliminary or temporary injunction." With this decision, construction commenced immediately thereafter and has continued on an orderly basis since June 11, 1980.

I am pleased to state that the Honorable Warren K. Urbom, one of the Judges of the United States District Court, District of Nebraska, has indicated to Mr. Lyle Strom, one of our Co-Counsel, that it is his understanding a settlement of this particular case is pending, and with the understanding that the settlement will now proceed, Judge Urbom will calendar the case

ahead to March 28 of this year, by which date it is expected that the settlement and dismissal documents will be submitted. It is my understanding as a result of this directive, this particular case will be dismissed forthwith. With the dismissal of this particular case, I am happy to report that there are no pending litigation against either the Twin Loups Reclamation District or the Twin Loups Irrigation District either in the United States District Court For The State of Nebraska, or in any State Court in the State of Nebraska.

To demonstrate the effects of what an irrigation project can do for a local area, I take pride in stating that in the early 1960's, the Farwell Irrigation Project was completed. This Project is located in the Middle Loup River Valley, which is adjacent to our North Loup Irrigation Project. This Project serves approximately 50,000 acres of land in Howard and Sherman Counties, Nebraska. As evidence of the tremendous impact this Project has had upon the social and economic welfare of Central Nebraska, I am pleased to make a short summary from the Crop Production Report of the Farwell Unit for the Year 1980 and previous years.

The Crop Production Report indicates that of the 50,051 classified acres in the Farwell Unit, 47,523 acres were actually irrigated and harvested. Farmsteads, roads, farm drains, and irrigation rotation makes up the remaining acreage, resulting in a total acreage of 50,051 acres. The gross income of the total harvested cropland and pasture amounted to $13,481,684.00. The average value per irrigated acre was $282.00. According to information available to me, costs of the Farwell Project up to June 30, 1980 was $37,460,438.00. To further demonstrate that investment in Irrigation Projects is a wise and sound one, in the Year 1980 more than 36% of the total costs of the Project was realized in income to the irrigator in the Farwell Unit. To carry this point further, the total accumulated crop value from the Farwell Unit from the Year 1963 through the Year 1980 was $122,221,000.00. The figure of $122,221,000.00 is more than three times the total cost of the Project expended to June 30, 1980. Certainly with these convincing figures, we can state with pride that an investment in a Project such as the North Loup Project is an investment in the water resources of the State of Nebraska. This is an investment to insure the continued economic and social well being of not only the farmers residing in Twin Loups Irrigation District and the Twin Loups Reclamation District, but also for our citizens residing in the towns and cities within the Districts, as well as all the citizens of the State of Nebraska, including the related agri-businesses in the State of Nebraska, and the Nation as a whole.

As further evidence of the economic impact a project such as the Farwell Irrigation Project has upon the valuations for tax purposes within the boundaries of the Loup Basin Reclamation District, I wish to briefly state that the valuations for tax purposes within the boundaries of the Loup Basin Reclamation District for the Year 1980 was $50,376,570.00. The valuation within the boundaries of the Twin Loups Reclamation District for 1980 was $30,046,570.00. While the number of irrigable acres in the Loup Basin Reclamation District is approximately 63,000 acres and the irrigable acres within the boundaries of the Twin Loups Reclamation District is 53,000, by reason of the Sargent Unit and the Farwell Unit, the valuations in the Loup Basin Reclamation District exceeds the valuation in the Twin Loups Reclamation District by more than $17,000,000.00. As further evidence of the impact that the Farwell and Sargent Units have had upon the valuations for tax purposes, it is interesting to note that in the Year 1976 the

valuation was $25,567,405.00. In the span of five years, the valuation has nearly doubled. Again, such increased valuations are added evidence that investment in irrigation projects such as the Farwell Unit and the Sargent Unit and now the North Loup Division is sound and economically wise.

In years past, we have been blessed with an abundance supply of grain. Today, our State, and particularly Central Nebraska, is faced with a continued drought. During the winter months we had very little snowfall and to date, the rainfall in the Counties of Valley, Greeley, Howard, Nance and Merrick has been minimal. If we are to fulfill our commitments to supply grain, not only for our domestic needs, but for foreign markets, it is paramount that projects such as the North Loup Project be constructed and placed into operation in order to insure an abundant grain supply not only to our Nation, but to the Nations of the World.

Further, it is significant to point out to your Committee that the pumping costs for Center Pivot irrigation, particularly on marginal lands, is simply becoming prohibitive. The cost of diesel fuel for Center Pivots on March 18th of this year stood at $1.17 per gallon. I know of one example of a four pivot systems whose cost of diesel fuel in 1980 was in excess of $6,000.00. Based on diesel fuel at $1.17 that same fuel cost for 1981 would be $7,140.00. While Center Pivot irrigation has been a boom to the agricultural economy and on good farm ground means continued growth of the farm economy, in the areas to be served by The Twin Loups Irrigation District and the Twin Loups Reclamation District, the savings in fuel is tremendously important. We must always remember that fuel is a finite resource, whereas water, while certainly exhaustable, but if properly conserved and utilized, can be replenished. The gallon of diesel fuel the Center Pivot uses is gone. The irrigation water to be made available by the North Loup Project normally will be applied by utilizing the force of gravity. The fuel cost saving and the replenishing of the water supply alone justifies the construction of the North Loup Project.

Fortunately for this Area, the Loup Valley Elevators located in St. Paul, Nebraska, with the cooperation of the Union Pacific Railroad, has now completed facilities to transport out of St. Paul Unit Trains consisting of 50 to 75 cars. In 1980, the Loup Valley Elevators transported by rail more than 1,800 car loads of grain to the West Coast. More than 75% of this grain was raised within a 50 mile radius of St. Paul, Nebraska, which includes lands to be served by the North Loup Irrigation Project. I am given to understand by the Manager of th local Loup Valley Elevators that his Company will market 8,000,000 bushels of grain in 1981, and in the year of 1982, the Company anticipates it will handle 10,000,000 bushels of grain. The Manager also reports that by reason of the company's facilities, the company has the potential of handling in excess of 15,000,000 bushels of grain annually. This potential can be realized in a large measure with the construction of the North Loup Project, and that when the Project is completed, the potential of 15,000,000 bushels of grain annually will certainly become a reality to the Loup Valley Elevators in St. Paul, Nebraska.

Aside from the economic and social benefits which will inure to the peoples residing within the boundaries of the Twin Loups Reclamation District and its trade territory, I believe it is also significant to point to the tremendous recreational facilities which will be provided by the construction of the Calamus Dam and Reservoir. All of us are aware of

increased cost of travel, and as travel becomes higher and higher, people will utilize more frequently the recretional opportunities in their own areas. I am informed that the recretional use at the Sherman Reservoir, which is the water supply for of the Farwell Irrigation District, in the Year 1980 was 219,475 visitor days. In 1956, it was estimated that the visitor days would be 40,700 visitor days. It is evident there is a tremendous use of these recreational facilities afforded to the people of Nebraska at this time. In short, the visitors days in 1980 were over five times what was estimated the visitor days would be when the Farwell Project was being planned and when construction commenced shortly thereafter.

I am further informed by the Water and Power Resources Service that the recreation days for the Calamus Dam and Reservoir is estimated at 50,000 visitor days. If the same ratio of visitation is realized at the Calamus Dam and Reservoir, the visitor days would be in excess of 250,000 visitor days each year.

In July of 1978, the Nebraska Games and Parks Commission decided not to enter into a cost-sharing contract under P.L. 89-72, Federal Water Projects Recreation Act, until their environmental concerns had been addressed. On September 26, 1979, the Twin Loups Reclamation District entered into a Contract with the Water and Power Resources Service to assume the Non-Federal costs for recreation development associated with the North Loup Division. The Water Power and Resources Service, the Fish and Wildlife Service, and the Nebraska Games and Parks Commission proceeded to address the State's environmental concerns. On January 9, 1981, the Nebraska Games and Parks Commission stated its concerns had been addressed to the extent practicable and passed a Resolution to serve as the Non-Federal sponsor for fish, wildlife, and recreation enhancement of the North Loup Division under the provisions of Public Law 89-72.

The Twin Loups Reclamation District believes the Nebraska Games and Parks Commission is the appropriate Non-Federal sponsor for fish, wildlife, and recreation purposes, and the District will terminate its contract as soon as the Nebraska Games and Parks Commission enters into a PL 89-72 Contract with the Water Power and Resources Service. The Directors of the Twin Loups Reclamation District base much of their decision on the fact that the Nebraska Games and Parks Commission has performed and is presently performing a tremendous service to the people who enjoy the recreational benefits from the Sherman Reservoir as indicated in the preceding paragraphs.

In summary then, we believe we have demonstrated to you, Mr. Chairman, and your Committee that the North Loup Division has the required support as evidenced by the more than the two hundred letters of support submitted to your Committee, and by the results of the elections held in 1979. Again, I want to emphasize to you that the early completion of the North Loup Irrigation Project will provide not only a stable and economical water supply for irrigation purposes, but will open opportunities for new agri-businesses and stabilize employment; and that finally, the North Loup Irrigation Project will provide for the Citizens of the State of Nebraska, not only new economic possibilities, but will provide them tremendous recreation and wildlife facilities.

Respectfully submitted,

Cyril P. Shaughnessy
Attorney for the Twin Loups Reclamation District
and The Twin Loups Irrigation District

CHARLES THONE
GOVERNOR

STATE OF NEBRASKA

LINCOLN 68509

March 18, 1981

The Honorable Tom Bevill
Energy and Water Development Subcommittee
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The purpose of this letter is to strongly endorse the Administration's Fiscal 1982 budget requests for all projects involving Nebraska that are under the jurisdiction of your Subcommittee.

Water is an issue of vital importance to the citizens of Nebraska. The wise use, proper management and conservation of water resources are essential to Nebraska's continued economic prosperity. As such, I would ask that you approve the total amount requested for water projects in Nebraska for Fiscal Year 1982.

Your favorable consideration will be deeply appreciated.

Sincerely,

CHARLES THONE
Governor

CT:klb

GRAND ISLAND AREA CHAMBER of COMMERCE

March 18, 1981

Honorable Tom Bevill, Chairman
Appropriations Subcommittee on
Energy & Water Development
U.S. House of Representatives
2362 Rayburn Office Building
Washington, D.C. 20515

Dear Mr. Bevill:

Enclosed is our recent Resolution respectfully asking that you and your subcommittee continue providing funds for the construction of the North Loup Division, Nebraska, of Pick-Sloan Missouri Basin Program.

Thank you for your consideration.

Sincerely,

E. J. Thayer, President
Grand Island Area Chamber of Commerce

lja

Enclosure

309 West 2nd • PO Box 1486 • Grand Island Nebraska 68801 • 308 382-9210

RESOLUTION SUPPORT CONTINUED FUNDING FOR

NORTH LOUP DIVISION, NEBRASKA

PICK-SLOAN MISSOURI BASIN PROGRAM

WHEREAS, the Grand Island Area Chamber of Commerce has adopted a Water Policy Statement; and,

WHEREAS, the North Loup Division, Nebraska, meets the requirements of our Water Policy Statement; and,

WHEREAS, the North Loup Division, Nebraska, is an area underlain with the Ogallala Aquifer which the Federally funded High Plains Study Council Report says its groundwater will probably be deleted within the next 20 to 40 years; and,

WHEREAS, the import of surface water by the works of the North Loup Division will retard and/or possibly eliminate this declining groundwater at a reasonable cost; and,

WHEREAS, the well being of the people of the North Loup Division and the Loup River Valley is of great concern to us.

NOW THEREFORE BE IT RESOLVED, that the Grand Island Area Chamber of Commerce respectfully requests the United State Congress to continue the North Loup Division's construction funding for fiscal year 1982 to assure its earliest possible completion.

Respectfully yours,

E. J. Thayer, President
Grand Island Area Chamber of Commerce

PROGRAMS:
SOIL & WATER CONSERVATION
WATERSHED PROTECTION
COMPREHENSIVE PLANNING
FLOOD PLAIN MANAGEMENT
DATA BANK
WATER QUALITY PLANNING
DEVELOPMENT FUND

STATE OF NEBRASKA
NATURAL RESOURCES COMMISSION
P. O. Box 94876
Lincoln, Nebraska 68509
Phone: (402) 471-2081
Office Location:
Fourth Floor
301 Centennial Mall South

March 20, 1981

The Honorable Tom Bevill
Chairman, Energy and Water Development
Subcommittee
House Appropriations Committee
H-218 Capitol
Washington, D.C.

Dear Congressman Bevill:

This is to advise you that the Natural Resources Commission, the Nebraska agency in charge of long-range water planning is in full support of construction of the North Loup Project. We fully recognize the project will stabilize and enhance the agricultural economy of a significant portion of Nebraska as well as providing certain flood control and recreation benefits.

We feel the North Loup Project is an essential link in the water development and management activities of the state and therefore support continued funding for the project.

Sincerely,

Al Narjes
Chairman

AN:nt

GRAND ISLAND AREA CHAMBER of COMMERCE

March 18, 1981

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Appropriations Subcommittee on
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U.S. House of Representatives
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DEVELOPMENT FUND

STATE OF NEBRASKA

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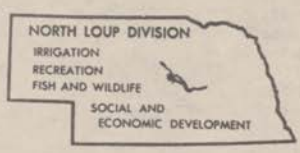
Al Narjes
Chairman

AN:nt

NORTH LOUP DIVISION
IRRIGATION
RECREATION
FISH AND WILDLIFE
SOCIAL AND
ECONOMIC DEVELOPMENT



TWIN LOUPS
RECLAMATION DISTRICT

St. Paul, Nebraska 68873

OFFICERS

President
Henry G. Lange
Ord

Vice President
Donald E. Kilday
Palmer

Secretary-Treasurer
Donald E. Hughes
Scotia

DIRECTORS

Ord
Henry G. Lange

Elyria
John Porrzeba

Scotia
Donald E. Hughes

Elba
Carl F. Anderson
Raymond J. Nowak
Richard Spilinek

St. Paul
Louie M. Colding

Palmer
Donald E. Kilday

Fullerton
A. L. Russell

Attorneys
Cyril P. Shaughnessy
Michael J. Shaughnessy
St. Paul

North Loup Division, Pick-Sloan Missouri Basin Program

List of Statements Supporting
North Loup Division

Presented at Hearings of the
Energy and Water Development
Subcommittee on Appropriations
United States House of Representatives
March 24, 1981

Statements in Behalf of:

1. Maurice A. Kremer, Senator, District 34 and Chairman, Public Works Committee
2. Donald L. Wagner, Senator, District 41
3. Howard L. Peterson, Senator, District 35
4. Ron Cope, Senator, District 36
5. Martin F. Kahle, Senator, District 37
6. Harold F. Sieck, Senator, District 24
7. William E. Nichol, Senator, District 48, Chairman, Judiciary Committee
8. Elroy M. Hefner, Senator, District 19
9. Loran Schmit, Senator, District 23
10. John W. DeCamp, Senator, District 40
11. Myron Rumery, Senator, District 42
12. Robert L. Clark, Senator, District 47
13. Harold W. Ottoson, Assistant Vice Chancellor, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln
14. Max E. Kiburz, General Manager, Loup Power District
15. Jack Odgaard, Executive Vice President, Nebraska Water Resources Association
16. J. Michael Jess, Acting Director, State of Nebraska, Department of Water Resources
17. J. Michael Jess, Acting Director, State of Nebraska, Department of Water Resources
18. Dennis Rasmussen, Legislative Consultant
19. Harry Lustgarten, Jr., Chairman, Nebraska Railroad Association
20. LaVerne P. Jacobsen, President, The Loup Basin Reclamation District and The Farwell Irrigation District

21. Keith Davis, Secretary-Treasurer, The Loup Basin Reclamation District
22. Keith Davis, President, Loup Basin Surface Water Development Association
23. Thelma M. Dulitz, Valley County Clerk and Secretary to the Board of Supervisors, Valley County, Nebraska
24. Stanley Key, Chairman, Garfield County Board of Commissioners
25. Clifford Stefanowicz, Chairman, Howard County Board of Commissioners
26. Richard F. Rowbal, Mayor, City of Ord, Nebraska
27. J. J. Lewis, Former Mayor of the City of St. Paul, Nebraska
28. Daryl Harvey, Mayor of the City of St. Paul, Nebraska
29. Dale J. Black, President, The First National Bank and Trust, Fullerton, Nebraska
30. Steve Vech, Chairman, Agricultural Committee, Ord Chamber of Commerce
31. Melvin W. Meyer, President, Howard Greeley Rural Public Power District
32. Francie Ostermeier, Executive, Secretary-Treasurer, St. Paul Business Development Corporation
33. Francie Ostermeier, Chamber Manager, St. Paul Area Chamber of Commerce
34. J. Marvin Weems, Attorney at Law, Ord, Nebraska
35. Robert B. Crosby, Attorney at Law, Lincoln, Nebraska
36. Stanley J. Edwards, President, Citizens Bank & Trust Company
37. Greg D. Stine, President, Nebraska State Bank, Ord, Nebraska
38. Dale Stine, President, North Loup Valley Bank, North Loup, Nebraska
39. Clarence H. Sixel, President, State Bank of Scotia, Scotia, Nebraska
40. Robert Sixel, Executive Vice-President, State Bank of Scotia, Scotia, Nebraska
41. Larry E. Hulburt, Cashier, State Bank of Scotia, Scotia, Nebraska
42. James S. Clinton, Executive Vice President, Scoular-Bishop Grain Company
43. J. A. Dinsdale, Dinsdale Brothers, Palmer, Nebraska
44. Rufus T. Amis, Jr., President, Missouri Valley Machinery Co.
45. Larry D. Masin, President, Karp and Krow
46. Clarence J. Fox
47. Herman Pokorny
48. Dean J. Rasmussen
49. Edward W. Hudson
50. Lawrence G. Roy
51. Harold Placke
52. Phyllis B. Kriewald
53. Gordon Kriewald
54. August C. Kriewald
55. Carroll Thomas
56. Merlyn Schudel
57. Thomas A. Holt
58. Samuel D. Jensen
59. Robert W. Vogehr
60. Dale Hortmann
61. Leonard W. Murphy
62. James Bryson
63. Victor L. Wegner
64. George Urich

65. Harold P. and Veola Rasmussen
66. Dale and Deb Rasmussen
67. Mr.and Mrs. Jerry Hansen
68. Gary F. and Kay A. Justesen
69. Francis and Virginia Justesen
70. Louie Cording
71. Mr. and Mrs. Rocke J. Jurzenski
72. Millard Vlach
73. Donald E. Hughes
74. Otto F. Gebhardt
75. Albert Zwege, Jr.
76. Don Petsek
77. Esther Fillinger
78. Doug Hughes
79. Irene B. Murphy
80. Mark V. Sonderup
81. Kenneth A. Tibbetts
82. Donald E. Kilday
83. Carl and Doris Anderson
84. Mr. and Mrs. Ernest F. Anderson, Jr.
85. Alex M. and Elaine M. Kulwicki
86. Mr. and Mrs. John Herbig
87. Tracy and Esther Herbig
88. Edward Lassen
89. Paul G. Julsgard
90. Ronald W. Wells
91. Anton Schmidt
92. Roland Spilinek
93. Charles Oeltjen
94. Anton F. Oeltjen
95. Donald P. Kilday
96. Bryce J. Pearson
97. Joy Jacobsen
98. Garrett and Arlene Petersen
99. Mr. and Mrs. Dean Thede
100. Alfred Novotny
101. Richard Spilinek
102. Lester Wells
103. Darrell G. Ingram
104. Robert W. Rasmussen
105. Harland Wells
106. Allen Rasmussen
107. Gary Rasmussen
108. James L. Vlach
109. Zigmond Palacz
110. Howard Lassen
111. Ray Nowak
112. Charles W. Tuma
113. Don Thompson
114. Carl Soneson
115. Jerry Polski

116. Clarence Polski
117. Lynn Jacobsen
118. Merrill Mason
119. Keith Kublish
120. Donald O. Asthelm
121. Rudolph John
122. Frank J. Zadina
123. Wm. Vancura
124. Eugene Novotny
125. Wm. Beran, Jr.
126. Vernon J. Potrzeba
127. John Potrzeba
128. William French
129. James Proskoul
130. Kenneth Petska
131. Donald Vancura
132. Joe and Maybelle Payne
133. Clinton A. and Doris R. Wells
134. James E. Nelson, Mgr., St. Paul Co-op Grain Association
135. Walter Alderman, Walt's Aerial Spraying
136. Merlin Goering, Howard County Clerk
137. Myron Ogard
138. Daniel C. Wells
139. Scott Russell
140. Richard L. Russell, Chairman, Nance County A.S.C. Committee
141. Rodney Russell
142. A. L. Russell
143. Clarence S. Hebda
144. Larry Cunningham
145. Lester L. Jacobsen
146. Carl M. Lehn
147. Errol Wells
148. Dan Rasmussen
149. Elwin Johnson
150. Eldon J. Maresh
151. George W. Radil
152. Simon O. Walkowiak
153. Richard Lola
154. Michael L. Jackson
155. Laverne C. Johnson
156. Joe M. Fryzek
157. Keith L. Novak
158. David E. Novak
159. Robert and Wynona Forbes
160. Ivan J. Cunningham
161. Vern R. Sonderup
162. Mervin and Geraldine Hornickel
163. Mr. and Mrs. Eldon Lange
164. H. S. Duvall
165. Robert J. Rasmussen
166. Ben Camp, Mgr., Farmers Grain and Supply Co.

167. M. A. Nowak
168. Donald G. Deininger
169. Gary L. Garnick
170. Donald E. Blaha
171. C. J. Klimek
172. Kent Hornickel
173. Mary Marshall
174. Ray Marshall
175. Lloyd D. Zikmund
176. Archie H. and Virginia Mason
     Mevill J. Mason
     Martin Mason
     Mrs. Phyllis Georgene Best
177. Viola M. Hackel
178. Rudolph Kokes
179. Russell W. Hackel
180. Mr. and Mrs. Ralph Spilinek
181. Mr.and Mrs. Neal D. Wiley
182. Allen Keep
183. Florence E. Hornickel
184. Edmund and Vesta Huffman
185. Larry Larkowski
186. Debra Sitz
187. Robert R. Cook
188. Donna Cook
189. Wilfred D. Cook
190. Mike Sitz
191. Mrs. Dan Cook
192. Alan D. Koelling
193. Orel and Elinor Koelling
194. Mr. and Mrs. Clarence J. Fox
195. Larry D. and Robyn L. Koelling
196. Alima M. Rajewich
197. Roger W. Walker
198. Evelyn M. Cook
199. Debra Sitz
200. Allan Bundy
201. Donna Cook
202. Robert R. Cook
203. Mike Sitz
204. Wilfred D. Cook
205. Mrs. Dan Cook
206. Allan Bundy
207. Lee Orton, Executive Director, Nebraska Association of Resources Districts
208. Dean J. Rasmussen, Chairman of the Board, Lower Loup Natural Resources District

Mr. BEVILL. Welcome to all of you. We are delighted to have each of you here. You have your battle 90 percent won if Mrs. Smith is supporting you. Take care of that other ten percent and you will be in good shape.

Mr. SHAUGHNESSY. My name is Cyril P. Shaughnessy. I live at St. Paul, Nebraska. I am just going to make a few brief statements and then I am going to let my bosses do the rest of the work. As you know from my statement we have a budget allotment of $27,307,000 for fiscal year 1982. This appropriation would permit us to continue with our construction of our project which was initiated last June or last July and this project will irrigate 53,000 acres of land in central Nebraska, a source of water supply from the Calamus River in central Nebraska and with that I am going to turn the rest of the meeting over to Mr. Lange and Mr. Kilday and Senator Wagner. Thank you.

Mr. BEVILL. Actually we hate to do this but we have to limit Members of Congress and the Senate to five minutes and you all have five minutes.

Mr. LANGE. I am Henry Lange, President of Twin Loups Reclamation District. Taking up where Mr. Shaughnessy left off, the north loup project is in the Loup River basin in Nebraska. It consists of impounding 140,000 acre feet of water, actually 100,000 of consumptive use. The point I want to make in looking through this prepared statement Mr. Shaughnessy made on the fire well project, of $282 per acre last year, the value of an average acre of irrigated ground. Last year in central Nebraska that area had less than ten inches of rainfall which is about half of our normal rainfall and it was a hot summer so that figure is very modest compared to what it should be, 350 or more.

Applying that to our lands which are similar, laying adjacent to them, we have annual products of something over $15 million. Using a figure prepared by the University of Nebraska of business impact of roughly $7 per dollar of new—well we are talking of over $100 million worth of business generated in the Loup Valley by this project. We are part of the Ogala Aquifer out there. You read a lot about the Ogala studies. Within our boundaries are some lands that had wells on them and were referred to petition lands out of the district. Along with irrigating 550,000 acres we are also supplying underground water to these people and they will be paying $2 million levy on their lands to help with part of the cost of this project. Probably you know this but when we put a foot to 15 inches of water on an acre of land about from four to six inches of that penetrates into the aquifer each year. In order to keep the grounds wet on top the water keeps going down. That is a sizeable recharge when you figure it in acre feet. Having the two together we are irrigating 75,000 acres of land with that supply of water. The Loup River produces 1,700,000 acre feet of water a year. 200,000 of it is being used now and we will use another ten percent. The rest of that water, when you contemplate what it is worth per acre foot we are letting 300 million, four, five hundred million dollars worth of water flow down to the Gulf of Mexico doing very little if any good. Thank you.

Mr. WAGNER. Mr. Chairman, Members of the committee my name is Donald Wagner. I am State Senator from Nebraska repre-

senting the 41st District. The 41st District is the area in which the north of the project lies within. I have handed in a written statement. There are three points I would like to make. One is that I do have a letter from Governor Charles Thone to the committee indicating support for the Nebraska projects under the jurisdiction of your committee. In the interest of time I would like to say I support the project, two former state senators have, and there is a great deal of support for the project up and down the valley and in the sake of time I will end there.

Mr. BEVILL. The Governor's letter, are you submitting that? We have put that in the record, along with a list of supporters of the project.

Mr. WAGNER. I would like to. There is an original and 15 copies.

Mr. BEVILL. Each of the copies you have furnished will be made a part of the record.

Mr. WAGNER. I appreciate the time you have given us to come before you because I know the value of time and committee work and so forth.

Mr. BEVILL. We just try to get through for lunch by one and get out of here by six or seven and we even step on a lot of toes doing that. It is embarrassing for people to travel 1,700 miles and give you five minutes to testify but we are in that kind of position.

Mr. KILDAY. Chairman Bevill and other committee members my name is Donald Kilday. I am here as President of Twin Loups Irrigation District representing the people of our valley. I want to thank you for the support you have given us in the past. We are now beginning to see fruits of our labor, starting of construction on the reservoir site. We are asking you to act favorably on this year's appropriation so our goals to provide irrigation to North Loup Valley might be realized. With increased cost of energy and rise in farm operation cost we feel that early completion of this is of utmost importance to our area.

Mr. BEVILL. Very good. Thank you very much. Any comments?

Mr. MYERS. It is good to see all of you here again. You are perennials.

Mr. BEVILL. Are you all Mrs. Smith's constituents?

Mr. LANGE. That is right.

Mr. BEVILL. We are always glad to see her constitutents.

Mr. MYERS. Your presence is very important but hers is more important.

Mr. SHAUGHNESSY. Maybe that is that other ten percent we were looking for.

Mr. MYERS. It is worth more than ten.

Mr. SHAUGHNESSY. Math makes it 100 percent.

Mr. MYERS. If I had a problem I would like to have her on my side. She is very tenacious. Express our good wishes to the Governor.

Mr. BEVILL. Next we have Mr. Jay Yaffo. Your statement will be made a part of the record, your formal statement and you may proceed as you wish.

[The statement follows:]

STATEMENT OF
MR. JAY YAFFO BEFORE THE
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
March 24, 1981

MR. CHAIRMAN: My name is Jay Yaffo. I am a Director of the Ocean Energy Council which is a non-profit corporation dedicated to the development of an OTEC industry. I am also Managing Director of Ocean Thermal Corporation ("OTC"), a subsidiary of Basic Resources, Inc. OTC has submitted a proposal in response to the Department of Energy ("DOE") Pilot Plant Program Opportunity Notice ("PON") as prime contractor for a land based plant in Hawaii. It is a pleasure to appear before you today to testify on behalf of the Ocean Energy Council and OTC on the OTEC Appropriations for Fiscal Year 1982.

My company is involved in OTEC as a private investor. Our views are generally reflective of the attitutde of the investment community toward OTEC. We do not build components for OTEC plants; we do however regularly take ordinary and reasonable commercial risks in the energy business. Therefore, my qualifications to speak to the issue of private capital investment in OTEC are clear.

Ocean Thermal Energy Conversion ("OTEC") uses the temperature differential between warm surface waters and colder deep waters of the ocean to produce electricity. Sufficient temperature differentials are generally found between 25°-30° North latitude and 25°-30° South latitude. Two simple OTEC processes exist to extract energy from these oceanic areas. Both utilize solar energy that is being collected and stored as heat in a surface layer of the ocean. The first process is known as the "closed-cycle". Here, a working fluid such as ammonia, propane or a freon-type refrigerant is vaporized and re-condensed continuously in a closed loop to drive a turbine. Warm sea water is drawn from the ocean surface and pumped through heat exchangers wherein the working fluid is vaporized. The working fluid then expands and emerges as a high pressure vapor to drive the turbine. From the turbine exhaust vapor flows to a condenser where it returns to a liquid as it is cooled by cold seawater.

The second method is known as the "open-cycle". Warm surface water is evaporated under a partial vacuum. The steam this produces passes through and propels a turbine and is later cooled in a condenser using cold sea water pumped up from the depths. Presently, closed-cycle technology is far advanced whereas open-cycle is still in its early research and development stage. However, excellent potential exists for open-cycle

OTEC plants because of the fresh water by-product.

OTEC electricity can be transmitted to shore by cable. Alternatively, OTEC plants can traverse (graze) the ocean in order to find the maximum thermal gradient differential. In the latter mode of deployment the energy produced could be used for energy intensive manufacturing processes on board, such as the production of ammonia or aluminum, the processing of manganese nodules, or the production of coal-based synfuels. OTEC can be used for the electrolysis of water to produce hydrogen, which can be produced in large quantities for use in fuel cells or as part of the process to produce synthetic fuels from coal. The ammonia industry is very interested in OTEC because it will result in the offsetting of the use of large quantities of natural gas and a consortium of ammonia companies has submitted a proposal to the Department of Energy for a floating plant off Hawaii to produce ammonia. These energy-intensive products can be transported to the United States or sold overseas.

OTEC technology can be combined with the geothermal resource to produce energy. In fact, one of the proposals submitted in response to the PON is for a geothermal OTEC in Alaska. The effluent from an OTEC can also be of tremendous value bacause of the nutrients in the subsurface ocean water. These when exposed to sunlight form a natural culture medium for the genesis of the food chain which is the basis of mariculture.

The potential benefits for the United States from OTEC technology are expected to be great. OTEC will produce a great amount of energy and energy-intensive products at a price competitive with alternative sources. Areas for deployment in the United States or its territories, commonwealths or possessions, include Hawaii, Guam, the Northern Marianas, American Samoa, other Western Pacific Islands, Puerto Rico, Florida, the Gulf of Mexico, the U.S. Virgin Islands and others. As already mentioned, the Department of Energy received a proposal for a geothermal OTEC in Alaska. There is also an enormous potential for baseload plants overseas as well as transmission of energy-intensive products to foreign countries, and if the United States can maintain its technological and industrial lead, there will be major export opportunities. Aggressive development and commercialization will result in the major expansion of various sectors of the U.S. economy, including the shipbuilding and offshore construction sectors. The total available worldwide OTEC resource is estimated at between 100 million to 10 billion MWe (Thermal).

Estimates of energy costs are in the region of 100 mills per kilowatt hour in 1980 dollars for this decade. OTEC's main economic barrier is its high front end capital cost. This cost is off-set by the zero fuel cost which results in an energy cost competitive with other sources of energy.

In September, 1980, the Department of Energy ("DOE") issued a PON for the conceptual design of multiple OTEC pilot plant projects. This solicitation was issued pursuant to Public Law 96-310, which directs the Secretary of Energy to competitively select at least two pilot plant projects for assistance to meet a goal of providing at least 100 MWe of OTEC energy capacity by 1986. The closing date for proposals was February 27, 1981; and it is believed that nine proposals were submitted. The proposals are estimated to have cost in the region of $3-4 million to prepare. The proposal sites are known to be Hawaii, the Northern Mariana Islands, Florida, Puerto Rico the Virgin Islands, and Alaska. It should be emphasized that cost-sharing is required in the range of 15-40 percent for all phases of this program.

The Administration presented its revised budget request to Congress on March 10. For Ocean Systems, which includes OTEC, the Administration has requested a recission of $4.5 million in Fiscal Year 1981; and elimination in Fiscal Year 1982. I intend to focus today on the Administration's testimony which was presented to this Committee on March 10 by Mr. Frank DeGeorge, Acting Assistant Secretary for Conservation and Renewable Energy at DoE. However, I would like to make it clear from the outset that I fully support the President's policy of eliminating the budget deficit and reducing excessive Federal involvement in the affairs of this nation's business sector. My concern is with priorities.

Mr. DeGeorge's testimony reads, "In summary, sufficient progress has been made to date to indicate that OTEC is technically feasible and could compete in several commercial market areas. . . . The accomplishments to date have brought this technology to the point where industry can take a more active role in its further commercial development." The proposed program requested by the Administration is stated in the following two sentences: "Given the recent accomplishments in OTEC technology, including clear evidence provided by "Mini-OTEC" that this technology is technically feasible, further development by the United States of OTEC technology suitable for pilot and commercial scale demonstrations can be left to the private sector. Therefore, the Department is requesting no funds for the Ocean Energy Systems program in Fiscal Year 1982."

Today I will explain why the acceptance by the Congress of the Administration's request would almost certainly result in a termination of the continued development by the United States of OTEC towards the commercial phase. I will rely on five propositions which clearly lead to the conclusion that the elimination of DOE sponsorship and involvement in the conceptual and preliminary design work of multiple pilot plant projects will mean the end of OTEC for the United States.

The first proposition is that conceptual and preliminary design work must be done prior to the construction of

any type of energy facility. This is self-evident and no prudent investor would touch a project which had not been properly researched and planned. No company can expect to obtain capital from a financing institution prior to this work having been done.

Secondly, I believe there is no dispute that pilot plants should precede commercial plants in developing emerging energy technologies. No large scale OTEC plants have ever been constructed and there is a real economic risk. It will be difficult to find private financing for the proof of the principle that OTEC plants can be built on a commercial scale, unlike the extremely small "Mini-OTEC" which produced only 15 KWe of net power.

Thirdly, government involvement in OTEC gives it a seal of credibility that all the other emerging alternative energy technologies have. Without it, having once had it, OTEC becomes the odd-one out, with the appearance of having been rejected, branded with a seal of disapproval. No other solar technology is being eliminated from the portfolio of DOE programs.

Fourthly, a DOE pilot plant program selection process, whereby conceptual and preliminary designs are evaluated and selected for awards will increase the chances of the successful projects being able to obtain financing because they have been carefully evaluated in intense competition with other OTEC projects and declared winners with the government stamp of approval.

Fifthly, apart from the economic risk, lack of government endorsement, the implied seal of disapproval and the lack of a competitive selection process, there is intense competition with other energy and non-energy technologies for capital resources in these times of tight money.

These five propositions compound each other and combine to result in one compelling conclusion; the OTEC industry will not be able to find sufficient private money for the conceptual and preliminary design work for the pilot plant phase. Without this work, there will be no construction money and therefore no pilot plants. Without pilot plants there will be no U.S. based commercial development.

Even those who disagree with this conclusion would find it difficult to disagree with the proposition that the commercialization of OTEC will be substantially delayed and American industrial participation virtually precluded. The potential of OTEC for the United States is largely dependent on the speed at which it is developed. If this happens, the Japanese and the French will have a commanding competitive

advantage in the Pacific, Asian, African and possibly the Latin American markets. It is clear even now to government and industry leaders that the Japanese are poised and ready to enter traditional American economic spheres. Moreover, one can, without stretching the imagination, conceive a scenario whereby foreign government assisted industrial effort in OTEC development will result in construction of OTEC plants in or for third world nations in exchange for vital resources for which the United States also has a critical need.

Mr. Chairman, we are requesting a minimum of $18.4 million to keep the OTEC program going in Fiscal Year 1982. This is the lowest of three scenarios we have projected, the others being $24.5 million and $27.1 million. The treatments are described in the attached chart. We agree this program should be prepared to take its fair share of the Administration's proposed cuts, but we cannot agree that it should be eliminated. $18.4 million is 50 percent of the previous Administration's request. Some of this money will be used on long-term R&D activities, but the core of the whole venture which we must retain is the pilot plant proof of principle conceptual and preliminary design component. I urge the committee not to end government involvement in one of the technologies which promises so much, and not to abort OTEC before it can survive on its own.

Thank you, Mr. Chairman, for allowing me to testify before this committee today. I will try to answer any questions you and the other members of the Subcommittee may have.

	Level I 27·1 million	Level II 24·5 million	Level III 18·4 million
Special Projects	1·1 million	1·1 million	$500,000.
Planning & Management	2·0 million	2·0 million	2·0 million
Heat Exchangers - Argonne Tests	1·5 million	0	0
Ocean Engineering, Mooring, CWP - Cable	7·0 million	7·0 million	2·4 million
Biofouling & corrosion (Seacoast test facility)	2·0 million	2·0 million	2·0 million
Pilot Plant -Phase I and commencement Phase II	9·9 million	9·9 million	9·9 million
Waves & Testwave Device	2·0 million	$900,000.	0
Open Cycle	1·6 million	1·6 million	1·6 million
Total:	27·1 million	24·5 million	18·4 million

ANNUAL IMPACT OF OTEC'S

PLANT PRODUCTION RATES: YEAR OF START OR CHANGE AND RATE / YEAR

1988	1
1990	2
1995	3
1998	4

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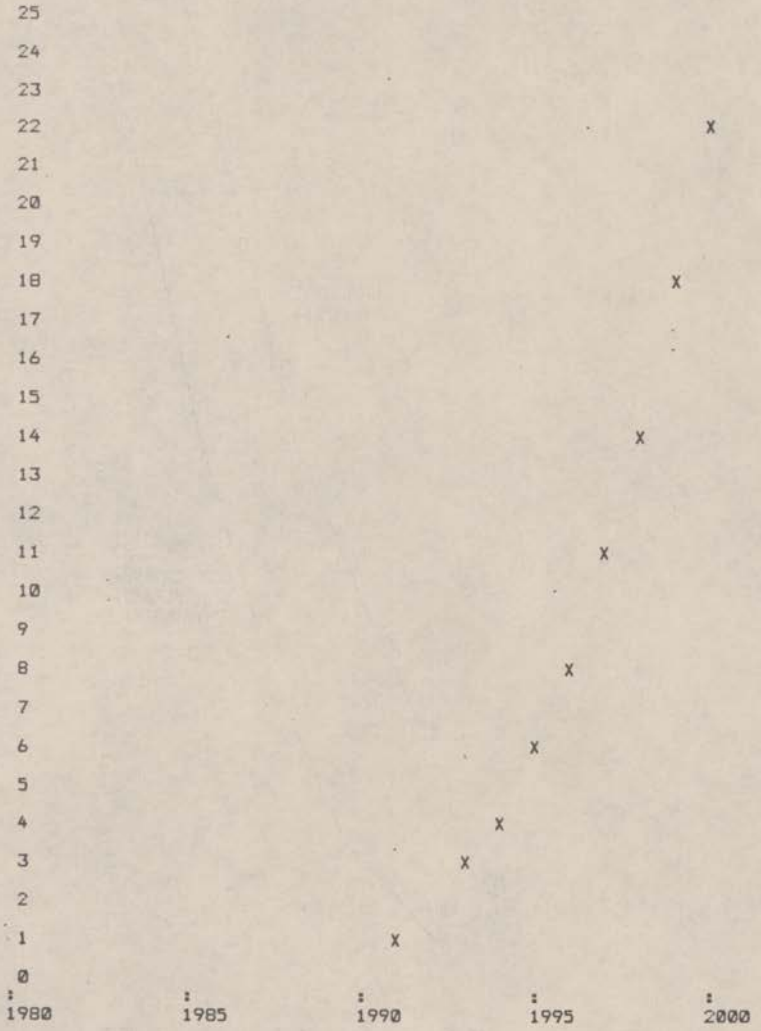
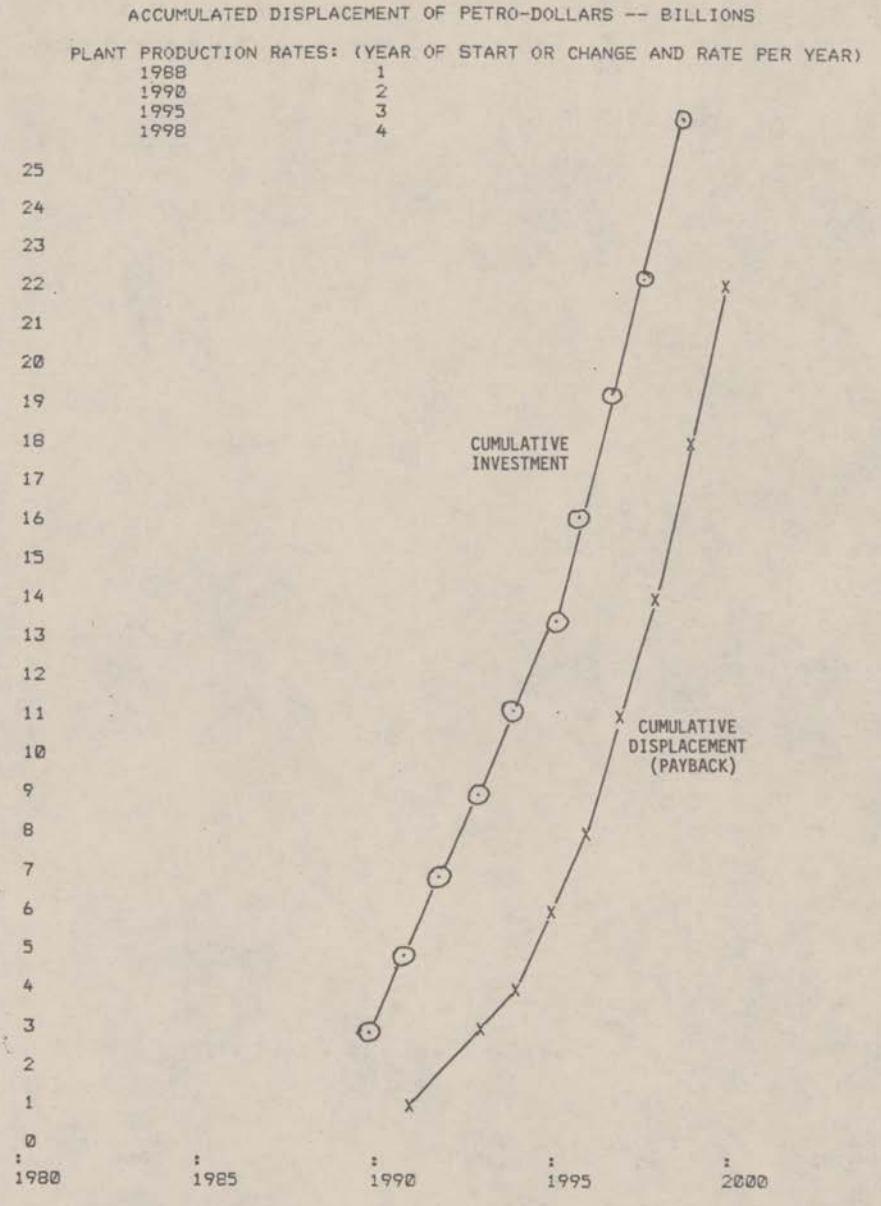
YEAR	TOTAL PLANTS	TOTAL CAPACITY GWE	TOTAL CAPITAL INVESTED (BILLIONS)	TOTAL PETRO $ DISPLACED (BILLIONS)
2020	109	43.6	109	234
2019	105	42	105	218
2018	101	40.4	101	202
2017	97	38.8	97	187
2016	93	37.2	93	173
2015	89	35.6	89	159
2014	85	34	85	146
2013	81	32.4	81	133
2012	77	30.8	77	121
2011	73	29.2	73	109
2010	69	27.6	69	98
2009	65	26	65	88
2008	61	24.4	61	78
2007	57	22.8	57	69
2006	53	21.2	53	61
2005	49	19.6	49	53
2004	45	18	45	45
2003	41	16.4	41	39
2002	37	14.8	37	33
2001	33	13.2	33	27
2000	29	11.6	29	22
1999	25	10	25	18
1998	21	8.4	21	14
1997	18	7.2	18	11
1996	15	6	15	8
1995	12	4.8	12	6
1994	10	4	10	4
1993	8	3.2	8	3
1992	6	2.4	6	1
1991	4	1.6	4	1
1990	2	.8	2	0
1989	1	.4	1	0
1988	0	0	0	0
1987	0	0	0	0
1986	0	0	0	0
1985	0	0	0	0
1984	0	0	0	0
1983	0	0	0	0
1982	0	0	0	0
1981	0	0	0	0

ACCUMULATED DISPLACEMENT OF PETRO-DOLLARS -- BILLIONS

PLANT PRODUCTION RATES: (YEAR OF START OR CHANGE AND RATE PER YEAR)

1988	1
1990	2
1995	3
1998	4




ACCUMULATED DISPLACEMENT OF PETRO-DOLLARS -- BILLIONS
PLANT PRODUCTION RATES: (YEAR OF START OR CHANGE AND RATE PER YEAR)
1988 1
1990 2
1995 3
1998 4
25
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12
11
10
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7
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5
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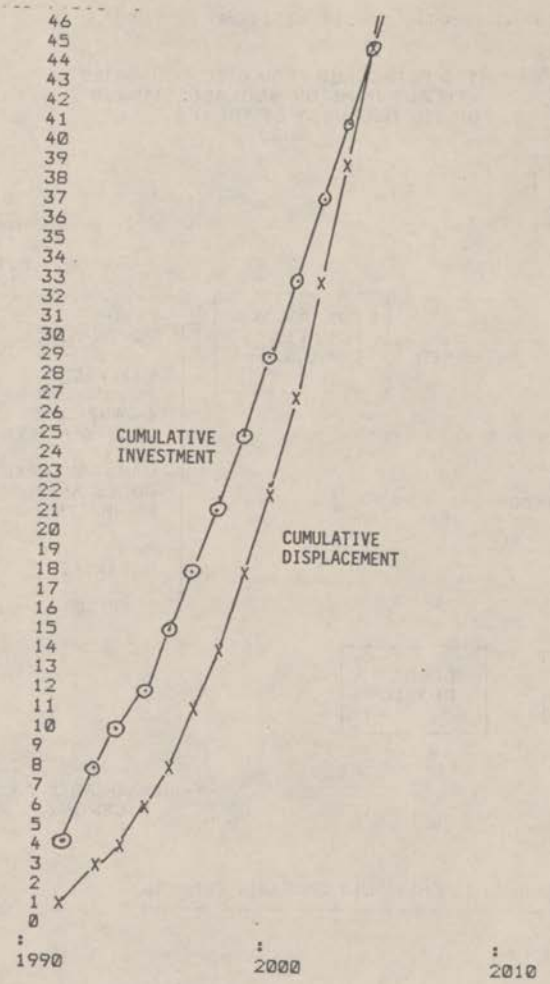
CUMULATIVE INVESTMENT
CUMULATIVE DISPLACEMENT (PAYBACK)
1980
1985
1990
1995
2000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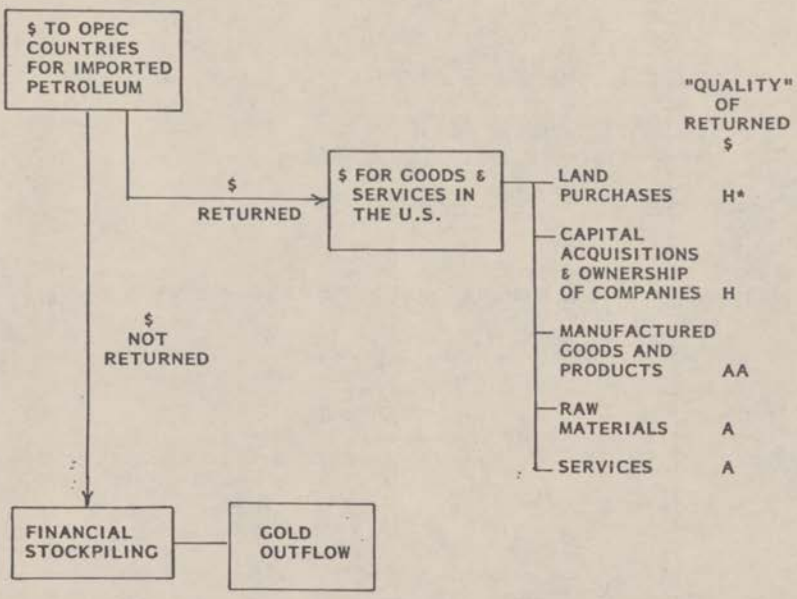
1
0
CUMULATIVE
INVESTMENT
CUMULATIVE
DISPLACEMENT
1990
2000
2010

EFFECT OF OTEC ON THE HEGEMONY OF THE U.S.

IMPORTED PETROLEUM FROM OPEC COUNTRIES TENDS TO ACT IN AN UNFAVORABLE MANNER FOR THE HEGEMONY OF THE U.S.



* UNFAVORABLE TO HEGEMONY

OTEC DIMINISHES THESE UNFAVORABLE EFFECTS

OTEC JOB AND INCOME MULTIPLIER ANALYSIS USING EXTRAPOLATED WHARTON ECONOMETRIC ANALYSIS PERFORMED AT REGIONAL SHIPYARD SITE

1. EMPLOYMENT, DIRECT AND MULTIPLIER EFFECT

   Direct employment will grow over a three year period to 15,000 at each of four construction sites.
   Multiplier will grow to 2.4
   Total employment derived from OTEC at each site: 36,000
   Total national employment: 144,000

2. GROSS NATIONAL PRODUCT INCREASE

   Value added to four regions aggregated to national total: $11.4 BILLION

3. PERSONAL INCOME

   $3.9 BILLION

4. RETAIL SALES

   $1.2 BILLION

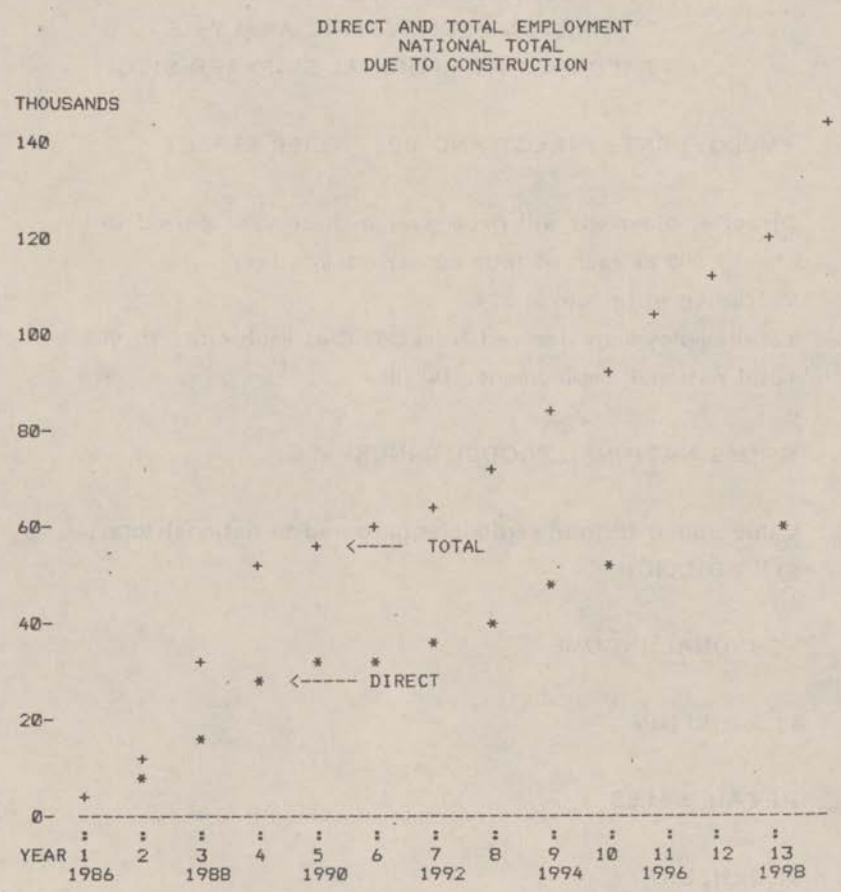
5. LOCAL & STATE TAXES

   $180 MILLION

6. FEDERAL INCOME TAXES

   $600 MILLION

OTEC PAYBACK -- JOBS



OCEAN THERMAL ENERGY CONVERSION

WITNESS

JAY YAFFO, DIRECTOR OF THE OCEAN ENERGY COUNCIL

STATEMENT OF JAY YAFFO

Mr. YAFFO. Thank you, Mr. Chairman. Let me say at the outset I am pleased for the opportunity to testify. I am going to take you out to sea I am afraid. You have been talking about rivers and reclamation projects and we will take a long voyage like fuels burn.

For my qualifications, I am Director of the Ocean Energy Council a nonprofit organization of companies in the Ocean Thermal Energy sphere. I am Managing Director of Ocean Thermal Corporation which is a private company subsidiary of publicly traded company, Basic Resources Corporation. We are a prime contract bidder on the current program opportunity notice which has been put out by the Department of Energy leading to two pilot plants under the requirements of Public Law 96-310. This program opportunity notice called for the submission of proposals by February 27th, 1981. To the best of my knowledge—and I think it is accurate—some nine proposals were submitted from nine differrent consortia. The number nine also includes, of course prime contracts which represent the Commonwealth of Northern Marianas which cannot be considered a public company. It is a term of course.

But there are nine proposals in all. And they range from the Northern Marianas, Hawaii, Port Rick, Alaska—I have the list—Florida. And they vary in technology. They vary in scope and they vary in size. What is rather dismaying to me now is the fact that we are facing a zeroing of the 1982 budget request from the Administration. It goes without saying that—and I think I speak for the entire community—we are completely in support of the President's desire to reduce the budget deficit, to reduce Federal spending and frankly to keep the Federal government out of industrial matters where it is possible to do so so that industry can proceed. There can be no argument with that. However, I think it is a question of priorities and I want to concern myself with that if I may so let me get right in and focus on a piece of testimony which I think highlights the problem.

On March 10th, the day when the revised budget was submitted, you received at this committee—I was here that day—some testimony from Deputy Assistant Secretary Frank George, and I would like, if I may, just to quote it to highlight precisely what was said because it is on that that I wish to focus. I quote in summary, "Sufficient progress has been made to date to indicate that OTEC is technically feasible and could compete in several commercial market areas." He goes on, "The accomplishments to date have brought this technology to the point where industry can take a more active role in its further commercial development." The proposed program requested by the Administration is stated in the following two sentences. I quote:

Given the recent accomplishments in OTEC technology including clear evidence provided by Mini-OTEC—I might add a program in which I played a major part—

this technology is technically feasible. Further development by the United States of OTEC technology suitable for private and commercial scale demonstrations can be left to the private sector. Therefore, the Department is requesting funds for the Ocean Energy System program in fiscal year 1982."

I would like to explain why the acceptance by the Congress of that request would almost certainly result in a termination, total termination of the continued development of OTEC toward the commercial phase, at least in the United States. And that I will refer to in a moment if I may. I am conscious of the time limitation Mr. Chairman. Let me reply on five quick propositions which I think lead clearly to the conclusion that the elimination of the Department of Energy sponsorship at this time and involvement in the conceptual and preliminary design work of multiple plant projects will mean the end of OTEC for the United States, at least as far as the industrial base in the United States in concerned. Although as I can point out later, it may not mean the end in the United States territories but it will be under foreign involvement.

The first proposition is that conceptual preliminary design work has to be done prior to construction of any type of energy facility. This is self-evident. No prudent investor would touch a project which had not been properly researched and planned and no company can expect to obtain capital from a financing institution prior to this work having been done. I think I am peculiarly qualified to say that. My company is involved in the business of ordinarily taking reasonable and prudent business risks, commercial risks in the energy field. This is what we do.

Mr. BEVILL. Your time is up. Would you take ten seconds to wrap it up.

Mr. YAFFO. We feel that we know that Japanese and French are moving rapidly forward, that they in fact have attempted to move into the territory of Guam with their concept. They are now in the process of approaching the State of Hawaii with their industrial leaders. The French have preempted us in the Ivory Coast where we had the lead. We feel strongly a budget of $18.4 million, restored would provide this program with sufficient impetus, certainly the core necessary, for continuation of the Department of Energy OTEC pilot plant program.

Mr. BEVILL. Thank you. I think you summed it up very well because it is a question of priorities and certainly this committee has always supported that program. Thank you very much.

Next we have Mr. Guess, Mr. Clair Guess, Chairman of the Interstate Conference on Water Problems. Mr. Guess, we are pleased to have you and your statement will be made a part of the record and you may proceed as you wish.

[The statement of Clair Guess follows:]

Gentlemen:

I am Clair Guess Jr., I am Chairman of the Interstate Conference on Water Problems and Executive Director of the South Carolina Water Resources Commission. ICWP reprsents water officials of 50 States, 4 territories and numerious intrastate entities. We are the people responsible for management of water in all of the states. We are also the people who are beset with drought and budget cuts.

Water is of primary importance to individuals and government at all levels. We do not understand the failure of the Congress and Administration to squarely address the need for reform. For the past several years, we have been told that reforms will be made "next year." Given our drought, I can promise you that "next year" should be this year. Particularly with a new administration which has articulated in its campaign promises the need for a strong state role in water resources, we must heed the states views regarding water policy reforms.

The Interstate Conference on Water Problems supports urgent reform and reauthorization of the Water Resources Planning Act of 1965. Such reform is firmly and overwhelmingly supported by all of the States. We do not support domination of water policy by an single Federal agency. Domination of water policy by Interior during the last Administration completely distorted years of efforts and excellent work by the Water Resources Council. States feel that single agency domination results in poor decis-ons, brings about regional spiits and fosters diminished State participation.

We propose reformation of the Water Resources Planning Act which will make the Council itself and the regional organizations permitted by the Act to be much more responsive to the Congress, the States and the Administration itself.

The reforms we seek are similar to those recommended by the National Governors Association and include:

-- an independent Chairman of the Water Resources Council, appointed by the President at a high level and confirmed by the Senate.

-- a State advisory council mandated by legislation

-- Principles and Standards -- we support the need for consistent planning and benefit/cost computation. However, recent revisions by the Water Resources Council should be reviewed by a reformed Council. Additionally, there should be a mechanism for Congressional review.

-- Independent review: we do not support the independent review of water projects by the Council which was placed by President Carter. A two line Executive Order will remove the requirement and will foster objective consideration of the Council and water policy issues.

-- river basin commissions: There is a great need uniformly expressed by all states for optional regional planning entities fostered by Title II of the Water Resources Planning Act. We have proposed reforms which will tighten state control as well as bring the commissions closer to the reformed Council.

-- State Grants: The $5 million recission for FY 1981 is completely unacceptable to the States. It is disruptive and symptomatic of the lack of understanding of State needs thus far exhibited

by officials now dominating water policy early in this Administration. The recission must not be permitted, and the State Grants under Title III of the Water Resources Planning Act should be funded at $20 million for FY 1982. Subsequent year funding should be at $50 million for a 10 year period beginning in FY 1983.

-- Funding: Funding for the remaining activities of the reformed Water Resources Council should be at a minimum of $14 million, to include administration, river basin commissions, ongoing studies, the national assessment and policy considerations.

Research and Technology

There is a very serious lack of trained personnel in the water resources area. States constantly steal employees, and the Federal government raids from us because of the shortages. This must be sorted out if we are to solve our growing crisis in water resources. The work of the Office of Water Research and Technology of the Department of the Interior must continue. While not addressed in our draft legislation, consideration might be given to combining the Council and OWRT.

In short, Gentlemen, 54 states and territories as well as numerious intrastate water organizations do not support the current Administration proposal to concentrate water policy in a single Federal agency dominated by western experience and considerations. We support instead thoughtful reform of the Water Resources Council so that it will examine the policy options to solve our water problems which grow more severe daily.

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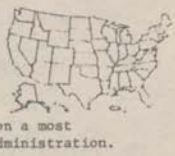
INTERSTATE CONFERENCE ON WATER PROBLEMS

March 24, 1981



Mr. Chairman, Members of the House Subcommittee on Energy and Water Development, House Appropriations Committee:

Let me thank you for the courtesy of being heard on a most vital issue facing this term of the Congress and the Administration.

I am Clair P. Guess, Jr., Chairman of the Interstate Conference on Water Problems, Chairman of the Southeast Basins Inter-Agency Committee and, for the past 14 years, Executive Director of the South Carolina Water Resources Commission. However, after 40 years experience, serving in the public and private sectors involving a wide spectrum of natural resources, I pose as no expert for I feel this Nation's involvement in natural resource affairs has just begun. Water and related land resources in particular are vital to this Nation's well-being, and they are of prime importance to every state and to the smallest of communities. Current trends forecast in budget cuts, the creation of a national water policy division in a single department of the Federal government, and rescinding of prior appropriations in the form of matching grants to states in mid-year, are frustrating, disruptive, and confusing. Further, by these actions and more, a breach of confidence exists that will be very difficult to reverse.

Today, I am speaking on behalf of the Interstate Conference on Water Problems, an institution created in 1959. Its membership is constituted by state, intrastate and interstate officials concerned with water resources administration and related matters.

With this as a background, I wanted to let you know that the ICWP continues to strongly support coordination of federal water policy and programs, with an effective voice for the states in such formulation; and a continued grant program to the states for water resources planning, expanded to include management as well as effective water resources planning on hydrologic boundaries. In short, ICWP views reform of the Water Resources Planning Act as a priority issue for the attention of the Congress. For several years, our organization and others, as well as individual states, have been told that such reform would come "next year." With a new Administration in office and a party platform proclaiming commitment to a state voice in water resources policy and state management of the resources, this must be the year for sound reforms in a truly federal-state cooperative effort.

There is be an urgent need to take immediate steps to amend and reauthorize the Water Resources Planning and Coordinating Act of 1965 (P.L. 89-80). On behalf of the membership of the Interstate Conference on Water Problems, while serving as its Chairman, I am empowered to seek your support and any action you deem necessary to accomplish this task early in this session of Congress.

ICWP proposed amendments to P.L. 89-80 are based on more than six years of study, and they are quite similar to the position taken by the Sub-Committee on Water Resources of the National Governors' Association chaired by Governor Scott M. Matheson of Utah.

In November, 1980, the 58 constituents of the ICWP, including state, interstate and intrastate water resources officials, were polled on this issue. Forty responded and, with few minor exceptions, they expressed agreement with the ICWP draft of proposed amendments to P.L. 89-80. We have worked hard to achieve, among other items, responsible federal water policy and program coordination and a voice for the states in such undertakings. Copies of this proposed draft have been provided to members of the House and Senate, including members of your committee, Mr. Chairman.

The Water Resources Council, despite the many current critical statements, has been responsive to the intent of Congress when viewed over the long span of time and in the perspective of the limitations imposed by the Act itself. Since the onset of the Carter Administration, however, the effectiveness and responsiveness of the Council greatly diminished due to the nature of the appointments to the staff and of the Council Members themselves. Additionally, the Council was inappropriately dominated by the Interior Department Chair committed only to an environmental viewpoint. As a direct result, the Council has not received necessary Congressional reauthorization legislation and has been subjected to very harsh and often inappropriate criticism. However, there still remains, regardless of comments to the contrary, a great need for a sustained national effort in support of water and land related resources planning, management and conservation based upon the individual state or interstate needs.

Mr. Chairman, the states are unified on what reforms we want in the Water Resources Planning Act. Let me outline those reforms.

Council Membership

Streamline the membership and firm up the decision process so that a single agency cannot veto decisions. Members should be (1) an independent Chairman -- I'll come back to that; (2) the Secretaries of Agriculture, Army, Commerce, HUD, Interior and the Administrator of EPA. Non-voting members should include the Secretary of Energy, the Secretary of Transportation, the Administrator of the Federal Emergency Management Agency, and the Chairman of the State Advisory Council.

Independent Chairman

The states do not feel that any federal agency should be permitted to dominate water policy. Unfortunately, it tends to cause some regional splits and also tends to distort development of policy. The

independent chairman should be a high level Presidential appointee confirmed by the Senate so that he is also responsible to Congress.

State Advisory Council

We feel a fairly large advisory council should be established so that all the necessary views and geographic interests are addressed. We want this legislated so that there is a definite role which cannot be reversed by arbitrary decision. Regardless of the many commitments to consult with the states made by various administrations, it always seems to go astray. We hope this will firmly establish that water policy is a matter for state participation and a prime responsibility for states in its administration.

We have agreed upon several steps to increase the interface between federal agency programs, budgets, water policy decisions of the Council, and state and regional planning, as well as with the Congress. Those include regular reporting by the Council to the President and the Congress on needs and recommendations.

Principles and Standards

We need to step back and take a serious look at the Council's latest revisions of the Principles and Standards, and a redirected Council can certainly do that. Further, there must be a built-in mechanism for Congressional review of the changes in the Principles and Standards, but it should not have a provision for automatic repeal if the Congress fails review.

Independent Project Review

The matter of independent project review by the U. S. Water Resources Council (as currently constituted) is not supported by ICWP, and we concur in the sentiments of the Congress to that end. We strongly support the role of the Congress in maintaining a strong voice in project evaluation, selection and funding support. However, we also believe that the Congress can obtain a clearer view of project proposals when they are handled with coordination and cooperation from the states. The interface of states working with federal water resource authorities has been one of the strongest and most often overlooked virtues of the Water Resources Planning and Coordination Act of 1965. For these often unaccounted values are a basis for our seeking reform, extended authorization and adequate funding for an amended P.L. 89-80.

River Basin Commissions

States overwhelmingly support the need for regional -- interstate -- planning for water resources. Title II of the Water Resources Planning Act presently addresses this. Formation of Commissions is at the option of the states and we recommend that it should remain so. However, states should have more participation in the selection of the Chairmen. Additionally, the link between the Council and the

Commission should be strengthened by appointment of Commission Chairmen by the Council's independent Chairman from recommendations of the Governors of the participating states. These would not be political appointments. We believe that greater state control of the Commissions will improve their performance. The Commissions should also serve as a forum for achieving federal consensus on issues effecting the region.

State Grant Program

The $5 million recision proposed for FY 1981 is disastrous. Some states already have grant awards based on the higher amounts. Commitments have been made and staff hired. Programs are underway. At stake is a 30 to 50% cutback in program effort while such problems as the current drought of nationwide impact dictates a need to expand our efforts more than four times over. Having said that, let me tell you why states do need federal matching grants for their water resources management, at least for another ten years. Water is so taken for granted by so many states -- including western states -- that management by the states is simply not funded at levels adequate to do the kind of planning and management which will assure that there is a supply in the future.

At this time, we are looking at a long, long road before we reach the point that states are financially able to take over the role which the federal government has played in water resources, even though the states need to do so. We must begin to set our sights toward that end. At this time, the planning grants administered by the Council should be broadened to include management opportunities and should be increased so that state capabilities, can fulfil the necessary state role advocated by the Administration. We must look to conservation, coordination of quality and quantity planning and groundwater and surface water conjunctive management, At one point, $50 million yearly was requested for this purpose, but it was cut and cut and now rescinded. Frankly, the states could match that amount. However, in this time of budget restraint, a minimum level would be $20 million for grants increased annually over the next ten years.

Funding

Approximately $14 million would be a minimum level for other activities of the reformed Water Resources Planning Act (P.L. 89-80) including Administrative costs, funding for river basin commissions and ongoing studies as well as the assessment of the Nation's water resources.

Research and Technology:

A strong arm to the Nation's wealth in knowledge stems from research and technology and, if you please, the training, development and the provision for experience of our young graduates of colleges and universities in water and land related resource affairs.

While there are some unfriendly aspersions of the efforts of and the need for an Office of Water Resources Research and Technology within the Department of Interior, let me assure you that the need still

exists. Recision of $11.8 million in 1981 funds and a zero budget in 1982 funds is frightening. Admitted, reforms in this effort are in order.

However, as a person who, through the years, has hired many college graduates having received training under this program, I must say we need more of them, not less. Estimates from the Environmental Protection Agency project a need for nearly 500 well-trained Hydro-Geologists in new positions nationwide. Unfortunately, there are not enough trained technical professionals in this science to meet the current day-to-day needs of the states. As a matter of fact, those being trained under current and past state-federal funding under Title III of P.L. 89-80 are "grabbed up" by consulting firms, industry and higher paying federal positions routinely. Such actions leave the states stripped of their most valuable and desperately needed employees.

Accordingly, I suggest that the federal inputs to state-federal water resource programs be viewed as a whole without prejudice, but with the solid conviction that the past and future economic base of America is vested in its land; its water; its people working in concert.

Mr. Chairman, thank you and the members of your committee for this opportunity to summarize the views of some 58 constituents of ICWP and, admittedly, those of myself as a dedicated engineer whose career has been spent for the betterment of the democratic dreams of all Americans.

WATER RESOURCES COUNCIL

WITNESS

CLAIR P. GUESS, JR., CHAIRMAN, INTERSTATE CONFERENCE ON WATER PROBLEMS

Mr. GUESS. In the time allotted to me I would like to speak quickly to what I think are some of the important issues before this Congress and the Administration as it relates to the long term planning and development and management of water resources in every state and not just those that have droughts. In the Interstate Conference on Water Problems which we represent, 50 states, water officials, we are the people responsible for the management of water in all of the states and the interface between the states and Federal government has been one of the most important links in the whole national water scene. As to the governments, we have looked around and we find ourselves very frustrated. For some six years we have asked the Congress to reshape, reframe the Water Resources Council, put the kind of machinery in there that is needed to do the job that it was originally intended by the Congress and each time it gets postponed. During the last Administration it got absolutely bogged down and became an environmental agency rather than a water agency. I could agree to that concept and in that particular instance it became very unpopular not only with the states but with the Congress and it should rightfully have done so.

Now what we are trying our best I think to do is to put all of the water spots or national water policy in any one Federal agency because it should have very close scrutiny. We feel some five or six or more Federal agencies that have a very important role in the national scenario as it relates to water resources—and I think they should be at the conference table helping us do it. But in addition to that Mr. Chairman, the thing we have not exercised and we are proposing in any new legislation—several things, and let me run it down real fast and I will give details later. We think the independent Chairman of the Water Resources Council—you can change his name, the principle is what we are after—appointed by the President at high level and confirmed by the Senate would be an important first step in having him tied both to the Congress and to the President.

A state advisory council mandated by legislation. Current principles and standards while we have supported them. In context we think we should take a sharp look at them now and revise that which could be done under any new mechanism developed by the Congress.

We feel that the independent review stance that has been taken by the council in the past we do not support. And we hope that in any change in legislation that you would note such. We think the river basin commissions, while they are operated by the states themselves are very good entities. We think the management of them could be improved and we think nonpolitical people should be selected by the President on the recommendation of the several states or by the new Chairman if you have an independent Chairman of this kind of setup.

Let me go one step further. As you know, the money, the half of a remaining $10 million has been rescinded by the President and that puts a crimp in my state. The afternoon I heard it, I had to begin cutting about 13 positions in vital programs related to ground water which we have spend six or seven years in; and we

have absolutely developed one of the finest programs in the United States in South Carolina.

We have done it by following good cooperative studies with the U.S. Geological Survey, Corps of Engineers and all we could pull together. By so doing, we have saved the Federal government a considerable amount of money to the advantage of South Carolina, and I think the other states are working similarly for the most part.

The state grants which have retarded our progress at this point and zero budget for 1982 makes it look very dim for programs that we think over the years, with the exception of a few errors that may or may not have been made here at the Water Utility Council, has been a very strong and viable one. One in which you have gotten every dollar back that has been put into it. I will be happy to bring you a much larger review. I frankly do not think the council has presented a program that has actually gone on in the states by this multiple effort. So we are asking please sir, for additional authorization of up to ten percent if you feel that is important to a fully changed Water Resources Council funding in 1982—up to $200 million over a ten year period and up it to about $50 million as a level for which the states can operate very effectively and cooperatively with the Federal interests.

In short—this is the end of it—I want to make one comment which is not in the proposed new Act. I am one who has personally used a good many young student graduates of our land grant and college and university who have had training through the funding that has gone to the Office of Water Resources Research and Technology. The budget has been rescinded by $11.8 million dollars and zero for 1982.

I think this committee and the Congress should take a very careful look at it. Those funds while they are cooperative research funds for the most part, nearly every state is using them to some advantage. The students that are being put out are very outstanding people, easily trained in new situations for higher technologies. And I quote in my master sheet when you get to it, "The EPA has predicted we would need about five hundred hydro-geologists throughout the United States if their proposed ground water program is put into existence."

Mr. BEVILL. Do we have that money?

Mr. GUESS. We do not have any. I stole one from an Alabama Congressman.

Mr. BEVILL. I wondered what happened to him.

Mr. GUESS. D.C. Spigner. He is an outstanding man. He just lost us last week, going into private practice. But these are the kinds of people—Alabama, I may say has done an excellent job in training them. I have had to go outside the state to get them, but the fact is we do not have enough to go around now, and they are being dropped out of state hands and that certainly retards our program tremendously.

Mr. BEVILL. You seem to train people to do anything but play basketball. Indiana beat us the other night.

Mr. MYERS. We have been giving them lessons for years.

Mr. GUESS. I called D.C. Spigner. He has put it right on top for us, that program. Mr. Chairman, that is the sense of my comments.

I could go on forever but I will stop now and if you have any questions.

Mr. BEVILL. If there are any questions you would like to ask we have the time.

Mr. MYERS. I yield my time to you if you would like.

Mr. BEVILL. Give me a little information about your organization. How is it set up?

Mr. GUESS. We have four major divisions, one in hydrogeology, one in engineering, one biological and earth sciences and one in the planning situation.

Mr. BEVILL. Where is your headquarters?

Mr. GUESS. Columbia, South Carolina. I am Executive Director of the Water Commission there. As such we only have 49 people. And I have to get rid of 20 of them, but we work as a team.

Mr. BEVILL. Because of the budget cuts? Is this the Federal budget cuts?

Mr. GUESS. Yes. The rescission alone. I do not have enough to pay them the rest of the year. We will lose about $70,000 of the original allotment. And the reallotment looks like we may get as much as 69 but some of the very best people I have are on the Federal funds for payment. We have worked with the National Governors Association and as I say in my expanded statement in here that we are at a point of complete frustration. I think the Governors themselves are wondering what to do with this water program. Now, regardless of regionalism and the Sun Belt included, we are rapidly growing and the industries that are coming in now—we have an investment board, but when it gets down to the bottom line—how much water, can I get where. Can I get ground water? Is it cheaper than surface water and what about this location? As a matter of fact just for the record, it was very interesting to me that through efforts of cleaning up the process, the Bell System had a recycling plant in New York. They take all the old telephones, all the old wire and melt it down and bring it back. We had seven engineers from Western Electric come in our office and said we have two sites, what about the water. And we showed them we gave them the profile and all the records on it. And they selected one we thought was a priority but we let them prove it. And they moved that entire plant from New York down to South Carolina. It is now spread out over about 30 or 40 acres and the system for recycling all of the AT&T and Bell System is now located there. The second site they had in mind did not have sufficient water to meet their daily demand and there were other issues in their original location. But it has become magic. It is extremely important in the nation and in the state's stance for economic development and growth and it is just that simple. Right now I do not have enough people to go around. Irrigation in the South has broken out like a rash in Georgia and in South Carolina and I presume in Alabama too. Three solid years of drought disaster has made people come to the decision, even if it is wrong we have to change. Each of those systems is costing about $180,000 apiece. And that money is being borrowed to put these things in and there still is some question as to economic justification. We tried our best night and day and on holidays to help farm people locate wells in stratas that we knew were productive and we have

advised them on not going too deep to get into salinities in some places that have some backup into the fresh water and ruin the whole aquifer if it is not stopped. We feel like it is a tremendous service. I guess up until today we have not stopped long enough to blow our own horn but I appreciate the opportunity today Mr. Bevill to have you go across this scenario with us. It is not all happening in Washington but you can certainly help us in the field to keep these things going and to keep an economic base and not destroy these resources and use them wisely.

Another instance—and I am not just taking up time but many of you may have been to Myrtle Beach and Hilton Head. Those two resort areas—Hilton Head is under terrific stress and we finished the finest study. They do not have additional water to expand very far without very careful use of it. Savannah, Georgia area right across the river, is pumping out of the same aquifer at the rate of 100 million gallons a day. The study which Mr. Spigner and others in cooperation with USGS just turned off the press indicates that the aquifer itself is being overpumped by about 50 million gallons a day in the Savannah area. Now it comes to a fact of meeting and putting the best minds we can together to resolve the problem between the two states and if Savannah is willing to look for other sources and cut back to about 50 million gallons a day, then the stress that is taking place on the South Carolina side can probably be relieved. These are examples that are almost daily in most of our states but I do not think they speak out sufficiently to let the Congress know and this committee know how very valuable this program has been but I am the first to admit, please help us straighten it out and keep going with it.

Mr. BEVILL. I hope we can. We appreciate your fine testimony and this committee will take it all under consideration.

Mr. WATKINS. Mr. Chairman, let me ask a question. In your industrial development—do you have most of your water in the locale where the industry is going or do you have to transport?

Mr. GUESS. We do not have a great transport problem. Here is the next thing we are going to do. This is coming off the press quickly. That is take the whole stretch of a river from Charlotte, North Carolina to the sea and we find out now that in areas that have been pretty much over developed. Any additional development would be stressful and we just advise people to that extent to help protect their investment before they make it.

Mr. WATKINS. Thank you, Mr. Chairman.

Mr. BEVILL. Thank you very much.

Our good friend and colleague Congressman Hughes is here and we will just hear from you. You may submit your statement and summarize it or handle it as you wish.

STATEMENT OF HON. WILLIAM HUGHES, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. HUGHES. Let me apologize first. We are in the middle of votes at Merchant Marine and Fisheries and I am actively participating so I was delayed. I will be very brief. There are some 11 different projects in my district where the Corps has a capability and there are varying degrees of immediacy and urgency. I have gone over the projects carefully with the Corps and with our local

officials who do not always agree with the positions we take here, and I determined that there are six projects that just cannot be deferred. Some of the projects are in the Administration's budget. Others are in partially but are not sufficient and I would like to review those and I will just offer my statement for the record.

The New Jersey Intercoastal Waterway is our life blood. That is our north-south artery. It is essential we maintain that each year. Last year, for instance, there were some deferrals and we did not get to many of the shoaled areas, and it just created inordinate problems for us. I seek $1,655,000 for dredging. That is what the Corps indicates is needed to do the work on that waterway. It includes $815,000 to dredge major trouble spots along the ICW, as well as $550,000 to repair bank erosion in the Cape May Channel. If we do not repair it, it will create additional problems at higher costs next year or the year after that.

Barnegat: There are funds in the Administration's budget, for operation and maintenance, $355,000 and I support that project. That is one of the biggest inlets up and down the coast, and in my testimony I discuss just how busy it is.

Cape May Inlet to Lower Township Project: I seek $175,000 for planning and engineering. That is essential. That is a mitigation project. It was created back in 1911. The problem was that we built a jetty which starved the beaches south of there. The erosion taking place there is horrendous. It is now creating problems for our Coast Guard training facility there. That is the largest training facility in the country for Coast Guard personnel, and they are beside themselves trying to figure out how they are going to combat the erosion. I have, as I will mention later, asked to defer some other monies for the training center problems, but we need for the present time the $175,000.

Absecon Inlet: Money was in the budget last year to dredge and deepen the channel. It was transferred to other parts of the country. We have the problems. The Coast Guard cannot get big cutters out of the inlet at low tide, so it has to be dredged. This year I seek $735,000 for that Inlet.

Cold Spring Inlet: We need $500,000. That is one of our major inlets, that serves the Coast Guard training center. Cape May is served by that particular channel so we need those dredging funds. Finally, in Pennsville I seek $385,000 for a mitigation project. At one time, we built a training dike, and as a result, it created tremendous erosion along the Pennsville shoreline. It is a project that cannot be deferred. It will create additional problems with additional costs if we defer it. As I indicated in my statement, I understand deferral of the $250,000 for the Absecon Inlet Phase I study. There is not the same immediacy to that. Cold Spring Inlet is also being deferred. We need $610,000 to repair the sea wall. And even though once again I think it is going to cost us more, I can understand deferring something that can wait a year. The $500,000 to dredge the entrance channel of the Maurice River is a project that can be deferred. I wish we did not have to defer it. We need the dredging. It is a commercial port. Much of my oyster industry is located in that area. They use that channel, but we can defer it and get by for a year.

The $100,000 to initiate a phase I study for flood control at Cape May Point, which is being wiped out by erosion, can be deferred. It is not the same media situation as the other projects. The same thing with $150,000 for the phase I study for flood control on Long Beach Island, and $100,000 for beach erosion control on Long Beach Island. In essence, I have gone through my projects, the ones where the Corps has the capability, and I tried to indicate to you the six projects that we just cannot put off. And I have indicated the other six projects that we can put off in view of our budgetary and fiscal problems.

Mr. BEVILL. I can emphasize with you on some of those, because I have the same situation. Any questions or any statements or anything. Thank you very much.

Mr. HUGHES. Thank you. I appreciate your indulgence.

Mr. BEVILL. The committee will adjourn until 2 o'clock.

[The statement of Representative Hughes follows:]

PREPARED STATEMENT OF REPRESENTATIVE WILLIAM J. HUGHES

SUMMARY

Projects supported

1. New Jersey Intracoastal Waterway—$1,655,000. That includes $815,000 to dredged the major trouble spots along the waterway, and $550,000 to repair bank erosion in the Cape May channel.
2. Barnegat Inlet—$355,000 for operations and maintenance dredging.
3. Cape May Inlet to Lower Township—$175,000 for continued planning and engineering.
4. Absecon Inlet—$735,000 to deepen the channel.
5. Cold Spring Inlet—$500,000 to dredge the entrance channel to the Inlet, which serves the U.S. Coast Guard Training Station.
6. Pennsville—$365,000 in mitigation funds to reinforce the bulkhead along the Delaware River which was damaged by the Government's construction of a training dike.

Projects to be deferred

1. Absecon Inlet—$250,000 to initiate a Phase One Study on a proposed beach erosion control and recreation project.
2. Cold Spring Inlet—$610,000 to repair the sea wall which protects the Coast Guard Station, and $850,000 to rehabilitate the inner portion of the east jetty, which also protects the station from erosion.
3. $500,000 to dredge the entrance channel of the Maurice River.
4. $100,000 to initiate a Phase One Study for a flood control project in Cape May Point.
5. $150,000 to initiate a Phase One Study for a flood control project in Brigantine Island.
6. $100,000 to initiate a Phase One Study on a beach erosion control project on Long Beach Island.

Thank you very much, Mr. Chairman. I am William J. Hughes, Member of Congress, representing New Jersey's Second Congressional District. I'm very grateful for the opportunity to testify before your Subcommittee this morning in support of a number of federally authorized projects in my District.

Over the next few days, this Subcommittee will have many difficult choices to make between proposed budget cuts, and the continuation of energy and water projects which support so much of this nation's economy. These are both worthwhile goals, and I know they will not be easy to reconcile. In my own Congressional District, there are eleven existing projects for which the Army Corps of Engineers has a spending capability in fiscal 1982. After careful deliberation and consultation with the Army Corps and local officials, I have decided to urge action on all or part of just six projects in my District today. While I continue to support the remaining projects, I feel they are not critical in nature, and understand the decision to defer them for at least another year, in the interest of holding down federal spending.

The first project for which I ask your support is the New Jersey Intracoastal Waterway. The Administration's budget recommends just $35,000 in operation and maintenance funding for the Intracoastal Waterway this year. Unfortunately, that

budget request is not adequate to perform the maintenance work which is necessary in the ICW this summer.

As you well know, Mr. Chairman, the Intracoastal Waterway System is our country's major inland, north-south navigation route. The New Jersey portion of the ICW extends some 117 miles from Manasquan Inlet to the Delaware Bay, and is the lifeline for our commercial shipping, fishing, boating and tourism industries. Since the ICW is a federal waterway system, we have no State or local authorizations to fall back on for maintenance dredging. The Army Corps advises me that it has a fiscal 1982 need of $1,655,000 for the ICW. I would ask the Subcommittee to appropriate $1,365,000 for the ICW this year. That includes $815,000 to dredge the major trouble spots along the waterway, and $550,000 to repair bank erosion in the Cape May channel, which is the critical link between the ICW and the Delaware Bay. The remaining funds were earmarked by the Army Corps for bank erosion projects along the ICW which I feel could be deferred for another year.

Mr. Chairman, it is essential that we maintain the federal commitment to the Intracoastal Waterway System. This is a federal waterway, and I fear we will be flirting with disaster if even a portion of the system becomes unnavigable. The Administration's budget request for this project is not realistic, and I would urge the Subcommittee to restore the funds needed to keep the ICW operable.

The second project which needs immediate attention is Barnegat Inlet. This Inlet, located in Ocean County, is the principal navigation channel between the Intracoastal Waterway and the Atlantic Ocean. More than 38 percent of all boats registered in New Jersey utilize Barnegat Inlet, and it is a critical element of Ocean County's fishing and tourism industries. The Administration's budget recommends $355,000 for maintenance dredging in Barnegat Inlet this year, and I feel that is an adequate amount of funding. I am pleased to support the Administration's budget request for this project.

The third project for which I ask your support is the Cape May Inlet to Lower Township Project. This is a beach restoration and erosion control project, designed to repair the damage which was caused to Cape May's beaches by the federal government's construction of the Cold Spring jetties. The Phase One study has been completed by the Army Corps, and the Cape May portion has proven to be cost-effective.

I am optimistic that Congress will formally authorize Phase Two of this important project this year, as part of an omnibus water resources development act. In the meantime, I am requesting that the Subcommittee appropriate $175,000 for this project under the category of "continued planning and engineering." That will cover us in the event that Congress fails again this year to finish work on an omnibus water resources act, and will keep the Cape May Project on schedule. The citizens of Cape May have waited many years for the federal government to repay its debt. Please help us keep this project on schedule.

The fourth project which must move ahead is Absecon Inlet in Atlantic County, which also appears in the Administration's budget. This project involves dredging the entrance channel into the ocean to a depth of 20 feet, and dredging throughout the Inlet itself to 15 feet. You may recall that Congress appropriated money for this project last year, but the work was never carried out. Instead, the funds were transferred out of our Division and into another part of the country. Since the dredging was not carried out last year, the need for maintenance work in Absecon Inlet is more compelling than ever this year. The Administration's budget earmarks $208,000 for maintenance dredging in Absecon Inlet, but the Army Corps advises me that is an insufficient funding level to do the job right. As such, I would urge the Subcommittee to appropriate the entire $735,000 which is the Corps' fiscal 1982 capability for this project.

I should point out that the Army Corps also has a fiscal 1982 capability of $250,000 to initiate a Phase One Study on a related project in Absecon Inlet. This project would provide major beach erosion control and recreational benefits to the entire Atlantic City area, and has attracted a great deal of local support. Nonetheless, I can understand the decision to defer this portion of the project until we get the federal budget in better shape.

I also seek support for the Cold Spring Inlet project which is the major navigation channel serving the U.S. Coast Guard Training Center in Cape May. The total fiscal 1982 capability of the Army Corps for this project is $1,960,000. That includes $610,000 to repair the sea wall which protects the Coast Guard Station; $850,000 to rehabilitate the inner portion of the east jetty, which also protects the station from erosion; and $500,000 to dredge the entrance channel through which the Coast Guard vessels travel.

With great reluctance, I am asking the Subcommittee to appropriate just the $500,000 to dredge the entrance channel in Cold Spring Inlet. The Army Corps feels

that is the only portion of the project which is truly critical at this time. However, I am not entirely pleased at the prospect of deferring the remaining work for another year. Erosion has taken a steady toll on the Coast Guard Base in recent years, and we are fast approaching a critical situation. If this erosion worsens much more, we are going to have a major problem on our hand. I would urge the Subcommittee to take a close look at this situation.

Finally, I seek support for $365,000 to reinforce the bulkhead along the Delaware River in Pennsville. The erosion was caused by a training dike constructed by the U.S. Government and the work is in mitigation of that damage.

Mr. Chairman, there are four other projects in my District which the Army Corps is prepared to move forward on this year. They are important projects, and I intend to continue sponsoring each of them in the years ahead. For the time being, however, they do not have the same immediacy as the others, and I reluctantly understand the need to defer those projects until our fiscal house is in better order.

These projects include: $500,000 to dredge the entrance channel of the Maurice River in Cumberland County; $100,000 to initiate a Phase One Study for a flood control project in Cape May Point; $150,000 to initiate a Phase One Study for a flood control project on Brigantine Island; and $100,000 to initiate a Phase One Study on a beach erosion control project on Long Beach Island.

That concludes my prepared statement. I would be pleased to answer any questions from the Subcommittee at this time.

[Whereupon the committee adjourned at 11:45 a.m. to reconvene at 2:00 o'clock.]

AFTERNOON SESSION

Mr. BEVILL. The committee will come to order.

Our Committee Chairman, Jamie Whitten, who has supported the Lower Mississippi, Yazoo Basin and all tributary flood control projects longer than any of us, is in an Appropriations Mark-Up in another subcommittee. As you know, he has already developed the record for your projects in connection with hearings with the Corps of Engineers.

We are pleased to have our good friend and colleague, Congressman Montgomery, with us here this afternoon and so Congressman Montgomery we are just going to turn this over to you, and you handle this as you wish. The Chair recognizes you.

STATEMENT OF HON. G. V. MONTGOMERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. MONTGOMERY. Thank you, Mr. Chairman. We have a designated spokesman. I will make a few comments, and we will turn it over to Al Boughton, who will actually introduce different persons. I will be very brief.

Mr. BEVILL. You have a good crowd here and I think you would want to put their names in the record to show they are present. You can submit that later. The record will be open for five days. I think it would be good to put that in there to show the good attendance you have here, and also whatever statements you wish to submit.

Mr. MONTGOMERY. I would like to submit my statement for the record. Mr. Chairman, if there is no objection I would like to have the Mississippians stand up. We have other states here but I would like to see who all I have from Mississippi.

Mr. BEVILL. Are any other states recognized?

Mr. MONTGOMERY. Arkansas, Tennessee, Missouri, Illinois and Kentucky.

Mr. Chairman, I certainly would like to extend an invitation to you and other Members of this subcommittee and also to the staff and to our friends here to a reception tonight. Lower Mississippi Valley Association is having a reception and buffet at Cannon Caucus Room at 5:30 this evening. We are changing from inviting Members to a dinner downtown. We have moved it to Capitol Hill and for it to be a success you have to be there.

We have a new Executive Vice President, I would like him to stand up, George Grugett who is the new Executive Vice President of the Lower Mississippi Association.

Mr. Chairman, we are very pleased that the Association's requests are in line with the President's revised budget for the Lower Mississippi River and its tributary projects. Of course we basically represent the lower part of the mighty Mississippi River and its tributaries. I might say that as you know, living in Alabama that some of the most fertile and productive land in the nation is around and near the Mississippi River and it certainly has to be protected. We encourage people to move out of the big cities, the big metropolis areas, we need more land in this country, more fertile land, more safe land for these people to live. I would like to say from a personal viewpoint, Mr. Chairman, I am vitally interested in the Yazoo Backwater Project. You are very familiar with that. When the Mississippi River acts up and overflows, it backs up into the Yazoo River and causes tremendous problems. We think before long the Corps of Engineers will recommend installation of pumps in the Yazoo Backwater Area. This will complete the last phase of the Yazoo Backwater situation. We have the mainstream projects pertaining to Yazoo, and from another personal note the community of Belzoni is a small delta town in Mississippi of around 2,500 people. We are familiar with their flood insurance problem. If we do not complete the starting of the dam at Wasp Lake, a dam near Belzoni, then they are going to have their flood insurance cancelled and this does affect some people and will be a setback for that community. That is basically the area I want to touch on, Mr. Chairman. I appreciate your giving me this opportunity and would it be all right to move to our general spokesman. I will let Al introduce himself. He is from Louisiana.

[The statement of G. V. Montgomery follows:]

PREPARED STATEMENT BY HON. G. V. MONTGOMERY

Mr. Chairman, I am pleased to appear this morning both as President of the Lower Mississippi Valley Flood Control Association and the Representative from the Third District in Mississippi to speak in behalf of funding for the Mississippi River and Tributaries Projects. I have worked with the members of the Lower Mississippi Valley Flood Control Association for years and know that nowhere can you find a more dedicated group of people. Their commitment is to flood control along the lower Mississippi River and their efforts are unending. It is indeed an honor to have this opportunity to support their 1982 funding effort.

I am pleased to state that the Association's requests for 1982 are figures that are in harmony with the President's revised Budget and his Economic Recovery Program. Minor changes have been made to the Administration's request: (1) to decrease the amount of funding for General Investigations, and (2) to increase figures in the Advanced Engineering and Design necessary to allow the Corps' planning for future projects to remain on schedule. For the most part, the figures you have before you today are those of President Reagan.

I think I would be remiss if I did not point out that the Mississippi River Valley contains some of the most fertile and productive land in this nation. As our population increases and as we lose more and more lands to urban and industrial develop-

ment, we must have workable and dependable flood control and navigation programs to ensure that the agricultural lands in this area can be used to their maximum potential to provide food for not only the people of this nation but also for the world's population that is dependent on others to sustain life. Next to defense, I feel it is the best investment that can be made for our future.

I would like to bring to your attention the two items on the agenda with which I am very familiar and personally feel to be badly needed. Both the Yazoo Backwater Project and the Main Stem Project are located in my Congressional District and I know them to be carefully planned projects designed to control flooding that has been devastating to their respective areas. When the Mississippi River flows high, the Yazoo River is affected and is subject to backwaters that can result in flooding of agricultural lands during the crucial spring planting season. Such disasters have occurred in varying degrees for five of the last eight years, causing very severe economic and personal losses that will be prevented when this Project is complete.

Belzoni, Mississippi is a small town of 2,000 to 3,000 that is threatened not only with economic losses from springtime flooding but also with the imminent loss of federal programs as a direct result of flooding. Flood insurance coverage in Belzoni will soon be impossible to maintain, therefore government funding in several areas will also be out of reach. This issue is now on appeal by the city leaders, and we have been told that once construction is 50 percent complete on the Wasp Lake Dam, this problem will be solvable. Timing is of the essence on this arm of the Main Stem Project, and I sincerely urge the Subcommittee to provide the Corps of Engineers with the necessary funds to allow construction to be completed on schedule.

I am certain that each Project on this list is vital to the communities served, and I know this Subcommittee will concentrate on the economic and personal losses prevented by this use of federal funds. The Projects have been approved by the Public Works and Transportation Committee as efficient use of the federal dollar, and I urge this body to favorably consider the request that is before you today.

Thank you.

LOWER MISSISSIPPI VALLEY PROJECTS

WITNESSES

H. A. BOUGHTON, GENERAL SPOKESMAN FOR THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION;

BURRELL FAIR, CHIEF ENGINEER OF THE ST. FRANCIS LEVEE DISTRICT;

JOSEPH MOONEY, CHIEF ENGINEER FOR THE BOARD OF LEVEE COMMISSIONERS FOR THE YAZOO-MISSISSIPPI DELTA;

ARTHUR THEIS, CHIEF ENGINEER, OFFICE OF PUBLIC WORKS, DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, STATE OF LOUISIANA

STATEMENT OF H. A. BOUGHTON

Mr. BOUGHTON. Thank you, Congressman. Mr. Chairman and distinguished Members of the committee. My name is Al Boughton. I am President of the Tensas Basin Levee District of Rayville, Louisiana. I am also the State Vice President for Louisiana of The Lower Mississippi Valley Flood Control Association and I appear here as spokesman for that Association to present their views on the funding requirements for the Mississippi River and Tributaries Project for Fiscal Year 1982. I will present several items of general interest to all our membership and then call on others of our groups to testify concerning specific items. Mr. Chairman, I assure you we will be as brief as possible.

For the benefit of new Members of the Committee who may not be familiar with our Association, it is an agency composed almost entirely of public bodies in parts of Illinois, Kentucky, Missouri,

Tennessee, Arkansas, Mississippi and Louisiana. Our members are public officials who for the most part are elected by the people. Our Association has been serving the people of the Lower Mississippi Valley for 53 years, and we provide the means for all the people of our great Valley to speak and act jointly on all flood control, bank stabilization, navigation and major drainage problems.

We come before you this year supporting President Reagan's effort to slow down the increases in Government spending, therefore we are in essence supporting the President's revised budget request for the Mississippi River and Tributaries Project with some minor exceptions, mainly in the Planning Activity of the Corps of Engineers.

Our special concern as always is for the safety of the Valley and I would like to briefly discuss the Mississippi River Levees which are the main line of defense against flooding for major portions of the seven states we represent. The Mississippi River Levees are designed to carry the drainage of 41 percent of these United States and because of the large geographical area involved, any deficiency of this system becomes a national problem. Studies made by the Corps of Engineers since the 1873 flood show that because of an unexpected deterioration in the flood flow carrying capability of the Mississippi River that deficiencies in levee heights do exist on both sides of the Mississippi River in the states of Louisiana, Mississippi and Arkansas. In fact, after completion of all work now underway, some 425 miles of levees will still be below the required grade.

The ability to furnish the rights of way for a major levee raising is taxing the financial capabilities of many of our levee boards, but we want to assure this committee of our determination to see this project through to completion as rapidly as possible. Although the $25,550,000 in the President's Revised Budget is only about one-half of the Corps stated capability, we support this amount and request this committee to make available as a minimum the $25,550,000 to continue the necessary raising and strengthening of the Mississippi River Levees and that this raising and strengthening be carried on as rapidly as possible.

We do believe that the Channel Stabilization Program on the Mississippi River must be carried forward at the maximum speed possible to prevent further deterioration of the river channel and the resulting requirement for additional raising of main line levees. In fact, it is our hope that by increasing the stabilization work on the main channel of the Mississippi that the deterioration can be stopped. If the channel is allowed to continue to deteriorate, some of the complete flood control works on the tributaries may become ineffective. One such project would be the Yazoo Backwater Area, and there are others. Over 100 years ago the Congress directed the Mississippi River Commission to "permanently locate and deepen the channel and protect the banks of the Mississippi River." We would hope that Congress would reaffirm the need to carry out this vital undertaking. We, therefore, request that the $59,100,000 in the Budget, even though it is well below the Corps stated capability, be appropriated for channel stabilization in fiscal year 1982. These two items, Channel Stabilization and the Main

Line Mississippi Levee System, are the top priorities of our Association.

There are other items in our request that deserve special consideration. Included, but certainly not limited to, are the St. Francis Basin Project in Missouri and Arkansas, the West Tennessee Tributaries Project, the Upper Yazoo Projects in Mississippi and the Atchafalaya Basin Project in Louisiana. In all cases under Mississippi River and Tributaries Construction, we are requesting the amounts in the President's Revised Budget.

We request the $80,466,000 in the President's Budget for fiscal year 1982 for the maintenance of the completed portions of the project. We cannot overemphasize the importance of properly maintaining these works so that they can function safely during times of major floods.

Others in our groups will speak briefly on other vital aspects of the project, so I will not cover these. I would like to state that the Lower Mississippi Valley Flood Control Association would request funds that are not in the President's Budget for several items under the Advanced Engineering and Design feature. These items are: St. John's Bayou-New Madrid Floodway Project in Missouri, Eight Mile Creek Project in Arkansas, L'Anguille River Basin Project in Arkansas, Eastern Rapides and South Central Avoyelles Parishes in Louisiana and the Harbor Projects at Memphis, Tennessee, Helena, Arkansas and Vicksburg, Mississippi.

We believe these additional funds in the amount of $2,112,000 offset by a reduction of $765,000 in General Investigation Funds, are needed in order that the Corps of Engineers may keep their planning for these vital projects on schedule.

Our total request for the Mississippi River and Tributaries Project for fiscal year 1982 is $273,557,000, a reduction of over $69,000,000 from our request last year. A detailed tabulation of this request has been filed with the committee.

In closing, I would like to express to Members of the committee our total faith in the ability and integrity of the Corps of Engineers and we assure you that this association will continue to support and cooperate with the Corps and the Mississippi River Commission in their endeavors.

Mr. Chairman, I would like to express to you and other members of your committee our appreciation for this opportunity to appear before you and for the understanding and consideration you have always given our requests.

Although we have not requested additional funding for construction of the Mississippi River and Tributaries Project, we would certainly ask that this vital project be given every consideration if additional funding can be made available.

Mr. Chairman, with your permission, we will proceed with our other witnesses. We appreciate very much the committee's patience.

[The statement of H. A. Boughton follows:]

PREPARED STATEMENT BY H. A. BOUGHTON, GENERAL SPOKESMAN FOR THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mr. Chairman and distinguished Members of the Committee, my name is H. A. Boughton. I am the President of the Tensas Basin Levee District of Rayville, Louisiana. I am also the State Vice President for Louisiana of The Lower Mississip-

pi Valley Flood Control Association and I appear here as spokesman for that Association to present their views on the funding requirements for the Mississippi River and Tributaries Project for Fiscal Year 1982. I will present several items of general interest to all our membership and then call on others of our group to testify concerning specific items. Mr. Chairman, I assure you we will be as brief as possible.

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St. John's Bayou-New Madrid Floodway Project in Missouri;

Eight Mile Creek Project in Arkansas;
L'Anguille River Basin Project in Arkansas;
Eastern Rapides and South Central Avoyelles Parishes in Louisiana;
The Harbor Projects at Memphis, Tennessee; Helena, Arkansas; and Vicksburg, Mississippi.

We believe these additional funds in the amount of $2,112,000 offset by a reduction of $765,000 in General Investigation funds, are needed in order that the Corps of Engineers may keep their planning for these vital projects on schedule.

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Mr. Chairman, with your permission, we will proceed with our other witnesses. We appreciate very much the Committee's patience.

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION FISCAL YEAR 1982 CIVIL WORKS BUDGET, MISSISSIPPI RIVER AND TRIBUTARIES APPROPRIATION

Project and State	LMVFCA request, fiscal year 1982
General investigations:	
Hickman Harbor, Kentucky	$50,000
Nonconnah Creek, Tennessee and Mississippi	75,000
Lake Neark, Arkansas	50,000
Boeuf-Tensas Basin, Arkansas and Louisiana	785,000
Helena and Vicinity, Arkansas	135,000
St. Francis River Basin below Wappa Lake, Arkansas and Missouri	415,000
West Memphis, Arkansas	200,000
Graham Burke Pumping Plant, Arkansas	0
Horn Lake Creek and Tributaries, including Cowpen Creek, Mississippi and Tennessee	40,000
Yazoo River Basin, Mississippi	965,000
Atchafalaya Basin (water and lane resources), Louisiana	400,000
Larto Lake-Saline Lake area, Louisiana	100,000
Collection and Study of Basic Data	240,000
Subtotal—General Investigations	3,455,000
Advanced Engineering and Design:	
St. John's Bayou-New Madrid Floodway, Missouri	500,000
Eight Mile Creek, Arkansas	275,000
Helena Harbor Arkansas	300,000
Mississippi River, Memphis, Tennessee	400,000
L'Anguille River Basin, Arkansas	350,000
Harris Fork Creek, Tennessee and Kentucky	160,000
Vicksburg Harbor, Mississippi	300,000
Eastern Rapides and South Central Avoyelles Parishes, Louisiana	100,000
Subtotal—Advanced Engineering and Design	2,385,000
Construction:	
Reelfoot Lake-Lake No. 9, Kentucky and Tennessee	100,000
St. Francis River Basin, Missouri and Arkansas[1]	11,800,000
Boeuf and Tensas Rivers, Lake Chicot Pumping Plant, Arkansas	17,500,000
Boeuf and Tensas Rivers, except Lake Chicot Pumping Plant, Arkansas	500,000
Mud Lake Pumping Station, Tennessee	350,000
West Tennessee Tributaries, Tennessee[1]	460,000
Yazoo Basin, Mississippi:	(25,700,000)
Big Sunflower River	5,635,000
Greenwood	137,000
Grenada Lake	2,327,000

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION FISCAL YEAR 1982 CIVIL WORKS BUDGET, MISSISSIPPI RIVER AND TRIBUTARIES APPROPRIATION—Continued

Project and State	LMVFCA request, fiscal year 1982
Main Stem	1,442,000
Sardis Lake	758,000
Streambank Erosion Control Evaluation	500,000
Tributaries:	
Except Ascalmore-Tippo and Oppossum Bayous	2,881,000
Ascalmore-Tippo and Oppossum Bayous	4,363,000
Upper Yazoo Project [1]	5,600,000
Yazoo Backwater	2,057,000
Atchafalaya Basin, Louisiana [1]	24,200,000
Bayou Cocodrie and Tributaries, Louisiana (Resumption)	400,000
Lower Red River-South Bank Levees, Louisiana	700,000
Old River, Louisiana	22,700,000
Tech-Vermilion Basins, Louisiana	10,400,000
Tensas Basin, Arkansas and Louisiana:	
Red River Backwater Area except Tensas Cocodrie Pumping Plant	800,000
Red River Backwater Area, Tensas Cocodrie Pumping Plant	6,200,000
Tensas River National Wildlife Refuge	0
Channel improvement, Illinois, Kentucky, Missouri, Arkansas, Tennessee, Mississippi, and Louisiana	59,100,000
Mississippi River levees, Illinois, Kentucky, Missouri, Arkansas, Tennessee, Mississippi, and Louisiana	25,550,000
Subtotal—Construction	206,460,000
Reduction for Savings and Slippage	−19,209,000
Subtotal—Construction	187,251,000
Operations and Maintenance Subtotal	80,466,000
Grand total—Mississippi River and Tributaries	273,557,000

[1] Priority projects.

Mr. BEVILL. You may proceed.

Mr. BOUGHTON. The first witness will speak for the States of Arkansas and Missouri. He is Mr. Burrell Fair.

Mr. BEVILL. We are glad to have you, Mr. Fair.

STATEMENT OF MR. BURRELL FAIR

Mr. FAIR. Mr. Chairman and Members of the committee, I live in West Memphis, Arkansas and I am Chief Engineer of the St. Francis Levee District of Arkansas. The purpose of my testimony here today is to request the appropriation of funds for work in fiscal year 1982 on the St. Francis Basin Project. This project is under the heading, Mississippi River and Tributaries, and includes work on flood control and major drainage outlets in the states of Arkansas and Missouri. This is an interstate project of great importance to large areas in both states and is totally supported by the drainage and flood control interests in the affected area. The project has been under way since 1936 and has been very modestly funded during the 45 years since it was started. Much important work remains to be done before completion.

We request that you recommend the appropriation of the sum of $11,800,000 for the St. Francis Project for Fiscal Year 1982. This is the amount which was included in the President's revised budget and is the amount included in the overall request of the Lower Mississippi Valley Flood Control Association. In requesting the budgeted amount we are attempting to express our support for the effort being made by the Administration and by Congress to con-

trol Federal spending. The costs of our projects are out of control. This year, after the application of the increase due to inflation and the allowance for last year's appropriation, the amount required to complete the St. Francis Project is substantially more than it was a year ago. The excessive cost escalation due to inflation will eventually undermine our cost-benefit justification. We believe the stringent fiscal measures being taken now will result in greater future progress on the work we need.

We hope this will not be construed as an invitation to cut our funding more than other programs are cut. We are supporting the overall effort, so long as it is evenly applied across all phases of government spending. However, if Congress decides to increase funds for water resource programs, we request our appropriate share. We are taking this simple approach in understanding of the tremendous task you have before you.

I am grateful for the opportunity to present this request to you and I am satisfied that it will receive fair and reasonable consideration.

[The statement of Burrell Fair follows:]

PREPARED STATEMENT OF BURRELL B. FAIR

Mr. Chairman and members of the committee, my name is Burrell B. Fair, I live in West Memphis, Arkansas, and I am Chief Engineer of the St. Francis Levee District of Arkansas. The purpose of my testimony here today is to request the appropriation of funds for work in Fiscal Year 1982 on the St. Francis Basin Project. This project is under the heading, Mississippi River and Tributaries, and includes work on flood control and major drainage outlets in the states of Arkansas and Missouri. This is an interstate project of great importance to large areas in both states and is totally supported by the drainage and flood control interests in the affected area. The project has been under way since 1936 and has been very modestly funded during the 45 years since it was started. Much important work remains to be done before completion.

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I am grateful for the opportunity to present this request to you and I am satisfied that it will receive fair and reasonable consideration.

Respectfully submitted,

BURRELL B. FAIR.

Mr. BEVILL. Very good.

Mr. BOUGHTON. Our next speaker is Mr. Joe Mooney, from Mississippi.

Mr. MONTGOMERY. Joe will not mind if we let Bill Alexander go first.

Mr. BEVILL. The Chair is delighted to see our colleague and friend, Congressman Bill Alexander here. The Chair recognizes Congressman Alexander.

STATEMENT OF HON. BILL ALEXANDER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. ALEXANDER. Thank you. I ask unanimous consent to submit the full text of my statement for the record and I will be pleased to summarize it.

Mr. BEVILL. You may do so.

[The statement of the Hon. Bill Alexander follows:]

PREPARED STATEMENT BY HON. BILL ALEXANDER

Mr Chairman and members of the Subcommittee, thank you for giving me the opportunity to appear before you today in support of second year funding for the study of the L'Anguille River, Arkansas, Project.

I recognize the constraints under which we, as members of the Committee on Appropriations, are working in an effort to keep federal spending down. I share the concern of the Administration and the Nation for controlling the federal budget. Earlier today, I urged the House Committee on the Budget to work carefully to insure that we keep our priorities right in dealing with productive as opposed to non-productive federal programs. My appearance before you now is in support of what I believe is a productive program; one not only important to our farmers but to consumers of the food they grow.

The L'Anguille Project affects 380,000 acres of land in Cross, Woodruff, St. Francis and Lee counties in First Congressional District, which I represent.

I, as will others who will be speaking to you today, am requesting approval of $350,000 for use in Fiscal Year 1982. This money will continue the Phase I Advanced Engineering and Design Study on the L'Anguille Project. The objectives of this study are to evaluate the water and related land resources needs of the L'Anguille River Basin to determine the best method of providing flood damage control using current evaluation criteria.

The Corps of Engineers has responsibility for this project. The Memphis District of the Corps has a capability for using $350,000 in this study in the coming year.

In the study, the Corps will measure efficiency of flood control alternatives in terms of national, regional, and local economic development, environmental quality and social well-being. I am assured that both structural and non-structural methods of flood damage reduction will be examined.

Because of the deterioration of the L'Anguille and its tributaries there is a somewhat different problem than the usual one in this basin. As a result of the current condition of the channels in this river drainage system, the land in this project area floods both in the late spring and the late summer.

Even when spring flooding does not prevent farmers in the L'Anguille Project area from getting their crops planted, fall flooding frequently prevents harvesting. The land involved is prime food-producing agricultural acreage.

As I understand the objectives of the local sponsor of this project total prevention of flooding is not what they have in mind. Rather, what they need is a reduction in the length of time their fields stay under water, particularly in the fall when such flooding results in preventing harvesting. Not only does such fall flooding reduce food supplies available to our own people and for needed exports to benefit our balance of trade, but it destablizes farmer income by causing partial or total loss of production investments already made.

I hope that in reviewing the requests before you this year you will find that you can recommend the appropriation of $350,000 for this project. It is my understanding that this request has the support of the Lower Mississippi Valley Flood Control Association.

L'ANGUILLE IMPROVEMENT DISTRICT NO. 1 OF ARKANSAS

This Improvement District was legally constituted in December of 1979 and a letter of intent to sponsor the L'Anguille River Project was provided to the Memphis District Corps of Engineers on January 14, 1980. There is a dire need for flood relief along the L'Anguille River in Cross, Woodruff, St. Francis, and Lee Counties in Arkansas, wherein there is contained some 380,000 acres that are affected within the proposed district.

Congress appropriated $150,000 for the first year planning and the Memphis District Corps of Engineers has expressed a capability of $350,000 for the 1982 Fiscal Year. It is important that this money be appropriated for the Corps to continue its re-study efforts of this previously authorized Project.

There is a somewhat unique problem in the L'Anguille River Basin that occurs because of late spring and summer flooding that prohibits or delays the planting of crops, as well as late summer and fall flooding that prohibits or delays the harvesting of matured crops. There have been numerous instances over the past three years where entire fields of matured crops have rotted because harvesting was impossible. The Commissioners for the Improvement District have the full support of the entire Arkansas Delegation who represent this District, both Senators Bumpers and Pryor and Congressman Alexander.

If this re-study effort is not completed and plans implemented to prevent the duration of flooding in the L'Anguille River Basin area then there will be an enormous loss of soil through erosion and washing, as well as unmitigated damage to woodlands and wildlife habitats, therefore the Commissioners of the L'Anguille Improvement District No. 1 of Arkansas urge the appropriation by Congress of $350,000 for fiscal year 1982 in order to fund the expressed capability of the Corps.

J. R. BURCHFIELD,
CHICOT COUNTY JUDGE

JUDGE SAM ROBINSON,
ATTORNEY

MEMBERS
SAM ANGEL, LAKE VILLAGE
MACK H. BALL, EUDORA
LEPHIEW DENNINGTON, DERMOTT
OLAN H. MENCER, LAKE VILLAGE
JACK R. RHODES, LAKE VILLAGE

CHICOT COUNTY
RURAL DEVELOPMENT AUTHORITY
LAKE CHICOT PROJECT
LAKE VILLAGE, ARKANSAS 71653

March 16, 1981

Mr. Chairman:

There is a sizeable delegation here today who are extremely interested in the continued funding of the Lake Chicot Restoration Project. (A line item in the Boeuf-Tensas water-shed).

We would like to request that the U. S. Corps of Engineers' stated capabilities of $17,500,000.00 for fiscal year 1982 be funded.

This delegation is extremely pleased with the way your committee has funded this project since its authorization back in 1968, and your continued favorable recommendations will be greatly appreciated.

Sincerely,

James R. Burchfield

JAMES R. BURCHFIELD,
Chicot County Judge.

J. H. BURGE, M. D.,
Chairman
Chicot County Drainage District.

BOARD OF

MISSISSIPPI LEVEE COMMISSIONERS

F. H. NANCE, PRESIDENT

P.O. BOX 637

GREENVILLE, MISSISSIPPI 38701

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STATEMENT
TO
SUBCOMMITTEES ON APPROPRIATIONS FOR
ENERGY AND WATER DEVELOPMENT
MISSISSIPPI RIVER AND TRIBUTARIES PROJECT
MARCH 24 - 25, 1981

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am Newman Bolls, Chief Engineer, Board of Mississippi Levee Commissioners, Greenville, Mississippi. This Board offers its support to the recommendations for appropriations for the Mississippi River and Tributaries Project for FY1982 as presented by the Lower Misssissippi Valley Flood Control Association. We offer specific recommendations for projects within the Yazoo Basin for which we urgently request $25,400,000 for FY1982.

Listed below is the President's budget for FY1982 which we support and respectfully request be appropriated for this vital work:

YAZOO BASIN, MISSISSIPPI

Big Sunflower	$ 5,635,000
Greenwood	137,000
Grenada Lake	2,327,000
Main Stem	1,442,000
Sardis Lake	758,000
Stream Bank Erosion Control Evaluation	500,000
Tributaries:	
Except Ascalmore-Tippo-Opossum	2,881,000
Ascalmore-Tippo-Opossum Bayous	4,363,000
Upper Yazoo Projects	5,600,000
Yazoo Backwater	2,057,000
Total Yazoo Basin	$ 25,700,000

The program that we have so long supported is not a giveaway or a welfare scheme but is one of capital investment that repays to our national and world economy many times the original investment and, in reality, provides greatly added sources of income and products that makes many of these social programs possible. The Yazoo Basin without question is one of the most highly productive agricultural areas in the world and with the gloomy forecasts of impending world hunger, it will be very shortsighted to stall the development and protection of this region that has such worldwide importance. The startling statistic that over 3,000,000 acres of arable land is being removed from productive use each year for the construction of roads, buildings and other commercial uses places an even greater burden on the remaining productive land. A recent study made by the Mississippi Research and Development Center shows that in the two principal counties in the Yazoo Backwater area, Sharkey and Issaquena, the value of their farm produce was 1.65 times the national average on a per-acre basis, further emphasizing the value of this land and its productive capacity.

We who have the opportunity and privilege now of protecting and providing for the future must exercise every available means to preserve these great natural resources of land and water so that the generations that follow will have a sufficiency of these two precious resources.

A short summary of the principal features of Yazoo Basin Projects will demonstrate the need for continuation of these improvements at a reasonable rate.

A. Yazoo Headwater Project is designed to control the runoff from the hills and pass it safely through adequate outlets to the Mississippi River. The various components of this project are:

1. The Hillside Reservoirs: Arkabutla, Enid, Grenada and Sardis whose flood control value is without question.

2. Main Stem which provides for levees and other structures along the Yazoo River. The most critical item is the Wasp Lake Closure which is desperately needed to protect Belzoni, Mississippi.

3. Tributaries Items which include Ascalmore-Tippo and Opossum Creeks. These items furnish flood control and drainage to a vast area in some five counties and include such urban areas as Marks and Lambert..

4. Greenwood provides for protection works around the City of Greenwood.

B. Upper Yazoo Projects is the improvement of the main channel of the Yazoo-Tallahatchie-Coldwater Rivers to provide adequate outlet for the entire upper Delta region of Mississippi.

C. Yazoo Backwater Project protects a 1,000,000 mile area in the extreme south end of the Delta from backwaters from the Mississippi and Yazoo Rivers. This project was authorized in 1941 and is still not complete. The most critical feature of this project is the Pumping Plants. It is imperative that the study be completed and that construction be initiated to protect this area.

D. Big Sunflower River Project presently consists of channel improvements on Steele Bayou, the only outlet for drainage in the extreme western side of the Delta and is the only source of drainage for Greenville, Mississippi with a population of over 50,000.

E. Stream Bank Erosion Control deals with the development of and demonstration of effective measures for controlling erosion resulting from heavy hillside runoff into the Delta.

We in the Yazoo Basin have always prided ourselves as being patriotic self-sacrificing citizens. This is evidenced by the vast expenditures of local taxes to support and finance the critical flood control and drainage problem so greatly affecting our area. We feel that we are again demonstrating this patriotic characteristic by not appealing for additional funds but are supporting the President's budget. We are very aware of the urgency to contain the destructive spiral of inflation and return to a balanced budget. The failure to do so will mean the utter collapse of America and with it, the free world. We are willing to do our part. We are agreeable to well-thought-out reductions that will not jeopardize the overall economy and effort and ask only that we be treated fairly.

We are grateful for the careful consideration you have always given our requests and wish to thank and commend you on the difficult job you have always done so well in providing funds for these most beneficial projects.

BOARD OF SUPERVISORS
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The Little River Drainage District

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MAINTENANCE SUPERVISOR
Larry D. Dowdy

ATTORNEY
Harry H. Bock,
New Madrid, Mo.

STATEMENT OF LARRY D. DOWDY

March 1981

Mr. Chairman and Members of The Committee:

My name is Larry D. Dowdy, Maintenance Supervisor of The Little River Drainage District. Our District is a political subdivision of the State of Missouri with its chief office at Cape Girardeau. This District was incorporated in 1907 and affords flood protection for more than 1.2 million acres of farmland as well as providing drainage facilities for almost 2.0 million acres of lands throughout Southeast Missouri.

Our District lies at the North end of the St. Francis Basin, through which our waters must flow through Arkansas to the St. Francis River and then on to the Mississippi River near Helena, Arkansas.

In 1936 the St. Francis Basin Project was authorized by Congress as a part of the MR and T Project. Its cost-benefit ratio then was 2:6:1 and today with the area becoming more progressive than ever, both agriculturally and industrially, has a cost-benefit ratio of 3:4:1.

We believe an accelerated construction of this project would relieve the annual disasterous floodings caused by inadequate drainage and would be a wise investment in the development of the abundant natural resources of this area.

In 1973 the largest flood of record occurred in this area which evidenced the benefits of the completed works and demonstrated to us what

benefits would have been realized had the St. Francis Basin Project been completed. Much damage was averted because of the works completed but damages occurred which could have been avoided had this project been finalized.

The Corps of Engineers capabilities are greater than our funding request for this Project as well as the MR and T Project.

Our District strongly urges this Committee to authorize full funding of the St. Francis Basin Project amount of $11,800,000 and for the MR and T Project amount of $273,557,000 as requested by The Lower Mississippi Valley Flood Control Association. The St. Francis Basin amount represents a 30% reduction of the amounts appropriated last year and the MR and T amount is a reduction of about the same per cent.

We support the requests made by other witnesses from the Association and trust their request likewise will be given serious consideration.

Our District appreciates the support and courtesies extended to it by this Committee in the past and for today's opportunity to appear before you to make our request known.

Respectfully submitted,

Maintenance Supervisor
The Little River Drainage District

STATEMENT BY:
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS
RECOMMENDING FISCAL YEAR 1982 APPROPRIATIONS
NAVIGATION, HURRICANE PROTECTION AND WATER RESOURCES PROJECTS IN LOUISIANA

PRESENTED TO: APPROPRIATIONS SUB-COMMITTEES ON ENERGY & WATER DEVELOPMENT
HOUSE OF REPRESENTATIVES - MARCH 24, 1981
SENATE - MARCH 25, 1981

The Louisiana Department of Transportation and Development, Office of Public Works, is the agency designated to represent the State of Louisiana for the coordinated planning and development of water resources including flood control, navigation, drainage, hurricane protection, water conservation, and irrigation projects. Therefore, this statement is presented on behalf of Governor David C. Treen and the State of Louisiana. We are pleased to present endorsements and recommendations for Fiscal Year 1982 appropriations to Louisiana projects. The projects listed herein are not contained in other separate statements by the Office on the Red River Basin or the Mississippi River and Tributaries.

In making the following recommendations, the State of Louisiana concurs in and supports the President's Budget recommendations for Fiscal Year 1982. These recommendations are made not because the projects are unworthy of higher funding levels, but because we agree that a balanced budget is a worthy objective and is in the best interests of the country at this time. However, we also feel that water resources projects are probably the most worthwhile and cost-effective projects in the Federal budget, having to meet stringent economic justification criteria not required of other programs. We ask that this be taken into consideration in the final decision making process to allocate the available funds.

PROJECT	BUDGET ALLOWANCE AND LOUISIANA REQUEST
CONSTRUCTION:	
Aquatic Plant Control	$ 500,000
Atchafalaya River, Bayous Chene, Boeuf and Black	10,000,000
Grand Isle and Vicinity	1,955,000
Lake Ponchartrain and Vicinity	15,000,000
Larose to Golden Meadow	9,900,000
Mississippi River, Baton Rouge to the Gulf	4,400,000
Mississippi River, Gulf Outlet	2,550,000
New Orleans to Venice	2,350,000
Ouachita & Black Rivers	24,500,000
Vermilion Lock	7,400,000

PROJECT	BUDGET AND LOUISIANA ALLOWANCE REQUEST
SURVEYS:	
Gulf Intracoastal Waterway, LA & TX Section	$ 620,000
Louisiana Coastal Area	150,000
Mermentau-Vermilion, & Calcasieu Rivers & Bayou Teche	220,000
Miss. River Nav. System-Adequate Mooring Facilities for Watercraft	295,000
Ouachita River Basin	1,000,000
Pearl River Basin	825,000
OPERATION AND MAINTENANCE:	
Atchafalaya River, Morgan City to the Gulf	6,953,000
Barataria Bay Waterway	1,710,000
Bayou Teche	303,000
Bayou Teche and Vermilion River	43,000
Calcasieu River and Pass	10,630,000
Freshwater Bayou	1,610,000
Gulf Intracoastal Canal	11,838,000
Houma Navigation Canal	1,635,000
Lake Providence Harbor	160,000
Madison Parish Port	171,000
Mermentau River	3,048,000
Mississippi River, Baton Rouge to the Gulf	26,073,000
Mississippi River, Gulf Outlet	7,089,000
Mississippi River Outlets, Venice	3,450,000
Ouachita and Black Rivers	3,690,000
Removal of Aquatic Growth	1,333,000

We wish to express our thanks to the Appropriations Sub-Committees on Energy and Water Development of the House and Senate for allowing us to present this Brief on the needs of the State. Without reservation, practically every single project in Louisiana, which has been made possible through actions of these Committees, has shown a return in benefits many times in excess of that contemplated by the authorizing investigation. The projects which you fund affect the economy of not only Louisiana, but the Nation as a whole. The Office of Public Works appreciates accomplishments of the past and solicits your consideration of the appropriations requested for Fiscal Year 1982.

Submitted by: STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS

I. F. "JIFF" HINGLE
ASSISTANT SECRETARY

ARTHUR R. THEIS
CHIEF ENGINEER

RICHARD L. BENNETT
CHIEF, FEDERAL PROJECTS

AL DANNY BROWN
STAFF ASSISTANT

STATEMENT BY:
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS
RECOMMENDING
FISCAL YEAR 1982 APPROPRIATIONS

MISSISSIPPI RIVER AND TRIBUTARIES PROJECT
FLOOD CONTROL

PRESENTED TO: APPROPRIATIONS SUB-COMMITTEES ON ENERGY AND WATER DEVELOPMENT

HOUSE OF REPRESENTATIVES - MARCH 24, 1981

SENATE - MARCH 25, 1981

The Louisiana Department of Transportation and Development, Office of Public Works, has been designated by Governor David C. Treen to represent the State in the planning and orderly development of our water resources. This statement is presented in behalf of the State of Louisiana and contains endorsements and recommendations for Fiscal Year 1982 appropriations for Louisiana items included in the Mississippi River and Tributaries Project.

In making the following recommendations, the State of Louisiana supports, in general, the budget recommendations of the President for Fiscal Year 1982. We agree that a balanced budget is a worthy objective, but at the same time point out that water resources projects are probably the most worthwhile projects receiving federal funding and have to stand cost justification studies other projects are not required to undergo. We ask that this fact be considered when the final funding decisions are made, and should additional funds above the budgeted amount become available, we request the following priority list be followed:

(1) Old River
(2) Mississippi River Levees
(3) Atchafalaya Basin
(4) Channel Improvements

MISSISSIPPI RIVER AND TRIBUTARIES
SUMMARY OF RECOMMENDED APPROPRIATIONS

ITEM	BUDGET ALLOWANCE AND LOUISIANA REQUEST
Atchafalaya Basin, LA	$ 24,200,000
Bayou Cocodrie & Tributaries, LA	400,000
Channel Improvement, AR, IL, KY, LA, MS, MO & TN	59,100,000
Eastern Rapides & South Central Avoyelles Parishes, LA	36,000
Mississippi River Levees, AR, IL, KY, LA, MS, MO & TN	25,550,000
Old River, LA	22,700,000
Teche-Vermilion, LA	10,400,000
Tensas Basin, AR & LA	25,500,000 *
STUDIES	2,115,000
OPERATION & MAINTENANCE	60,999,000

* Represents funding request in excess of budget recommendation.

NOTE: Listed above are only those items in Louisiana and directly affecting the State. We realize that there are others outside of Louisiana that are vitally important to the Project and we endorse the recommendations of the Lower Mississippi Valley Flood Control Association.

LOUISIANA PRIORITIES FOR FUNDS WHICH MAY BE APPROPRIATED ABOVE THOSE IN THE PRESIDENT'S BUDGET FOR FISCAL YEAR 1982

OLD RIVER, LOUISIANA
(Budget and Request: $22,700,000)

This project is recognized as the number one priority item in the entire civil works program. The Old River project prevents the Mississippi River from changing its course to the Atchafalaya. Should this occur, the cities of Baton Rouge and New Orleans and many lesser communities would suddenly be without sufficient quantities of fresh water for domestic and industrial needs. A large investment by the United States in flood control and navigation facilities would be lost. Since the project is one of the Main Stem components for flood control on the Mississippi River, it is inseparable from the other components when calculating a composite benefit-to-cost ratio for the Main Stem project. The benefit-to-cost ratio for the main stem computed for the base estimate was 7.85 to 1, but the remaining benefit-cost ratio is 16.5 to 1, or more than $3 Billion in benefits through flood control, navigation, area redevelopment and recreation. The requested amount of $22,700,000 will complete the initial excavation, mainline levees and lower guide levee for the auxillary structure as well as complete the radar towers and picket boat facilitiy at the low-sill structure. The funding will also continue the engineering and design for the auxillary structure and cover supervision and administration for the project. Since it is of the utmost importance to complete this project on schedule and the funding requested in FY 1982 is only the minimum necessary to meet the presently scheduled completion dates, we request that any additional funding above the President's budget that becomes available be applied first to this important project to insure timely completion.

MISSISSIPPI RIVER LEVEES
(Budget and Request: $25,550,000)

The Mississippi River Levees Project is also a Main Stem component in the plan for improvement of flood control on the Mississippi River. As stated before in reference to the Old River Project, the Main Stem components are inseparable when computing cost-to-benefit ratio, which in this case is 16.5 to 1 (remaining costs to remaining benefits) or approximately $3 Billion in total benefits. The levee system provides protection to 23,600 square miles and partial protection of an additional 3,780 square miles in the alluvial valley subject to flooding from a Project Flood. In addition to the highly developed and productive agricultural areas, the levees afford protection to many large and varied industries as well as important urban areas. The funds requested for FY 1982 will continue levee enlargement work and relocations underway for the project but are only the minimum funds necessary to meet the presently estimated completion date. The revisions in the flow line necessitated by flows and stages experienced in the 1973 Flood indicate how imperative it is that the levee enlargment and berm work be completed as early as possible. Therefore, we recommend should any funding above the President's recommendation become available, this project be given consideration second only to that of Old River in the appropriation of such funds.

ATCHAFALAYA BASIN
(Budget and Request: $24,200,000)

This project is also a Main Stem component of the flood control plan for the Mississippi River and Tributaries. The Mississippi River can safely carry only 1,500,000 cubic feet per second below Old River. The Project Flood is of such magnitude that 3,000,000 cubic feet per second will pass the latitude of Old River, therefore, one half of this projected flow must be discharged through the Atchafalaya Basin. The levees which must confine this flow to the basin are now deficient due to consolidation of the underlying soils. The lives and welfare of 650,000 people and their property and improvements in 13 parishes in the immediate vicinity of the Atchafalaya Floodway are placed in jeopardy each flood year. The tax assessment records indicate values of potential flood losses of approximately $8 Billion not including public improvements. Funding requested is the minimum needed in FY 1982 to meet the presently estimated completion dates. We, therefore, recommend that this project be given priority number three for the appropriation of any funds that become available over and above the amount the President has recommended.

CHANNEL IMPROVEMENTS
(Budget and Request: $59,100,000)

Channel improvements and stabilization provide protection of levees and the many improvements behind them, as well as preventing unsatisfactory alignment where the river's bank is unstable. This project is also a Main Stem component of the flood control improvement program for the Mississippi River and the benefits are the same as for the other main stem components. The Mississippi River and Tributaries Project above Old River is about 80 percent complete but only about 30 percent complete below Old River. Because of the improvements upstream, increased flows are a major problem in Louisiana where the project is lagging. Much of the appropriation for this item in FY 1982 will be spent in the lower end of the project, the area of the greatest need. We, therefore, concur with the President's budget recommendation and request that should additional funds above the President's request become available, this item should be considered priority four in the appropriation of these funds.

TENSAS BASIN
(Budget: $25,000,000 Request: $25,500,000)

The requested increase of $500,000 over the budgeted amount for this project is needed to commence construction of the Sicily Island Levee in the Red River Backwater area.

The construction of the Sicily Island Levee was approved by the Chief of Engineers under authority granted to him by the Flood Control Acts of May 15, 1928, and August 18, 1941, and the project was amended and confirmed by the Flood Control Act of October 27, 1965. Numerous public hearings have been conducted and the project features have been redesigned to eliminate objectionable features unearthed by the most intense and detailed scrutiny. The questions raised as to the authority for original approval have been resolved and the General Design Memorandum has been approved.

There is no reason to further delay the construction of this worthy project. We urge the addition of $500,000 to the amount budgeted for the Tensas Basin Project so that Item 1 of the Sicily Island Levee can be constructed.

LOCAL CONTRIBUTIONS FOR FLOOD CONTROL IMPROVEMENTS

Historically, Louisiana has always done its part in cooperation with the Federal agencies concerned with flood control. The Louisiana State Board of Engineers, the forerunner of the Office of Public Works, was created in 1879 the same year as the Mississippi River Commission to coordinate the planning and construction of the required flood control facilities to protect the State. Since that time, local expenditures for flood control have exceeded $729,000,000. This amount adjusted to 1979 dollars represents expenditures in excess of $5.3 Billion. Nearly one-half of the potential flooded area of the Lower Mississippi River Valley lies in Louisiana. Local expenditures for flood control have increased with the growth of the valley. This record not only meets, but exceeds any National Water Policy local participation requirements ever put into practice.

The State of Louisiana, its Office of Public Works, in particular, wishes to commend the Appropriations Sub-Committees on Energy and Water Development and express our appreciation for the foresight and understanding exhibited in the past of the need for authorizing adequate levels of appropriations for water resources projects which are vital to the national interest. We solicit your further consideration of the recommendations presented herein.

Submitted by: STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
OFFICE OF PUBLIC WORKS

I. F. "JIFF" HINGLE
ASSISTANT SECRETARY

ARTHUR R. THEIS
CHIEF ENGINEER

RICHARD L. BENNETT
CHIEF, FEDERAL PROJECTS

AL DANNY BROWN
STAFF ASSISTANT

TO: HOUSE PUBLIC WORKS SUBCOMMITTEE ON APPROPRIATIONS

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I am Gray Evans, an attorney from Greenwood, Mississippi and am Secretary-Treasurer of the Lower Yazoo River Basin District in Mississippi.

I am pleased to present this statement on behalf of the Lower Yazoo River Basin District in Mississippi.

The Yazoo River Navigation Project, authorized by Congress in the 1968 Rivers and Harbors and Flood Control Act, provides for improving the navigable waterways of the Yazoo River from its mouth on the Mississippi River to the river port of Greenwood, approximately 100 miles upstream. The recommended plan of improvement calls for a channel with a 9-foot depth and 150-foot minimum bottom width between the mouth of the river and Greenwood. The physical features include a lock and dam near the mouth, channel realignment and dredging, raising the control structure at the upper end, and modification of Sardis Reservoir to provide additional storage capacity of water supply for navigation, and bridge alterations.

This project is necessitated by the tremendous increase in river traffic on the Yazoo River in recent years serving the Mississippi Delta. While the demand for river transportation has increased, the water level in the river is sufficient less than

50 percent of the time to accommodate a modest amount of this traffic. The industry and agriculture that would otherwise utilize the river are forced to turn to more expensive surface transportation. The savings to agriculture and industry which will result from this project will be great. These benefits were foreseen by the Congress in approving this project in 1968.

The reasons for initiating the project now are even more compelling than they were in 1968. Delays in completion will no doubt increase the cost of the project and impede industrial and agricultural growth and development of the area which the project will serve.

The Lower Yazoo River Basin District has in excess of $1,000,000.00 available for acquisition of rights of way, etc., and we are anxious to get this project completed. In addition to the navigational benefits which will result from the project, tremendous recreational opportunities will be afforded to the people living in this area.

In FY 1981 we received for Engineering and Design the sum of $450,000.00 plus Advance Participation for the Belzoni bridge, which is a part of the project, in the sum of $660,000.00. The President's budget for FY 1982 contains a figure of $600,000.00 for Engineering and Design and a figure of $2,800,000.00 for the Belzoni bridge. The Corps of Engineers has the capability for these amounts. In fact, Lower Yazoo River Basin District has purchased the necessary rights of way for the construction of the new

Belzoni bridge and has made entry available for the letting of the contract for construction on April 28, 1981.

Respectfully submitted,

LOWER YAZOO RIVER BASIN DISTRICT

BY: Gray Evans

GRAY EVANS, SECRETARY-TREASURER

Mr. ALEXANDER. Mr. Chairman, I have apeared before this Committee many times and I come here today recognizing full well the budget constraints under which our Appropriations Committee must operate. For my purpose today, I am here to support the L'Anguille Project which affects 380,000 acres. They are requesting approval of $350,000 for Fiscal 1982 with which to continue the feasibility study. This project is unique in flood control projects only in that it floods both in the spring and in the fall inhibiting the farmers from gathering their crops after they put in their hard labor, and spent their hard-earned capital in so doing. We feel that if the questions are directed that we can justify the project in every respect, Mr. Chairman.

Mr. BEVILL. Very good. We are always delighted to hear from our Assistant Whip of the House and we appreciate your appearance.

Mr. ALEXANDER. I feel like I have been whipped today Mr. Chairman, four or five times. That is the first nice thing that happened to me all day.

Mr. BEVILL. You may proceed.

STATEMENT OF MR. JOSEPH MOONEY

Mr. MOONEY. Thank you, Mr. Chairman. My name is Joe Mooney. I would like to touch on highlights of our statement and one submitted by Newman Bolls. We each speak for the people of the Yazoo Basin, approximately 200 miles long and about 60 miles wide. We support the request for appropriations in the amount of $273,557,000, particularly the $25,700,000 that has been appropriated to the Yazoo Basin Project. We come in support of the President's Budget in full knowledge that this is not nearly the amount of the Corps of Engineers capacity, the amount of work that they could do if ample funds were available. We also come thanking you for your continued support over the years. I am not going to dwell on any of the technical aspects of that work because I feel the Committee has already demonstrated that you know as much about them as we do. We are confident that as financial conditions improve that you will once again begin to invest at a greater and more efficient rate in our part of the valley. We feel when it comes time to tighten the belt there are perhaps two or three things that should be kept in mind. One is the assignment of priorities. Congressman Montgomery has alluded to the upper Yazoo Project work which affects the City of Belzoni. We feel this particular part of the Yazoo Basin project is essential to many other elements of work in the area and so if you happen to turn up any extra dollars we would like to see you put it there.

Equally important we feel, it is extremely necessary to spend these monies in such a way as to buy as much work as possible and we feel that we should speak to two things. One is the present application of Section 404 as regards these public works construction matters. We find that many of the in-field applications of these rules and regulations that have been handed down act artificially to increase costs of many aspects of the work. The second thing is the items of the Section 8A setaside for minority and disadvantaged business. It happens this year all of the items in the Yazoo Basin budget are setaside for that work. And we understand that the way that will be carried on is that the work will be negotiated for rather

than by advertisement. And there are several other aspects of the application of that type of ruling to these projects that are going to run the cost of those projects up considerably in our estimation. We know the Corps of Engineers is going to require the delivery of the good job and so the only other alternative is to artificially increase the cost of that work. So we respectfully request that you do approve the appropriation of the requested amounts, but we also ask that you examine and direct that those funds be spent in the wisest possible manner and buy as much work on the ground as we can get.

[The statement of Joseph Mooney follows:]

STATEMENT OF JOSEPH F. MOONEY, JR.

Mr. Chairman and members of the Subcommittee, I am Joseph F. Mooney, Jr. of Clarksdale, Mississippi, Chief Engineer for the Board of Levee Commissioners for the Yazoo-Mississippi Delta. I have the privilege of presenting highlights from this statement and from one submitted by Newman Bolls, Chief Engineer for the Mississippi Levee Board at Greenville, Mississippi. Both statements support the request of the Lower Mississippi Valley Flood Control Association for fiscal year 1982 Appropriations to the Mississippi River and Tributaries Project in the amount of $273,557,000 and address in particular, the appropriation of $25,700,000 for the Yazoo Basin portion of the project.

The gentlemen of this subcommittee who have heard us so graciously over the years can well understand our mixed feelings as we appear before you today. We come in support of the President's Budget for Fiscal Year 1982 knowing full well that the need for progress in flood control is greater than it ever was and that the Corps of Engineers has the capability of achieving a much greater rate of progress than the budget will permit. We also know full well that the leadership of our country must unite in the effort to control inflation and work toward a balanced budget. We conclude that every area and interest of our society must participate in this effort as though it were a war (it is a war of a special sort) and if for no better reason than to serve as a good example.

We are reassured that the Subcommittee is highly aware that our basin is a fertile food basket producing abundant crops that feed and clothe our countrymen, as well as, contribute to our favorable balance of trade. You know also that the many small communities and light industries affected help to contribute to a very favorable benefit to cost ratio on the project. We are confident, therefore, that as financial conditions improve in the future, the Congress will once again invest at a more efficient rate in the protection of our valley.

Meanwhile, belt-tightening anywhere requires that a careful look be taken to see that available funds are spent in the wisest and most productive ways and in accordance with the greatest priority. We respectfully offer information in this regard for your consideration.

We assign a very high priority to the Upper Yazoo Projects portion of the work in the basin and request that it be one of the first places that additional funds be allocated should any become available. The Upper Yazoo Project involves the enlargement of the Yazoo and Tallahatchie rivers and construction of levees along the banks of the rivers. On a map, the Upper Yazoo Project appears as the spine that supports the entire Yazoo-Flood Control System and is the primary outlet for the four hillside reservoirs and the eastern two-thirds of the Delta. Many very necessary and worthwhile items of work must wait in abeyance until the Upper Yazoo Project work progresses sufficiently upstream, and therefore, justifies assigning it priority status.

It has come to our attention that most of the items of work being funded this year in the Yazoo Basin have been designated for disadvantaged and minority business set aside. We understand that these items will be let without competitive bidding and to firms without demonstrated ability or techniques in flood control construction. Such conditions can only result in higher direct costs for each item of work some of which are relatively sophisticated and complicated. The Corps of Engineers will have to provide management and supervision to assure acceptable quality in the final product, thereby driving up the indirect costs of the work. Strict adherance to mandatory minority business set aside with the built in high costs, low production, and inefficient consumption of funds and manpower seems contrary to our present national goals.

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We respectfully request that the Congress approve the Fiscal Year 1982 Appropriation of $273,557,000 for Flood Control, Mississippi River and Tributaries, as recommended in the President's Budget with $25,700,000 allocated to the Yazoo Basin. Further, we respectfully request that the Congress direct that the funds be spent in the wisest and most productive manner consistent with our current national fiscal goals.

Mr. BOUGHTON. Mr. Chairman, our final speaker today is Mr. Arthur Theis from the State of Louisiana.

STATEMENT OF MR. ARTHUR THEIS

Mr. THEIS. Thank you. In Louisiana we send you our regards and we appreciate this opportunity to express our needs to you today. I am Art Theis, Chief Engineer, Office of Pubic Works, Department of Transportation and Development, State of Louisiana. And an officer in the Association of Levee Boards of Louisiana.

The Association is made up of a group of 23 levee boards having responsibilities in flood control in the State of Louisiana. This comment or these comments today are made on behalf of the state and our association. In discussing the proposed budget for the MR&T Program in Louisiana we are cognizant of the fact that the Federal Government recognizes the need to maintain the integrity of the Old River Complex separating the Mississippi River from the Atchafalaya River and places this project as the highest priority item in the entire Civil Works Program. We appreciate their understanding of our needs. However, we would like to also express we have additional needs in other areas that we think have additional or equally high priority. Louisiana, as you know is at the bottom of a funnel, draining some 41 percent of the continental United States and part of Canada. In addition, almost two-thirds of our state is made up of alluvial lands on which about 3.2 million of our 4.8 million population resides. Over the last 53 years we have supported the Mississippi River and Tributaries Project and the concept that flood protection must start upstream and progress downstream. However, as a result, the upstream states enjoy a considerably higher degree of protection than does the State of Louisiana with the resultant that the MR&T Project completion is about 90 percent plus in these upstream states. Louisiana, at the bottom, is highly susceptable to flooding since only about 80 percent or less of our MR&T levees are up to project grade and in the Atchafalaya Basin only about 65 percent of the levees can contain a project flood. This risk was highlighted by the 1973 flood, which resulted in raising the design flowline when we found out our mainstream Mississippi was not as efficient as we would like to it to be. The result revealed that we had hundreds of miles of levee we thought adequate, found to be inadequate and below grade. As a result we have to raise levees as much as six feet in some areas in order to maintain the same degree of integrity and the same degree of flood control we desire of course for the whole area.

Enlargements are necessary on a vast part of the raising process and this is by far the majority of the projects. In Louisiana we do pay a part of these costs in having to acquire the land for these enlargements. They are not reimbursed by the Federal Government. With some of the actions taken lately by the state in paying fair market value for these lands, it has increased our exposure and our obligations to the people in buying up those lands in order to

make the project safe and to enlarge it. This cost is not reimbursed by the Federal Government except in Atchafalaya Basin where they have the responsibility for the entire program. So you can see to some degree we are participating in this program as the local interest through the years. If you portrayed it in terms of today's dollars we have something like a $6 million investment in the flood control program in Louisiana.

Floods suffered in many parts of the nation and drought in other parts these past several years have emphasized the need for re-evaluation of the priority we give to our water resources development. We have thus a particular support of the concept of balanced budget and of course, increased responsibility for defense. We most assuredly support the need to place a high priority on water resources development just as we do on energy development programs.

While we support the President's proposed budget for the MR&T Project we do sincerely request your attention to the need for additional funding in critical areas such as levees and bank stabilization which in the lower part is probably only about 30 percent complete. We lag far behind the other areas in the upstream states.

In making the recommendations that we have Mr. Chairman, we in Louisiana followed the recommendations of the Valley Association as a whole in that we support the President's Revised Budget. But, we do ask that, while this is a worthy objective of course in having a balanced budget, we give full support to water resources projects, since we think they are some of the most worthwhile projects receiving Federal funding, and which have to stand cost justification studies, other projects are not always required to undergo. So we think this should be a factor in the Federal Government considering where they will extend their funds. Even with the balanced budget concept there are priorities that we should direct those for. In Louisiana, we have applied those priorities to the Old River as the Federal Government has recognized a number one priority in order to maintain the separation of those two great basins. Second, would be the Mississippi River Levees and Atchafalaya Basin since it is so far behind and our channel improvements project of course including the backwater area is similar to what Mr. Montgomery mentioned in the Yazoo area. We are required to store certain quantities of the water in the Red River Backwater Area. These areas have lagged far behind in their protection and we have such projects such as Sicily Island Project which is a flood protection and levee system that would help us protect that backwater area from flooding except during design flood when it would be available for storing the project flood information and flood waters.

In addition, in Louisiana we have a number of other projects related to general construction in the Civil Works Budget, relating to navigation, hurricane protection and water resources projects in general. Some of the most important to us that protect a large part of our population are the hurricane protection projects. such as the Grand Isle Vicinity, Lake Pontchartrain Vicinity, Larose to Golden Meadow, and an area below New Orleans we call New Orleans to Venice. These are important hurricane protection projects that require considerable outlay by the Local people in that the insur-

ance calls for at least 30 percent. This 30 percent I measure you can recognize is escalated to the point where it is no longer a nominal fee. It is a very large undertaking, to the extent that we are not sure in some cases how we are going to afford this. But, we are working closely with your Committee, and the office, and with the Federal Government in developing this program. We appreciate the opportunity to appear today, Mr. Chairman, and we would be glad to answer any questions you might have concerning our request.

[The statement of Arthur Theis follows:]

STATEMENT OF ARTHUR R. THEIS

Mr. Chairman, I am Art Theis, Chief Engineer, Office of Public Works, Department of Transportation and Development, State of Louisiana. I would like to present a few verbal comments in support of the budget allowance and our request in behalf of the State of Louisiana and the Association of Levee Boards of Louisiana. A written brief has been filed today with your staff.

In discussing the proposed budget for the MR&T Program in Louisiana we are cognizant of the fact that the Federal Government recognizes the need to maintain the integrity of the Old River Complex separating the Mississippi River from the Atchafalaya River and places this project as the highest priority item in the entire Civil Works Program. In addition to this urgent need, we must also point out other deficiencies.

Louisiana, as you know, lies at the bottom of a funnel draining some 41 percent of the continental United States and part of Canada. In addition, almost two-thirds of our State is made up of alluvial lands on which about 3.2 million of our 4.8 million population resides. Over the last 53 years we have supported the Mississippi River and Tributaries Project and the concept that flood protection must start upstream and progress downstream. However, as a result, the upstream states enjoy a considerably higher degree of protection than does the State of Louisiana with the result that the MR&T Project completion is about 90 percent plus in these upstream states. Louisiana, at the bottom, is highly susceptable to flooding since only about 80 percent or less of our MR&T levees are up to project grade and in the Atchafalaya Basin only about 65 percent of the levees can contain a project flood. This risk was highlighted by the 1973 flood, which resulted in raising the design flowline and revealing that hundreds of miles of levees in Louisiana are inadequate and require raising and enlarging. Where enlargements are necessary as part of the raising process, and this is by far the majority of the projects, we must pay fair-market value for lands taken for construction of these enlargements. This cost is not reimbursed by the Federal Government except in the Atchafalaya Basin. So you can see we are participating in the program to a substantial degree, in fact, in terms of today's dollars, the cost to local interests for this program amounts to almost 6 billion dollars.

Floods suffered in many parts of the nation and drought in other parts these past several years have emphasized the need for a reevaluation of the priority we give to our water resources development. While Louisiana does enthusiastically support the concept of a balanced budget and increased spending for defense, we most assuredly support the need to place a high priority on water resources development just as we do on energy development programs.

While we support the President's proposed budget for the MR&T Project we do sincerely request your attention to the need for additional funding in critical areas such as levees and bank stabilization on which we lag so far behind. This viewpoint is further discussed in our submitted brief.

We have also submitted a brief in support of the budget request for general appropriation for hurricane protection, navigation and other water resources projects in Louisiana and I will not go into a discussion of these items at this time.

Thank you Mr. Chairman for allowing me this opportunity to express our needs to you and your Committee.

Mr. BEVILL. Does anyone have any questions?

Mrs. BOGGS. I would like to thank Mr. Theis for his excellent testimony, and tell you Mr. Chairman and Members of the Committee we receive very splendid cooperation from the state, and we are very proud of what the state is doing as well.

Mr. BOUGHTON. We thank you, Mr. Chairman.

Mr. BEVILL. We have been holding hearings for the 1982 Appropriations for many weeks and this is the first group we have had who accept the budget. So this makes you rather unique. I think that is a very sensible approach and we all know we have to balance our budget, and this group is willing to take its share and I think that is commendable. I think you made a very effective and good approach and of course having General Montgomery there with you did not hurt a thing.

Next, Mr. Platt. Mr. Platt, we are pleased to have you with us today and you may submit your statement and proceed as you wish.

OUACHITA RIVER VALLEY PROJECTS

WITNESS

LLOYD PLATT, EXECUTIVE OFFICER, OUACHITA RIVER VALLEY ASSOCIATION

STATEMENT OF LLOYD PLATT

Mr. PLATT. Mr. Chairman, my name is Lloyd Platt. I am Executive Officer of the Ouachita River Valley Association in Arkansas and Louisiana with headquarters in Camden, Arkansas.

The Ouachita River Valley Association is an organization that has been the public spokesman for the Ouachita River Basin on water development since the turn of the century.

This year we are following the suggestion of this Committee in conserving energy and excessive travel expenses, and did not encourage a large number of Ouachita River Valley Association members to make the trip to Washington. But, we have a number of testimonial letters which I ask permission to file for the record. I have already given these to somebody.

Mr. BEVILL. This will be made a part of the record.

Mr. PLATT. The statement before you of the President's Budget and the difference of the Corps of Engineer's capabilities marked in green are the projects we would like to emphasize. The other items are important but we feel those marked will help the most to complete the Nine-Foot Navigation Project, by Fiscal Year 1983 in order for the Ouachita Basin to make a contribution to the defense of the nation and the economic well-being of the Basin.

All of our major projects are of long standing and have been studied, restudied and surveyed and have been found to be economically justified. In construction this applies especially to our locks and dams in Arkansas with Lock Number 6 at Felenstahal, Arkansas at 95 percent completion and Calion Lock Number 8 at 25 percent to be completed by 1983. Both locks and dams in Louisiana are completed. We have the nine foot navigation project up to Sterlington, Louisiana; with the completion of the locks and dams in Arkansas, the bend widenings and cutoffs, the dredging can bring the desired channel up to Camden, Arkansas and beyond to Arkadelphia, Arkansas.

Vought Corporation is conducting a transportation study for a recommendation to the Army on the best mode of transportation for the defense item to be manufactured in Camden, Arkansas.

The Ouachita River Valley Association has recommended that it be shipped by water. We believe it to be the cheapest and safest way for this production to reach a port for shipment overseas.

The nine foot channel with three barge tows was the authorized project with two locks and dams in Louisiana and two in Arkansas. We of the Ouachita River Valley Association feel this project has lagged long enough. It is time to finish it up without further delay. This is the first time, Mr. Thatcher has not been here in 40 years and he almost cried when I left him. So, I feel like I am taking on some good shoes that he has on back there.

Mr. BEVILL. How is he?

Mr. PLATT. He is 90 years old. His body is beginning to fail but his mind is sharper than mine.

Mr. MYERS. Tell him we missed him and wish him well.

Mr. BEVILL. That is quite a record he set. I do not believe I have heard of anyone—we had someone yesterday that was there 25 years, but I do not think we have had one for 40 years.

Mr. PLATT. Last year in the Senate hearings they gave him a standing ovation. Forty years of patience I guess.

Mr. MYERS. Perseverence.

Mr. PLATT. Mr. Chairman, I thank you along with the Committee for the privilege of appearing before you and for your kind attention. I am supposed to have a couple of Congressmen here.

[The statement of Lloyd Platt follows:]

STATEMENT OF LLOYD M. PLATT

Mr. Chairman and Gentlemen of the Committee, my name is Lloyd Platt, Executive Officer of the Ouachita River Valley Association in Arkansas and Louisiana with headquarters in Camden, Arkansas.

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Mr. Chairman I thank you along with the Committee for the privilege of appearing before you and for your kind attention.

OUACHITA RIVER BASIN IN ARKANSAS AND LOUISIANA, FISCAL YEAR 1982 APPROPRIATIONS, ENERGY AND WATER DEVELOPMENT

[In thousands of dollars]

Projects	President's budget, fiscal year 1982	Corps of Engineers capabilities, O.R.V.A. request	Amount needed above President's request
General Investigations:			
Boeuf-Tensas Basin	785	785	0
Larto Lake-Saline Lake Area	340	500	160D
Collection and study of Basic Data	165	165	0
Construction:			
Channel Improvement (Vicksburg District Portion)	14,000	46,600	32,600
Mississippi River Levees (Vicksburg District Portion)	10,700	20,700	10,000
Boeuf-Tensas Rivers including Lake Chicot Pumping Plant	18,000	18,200	200
Red River Backwater Area including Tensas-Cocodrie Pumping Plant	7,000	13,500	6,500
Tensas River National Wildlife Refuge	0	39,800	39,800
Blakely Mountain Dam-Lake Ouachita	790	790	0
Narrow Dam-Lake Greeson	130	530	400
Operation and Maintenance:			
Channel Improvement (Vicksburg District Portion)	9,356	12,215	2,859
Lower Arkansas River	153	153	0
Mississippi River Levees (Vicksburg District Portion)	467	747	280
Boeuf-Tensas Rivers	94	94	0
Red River Backwater	105	105	0
Blakely Mountain Dam-Lake Ouachita	2,465	6,010	3,545
DeGray Lake	2,523	3,288	765
Lake Providence Harbor	160	160	0
Madison Parish Port	171	171	0
Narrows Dam-Lake Greeson	2,125	4,570	2,445
General Regulatory Functions	584	695	111

Statement of H. W. McMillan, Attorney, Arkadelphia, Ark.

I am H. W. McMillan, an attorney living in Arkadelphia, Arkansas. For more than thirty years (1940–1970) I was associated with Ouachita River Valley Association, first as President, then Chairman of the Board. For many years I appeared before House and Senate Committees along with H. K. Thatcher, Executive Vice President of the Association, in behalf of the Ouachita River Program.

The Ouachita River Basin Program was approved in 1950 for a nine foot three barge tow which is yet to be completed. The people of the Basin want this project completed as soon as possible and urge this Committee to appropriate the necessary funds to keep the Army Corps of Engineers working at their capability to finish this project, so it can be extended on up to Arkadelphia, the head of navigation, as soon as possible.

Statement of Edwin M. Horton, Treasurer, Ouachita River Valley Association

Mr. Chairman and gentlemen of the Committee, my name is Edwin M. Horton, Treasurer of the Ouachita River Valley Association in Arkansas and Louisiana, with headquarters in Camden, Arkansas.

The Ouachita River is the source of all drinking water for numerous towns in Arkansas and Louisiana.

The Ouachita River is the source of water for the growing number of rural water districts emerging throughout the basin with the assistance of the U.S. Department of Agriculture.

The Ouachita River is the source for transportation of hundreds of tons of gravel for highways, of soybeans for food, and of oil for manufacturing.

The Ouachita River project was authorized several scores of years ago by the Congress and is within just five years of completion if the U.S. Army Corps of Engineers is allowed to perform at the capability figure presented by the Corps to you.

With this completion comes flood control long needed, recreation long sought, the embryo of hydro electric power potential long wasted and alternative transportation opportunities competitive with those on the Nation's other inland waterways.

I respectfully urge the Committee to consider and accept the capability of the Corps in its deliberations on the Ouachita/Black Rivers project.

STATEMENT OF H. K. THATCHER

Mr. Chairman and Members of the Committee, my name is H. K. Thatcher (ORVA, retired), 1601 N. Mississippi Ave. Little Rock, Arkansas, 72207.

The Ouachita River Valley was organized by the citizens of the Valley in 1893 to be its spokesman for the "local interests." I was the Executive Vice President of the Association for 30 years. Our group is well organized and has become well known to many members of the Congress and several National Administrations. The ORVA is presently in capable hands under Lloyd Platt.

The new National Administration is under a mandate to do something that will end the rampant expansion of several government agencies and the run-a-way inflation. I believe most of our people are in agreement with the new Administration but there are some basic projects that cannot be curtailed, and one of these is the 9 Foot Navigation Project of the Ouachita River. The help of this Committee is desperately needed in this respect.

It is of great concern that this 9-foot channel, which is nearing completion, be completed in the calendar year of 1983. The time coordination is extremely important to our National Security. The Vought Corporation operates a war-plant near Camden, Arkansas, which has a sizable contract to produce and ship to tidewater ports, multiple launching rocket systems for the Army and N.A.T.O. The 9 Foot Navigation Project and the Vought manufacturing contracts will size out in 1983. There must be no delay in either principle. Certainly, the river project which is ours, must not be delayed from lack of appropriated funds.

It could be vital to the National Security and this is why our urge is vital.

STATEMENT OF LAWRENCE H. DERBY

Mr. Chairman and Gentlemen of the Commitee, my name is Lawrence H. Derby, President of the Ouachita River Valley Association.

Our organization has been working for the development of the Ouachita River for over 50 years. Our projects are well underway and progressing satisfactorily.

It is our desire to request funding at the level requested by the Corps. Any delay in funding this project will increase the costs tremendously due to inflationary trends.

The Vought Corporation's location at Camden makes this project even more important. They feel very strongly that water transportation will be the most economical for the Army and other buyers to move their production.

Mr. Chairman, I thank you and the Committee for your time and your consideration of our requests.

STATEMENT OF JAMES H. PHILLIPS, EXECUTIVE DIRECTOR, ARKANSAS WATERWAYS COMMISSION

The Arkansas Waterways Commission continues to endorse and support the water development goals identified by the Ouachita River Valley Association.

All modes of transportation are needed in the State. The continued development of the Ouachita Basin will help the State and National Governments to move toward the long range goals of energy independence and competitive prices for all our goods in the market places of the world.

The Commission is aware of the need for a balanced budget and that priorities must be set for federal investments. We know there are limitations on investment capital. The State, like the Nation, however also knows that people need jobs and

that their environment must be protected. It is the Commission's belief that the investment in the Basin is compatible with the needs of the Nation and the State and the Ouachita Project should be done.

The benefits that will be accrued by the Ouachita Basin can be realized sooner if the capital investment is made at the earliest date. Further, it is believed that the early deployment of the multiple launch rocket system from Camden to Europe could be expedited with the completion of the project. For these reasons it is recommended that the Corps of Engineers work at the maximum construction capability on the project and this suggests the funding level in Arkansas be at $26.9 million and $5.8 million for operation and maintenance.

The Arkansas Waterways Commission thanks the Committee for the opportunity to make this written statement.

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Crescent River Port Pilots Association
RIVER PORT PILOTS FOR THE PORT OF NEW ORLEANS
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CABLE ADDRESS
CRESPILOTS

March 23, 1981

Hon. Russell B. Long
United States Senator
217 Russell Senate Office Bldg.
Washington, D.C. 20510

Hon. J. Bennett Johnston
United States Senator
421 Russell Senate Office Bldg.
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Hon. John Breaux
United States Representative
2443 Rayburn House Office Bldg.
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Hon. Gillis Long
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Hon. Lindy (Mrs. Hale) Boggs
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Hon. Billy Tauzin
United States Representative
1609 Longworth House Office Bldg.
Washington, D.C. 20515

Hon. Buddy Roemer
United States Representative
1725 Longworth House Office Bldg.
Washington, D.C. 20515

Dear Mrs. Boggs and Gentlemen:

As president of the Crescent River Port Pilot's Association, I am pleased to avail myself of this opportunity to express to each of you the concern of this Association and all the individual River Pilots for the expeditious implementation of the proposed fifty-five foot Mississippi River channel.

The River Pilots are aware that various interests are urging your attention to their perceptions of the need for and potential economic and other impact of such proposed deepened channel. In point of

fact, we have been solicited and urged to endorse or subscribe to varying points of view on the matter.

Certainly, the River Pilots are aware that the economic impact of the development on the entire Mississippi River valley of the Mississippi River system as a coal transportation medium must be considerable not only to Middle America, but to the entire nation. That some of that economic benefit may inure to the State of Louisiana and its ports along the Mississippi River cannot be gainsaid. That those benefits are nationwide and perhaps not subject of reasonable regional or local apportionment appear obvious beyond argument.

Further, the River Pilots are aware that the implementation and continued upkeep of such a channel will require funds far beyond the capabilities of other than the national government. Pretermitting the enormous initial outlay, the cost of maintaining the channel in the future against the silting propensity of the Mississippi River must require outlays for equipment and manpower, thus far unavailable. Even the maintenance of the current woefully inadequate channel is neglected and shunted aside with equipment and manpower diverted, to other projects which, though appealing, cannot be so impressed with the national interest as is the navigability of the Mississippi River system.

Undoubtedly, arguments can be made for the retention of the scenic beauty of the Mississippi River unspoiled by commerce and river traffic. No river pilot would question the River's poetic beauty and its delightful vistas. The pilots, however, do recognize that their River is, and has been during the entire life of the Republic, the commercial highway of all Middle America. As such, there is no going back to sleepier times. The River is a highway and not a sleepy lagoon. It must have the development of infrastructure of the busiest most important water highway in all America, if not in all the world.

We, as Crescent River Port Pilots, are charged by the State of Louisiana with the responsibility of safely navigating the River's traffic in its most congested and dangerous reach -- from New Orleans to the River's mouth. We must take all vessels, no matter their number, under all conditions of weather and circumstance. The limitations of the present channel are aggravated by silting and shoaling resulting in strandings at numerous points along the route. Such strandings compound already difficult and dangerous traffic problems brought on, in part, by the inadequate channel.

Unreasonable and unrealistic limitations on the traffic to and from the Port of New Orleans are imposed today due to the River's navigational depth. Those limitations deny access to this port to a great

amount of world ship commerce serving as an effective barrier to all the Mississippi valley. The pilots have repeatedly pleaded and petitioned for the services of dredges at least to maintain the present insufficient depth. The response has been truly unfortunate thus far.

It seems inevitable that the demand for coal as an energy source will result in an influx of coal related water commerce on the lower Mississippi which will strike this inadequate, dangerous channel like a flood. That traffic to meet the demand will be geometrically more than the River can possibly cope with. From that inadequacy will come danger of collisions with loss of life and cargo, delays while the entire River is shut down due to strandings in the shallow channel and the need to seek emergency half measure palliatives which could be relieved or removed by providing now for a realistic fifty-five foot River channel.

The primary concern of the Crescent River Port Pilots is the affording of safe efficient navigation on the reach of River entrusted to our responsibility. That responsibility and its discharge can be facilitated by action of the appropriate authorities in making a deepened channel available.

The River Pilots will, as they have since 1908, spare no effort in their work to meet their responsibilities to the people of the State of Louisiana and to the maritime industry they serve. The facility to perform that task will be made much safer and more efficient by the provision of a reasonably adequate channel.

Your kind assistance in bringing your influence to bear in obtaining this urgently needed facility is respectfully requested.

Yours very truly,

Richard E. Ducros

Captain Richard E. Ducros
President

RED:bcr

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Further, the River Pilots are aware that the implementation and continued upkeep of such a channel will require funds far beyond the capabilities of other than the national government. Pretermitting the enormous initial outlay, the cost of maintaining the channel in the future against the silting propensity of the Mississippi River must require outlays for equipment and manpower, thus far unavailable. Even the maintenance of the current woefully inadequate channel is neglected and shunted aside with equipment and manpower diverted, to other projects which, though appealing, cannot be so impressed with the national interest as is the navigability of the Mississippi River system.

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Unreasonable and unrealistic limitations on the traffic to and from the Port of New Orleans are imposed today due to the River's navigational depth. Those limitations deny access to this port to a great

amount of world ship commerce serving as an effective barrier to all the Mississippi valley. The pilots have repeatedly pleaded and petitioned for the services of dredges at least to maintain the present insufficient depth. The response has been truly unfortunate thus far.

It seems inevitable that the demand for coal as an energy source will result in an influx of coal related water commerce on the lower Mississippi which will strike this inadequate, dangerous channel like a flood. That traffic to meet the demand will be geometrically more than the River can possibly cope with. From that inadequacy will come danger of collisions with loss of life and cargo, delays while the entire River is shut down due to strandings in the shallow channel and the need to seek emergency half measure palliatives which could be relieved or removed by providing now for a realistic fifty-five foot River channel.

The primary concern of the Crescent River Port Pilots is the affording of safe efficient navigation on the reach of River entrusted to our responsibility. That responsibility and its discharge can be facilitated by action of the appropriate authorities in making a deepened channel available.

The River Pilots will, as they have since 1908, spare no effort in their work to meet their responsibilities to the people of the State of Louisiana and to the maritime industry they serve. The facility to perform that task will be made much safer and more efficient by the provision of a reasonably adequate channel.

Your kind assistance in bringing your influence to bear in obtaining this urgently needed facility is respectfully requested.

Yours very truly,

Richard E. Ducros

Captain Richard E. Ducros
President

RED:bcr

Mr. BEVILL. As members come in we will recognize them.

Mr. PLATT. Congressman Anthony and Congressman Hammerschmidt.

The emphasis I placed on the three items I have marked. I did not intend to deemphasize any of the rest of it but those will get the nine foot channel completed in or about the same time that Vought meets their production.

Mr. BEVILL. Most of this is in the budget?

Mr. PLATT. The emphasis is, if the budget was to be varied in any way, I believe the three we have marked because that would complete our project early.

Mr. BEVILL. Thank you, Mr. Platt.

Mr. MYERS. These funds would complete them?

Mr. PLATT. No, sir, but it would complete it earlier than some of the others. We are interested in the others.

Mr. BEVILL. Do you have anybody else with you that you want to make any statement?

Mr. PLATT. No, sir.

Mr. BEVILL. Thank you very much.

Mrs. BOGGS. I thank you for representing the Louisiana segment of the Ouachita Basin.

Mr. BEVILL. We recognize our colleague Mr. Hammerschmidt.

STATEMENT OF CONGRESSMAN JOHN PAUL HAMMERSCHMIDT

Mr. HAMMERSCHMIDT. It is indeed a pleasure to once again appear before this panel to express my strong support for the statement about to be delivered by the Red River Commission of Arkansas.

For fourteen consecutive years, this Commission has strived to meet the water related needs of Southwest Arkansas through preservation of our natural resources and the continued development of the water resources of this fertile valley. Their specific accomplishments are numerous and include the completion of Millwood, Dierks, and DeQueen Dams on the tributaries of the river in Arkansas. These dams have sharply reduced the threat of floods which had caused substantial damage in the past.

However, as a direct result of these same flood control accomplishments the Commission is now severely concerned about the accelerated bank caving which continue despite earlier stabilization efforts. In fact, the Corps of Engineers estimates that over 1,000 acres of the most fertile farm land in the South are lost forever annually between Shreveport, Louisiana and Index, Arkansas, to the Red River to wash ashore as sand bars downstream. To combat this loss, I strongly support the Emergency Bank Protection and Red River below Denison Dam Projects.

In addition, the severe drought which have ravaged much of the South reveals the importance of the Arkansas-Red River Basin Chloride Control Project. The Corps has stated that 7,000 tons of salt passes Index, Arkansas each day, suspended in the waters of the Red River making its waters too salty to use for irrigation purposes.

Although I certainly realize that this is a time for austerity in the Federal Budget, those programs which have proven cost effective must be continued. As Ranking Member of the House Water

Resources Subcommittee, I remain deeply committed over the lack of Federal commitment to investments for capital improvements which will continue to yield benefits to our citizens while enhancing our economy for the future. Also, considering our Nation's energy crisis, I am very much aware of the vital role water transportation must play as an essential tool in the conservation of energy to transport goods. It is with these factors uppermost in mind that I urge this Subcommittee to accept the funding request of the Commission regarding the orderly and economical progression of pre-construction planning and design for the Red River Waterway. The proposed $270,000 reduction for this project would certainly just increase overall construction costs of the project in the long run.

Substantial progress has already been made throughout the Red River area in the development of navigation, job promotion, bank stabilization, erosion control, and water resource preservation. However, there is much work to be done, and we should move ahead wisely to complete the tasks already begun.

Lastly, I would once again like to commend this Subcommittee, which in the past has revealed a strong willingness to make the proper investments in water resource developments, and strongly urge you to show the same farsightedness to make certain that we invest adequately today in the Red River Valley, for our water transport needs of tomorrow.

Thank you for your time and courteous attention.

Mr. BEVILL. Mr. Wells, the Chair recognizes you on behalf of the Red River Valley Association and do you have all your people here?

STATEMENT OF CONGRESSMAN LONG OF LOUISIANA

Mr. LONG. I am grateful for this opportunity to express my support of the important public works projects in the State of Louisiana. I wish to fully, and strongly, support the requests of the representatives from the associations that are here today.

The 97th Congress faces the 1982 budget with a mood of austerity. We in Louisiana are willing to make the sacrifices that will be shared nationwide in the patriotic interest of achieving a balanced budget.

The rest of the country, however, does not face the problems which result from 41 percent of the nation's water draining through the state with the subsequent loss of life and property. The projects we discuss today are vital to the protection of our people, and they are an investment in our future.

Water is a productive resource if managed and developed. It is destructive if left uncontrolled. We in Louisiana appreciate the Committee's recognition of the importance of water projects.

The Red River Waterway Navigation Project is critical to my state. Not only will this project provide the people with flood protection, it will make the water work for us. We will control the river to provide commerce, to provide hydroelectric power, to provide recreational resources and to provide drinking water to our expanding cities.

We will manage this renewable resource, directing the river to meet our needs and the needs for future generations.

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The Red River will make a substantial contribution to the development of a rural part of America. Jobs will be created to ease the critical unemployment in central, rural Louisiana, and industrial development will accompany the project to provide future jobs in the private sector.

Local support for this project is solid. Since 1966, localities in the seven parishes along the water have assessed their citizens for the contruction and maintenance of this waterway. The State of Louisiana is purchasing the rights of way. This local and state financial participation is extraordinary with Federal water projects, and demonstates the people's recognition of the importance of this system to the economic development of the state.

The Red River Waterway is a good project. It has undergone the close scrutiny of the Congress, the Corps of Engineers, past Administrations, and environmental experts. It has been endorsed as a worthwhile project every time.

We need adequate funding to assure continuation of this project. I urge the committee to include in the report appropriate language that will assure the continuation of the Red River Project in years to come. I urge the Committee to include in the report accompanying this Appropriations Bill, language to reflect the Committee's support of the construction of Lock and Dam Number 2.

Finally, I urge the Committee to take a close look at the need for funding the Aloha-Rigolette Area Study. Due to an inadequate floodgate structure, the area is flooded after even a modest rainfall, and the study to alleviate this hazard should be continued.

Louisiana's strategic role in solving the nation's energy problems makes these projects critical to the well-being of the entire United States. I thank you for the opportunity to support these important projects.

TESTIMONY OF CONGRESSMAN GILLIS W. LONG OF LOUISIANA

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Mr. BEVILL. Mr. Wells, you may proceed.

RED RIVER VALLEY PROJECTS

WITNESSES

CHESTER D. WELLS, PRESIDENT
HOMER TANNER
JOHN STROUD
WALTER HELM
CARROL LANIER

INTRODUCTORY STATEMENT OF CHESTER WELLS

Mr. WELLS. Mr. Chairman and Members of the Committee, Mrs. Boggs, we thank you for the opportunity of appearing here today. It is always a pleasure to be before your Committee. I cannot say it is always a pleasure to be here under the certain trials and tribulations we have going on now, but nevertheless we are back here, a 56-year old organization with 500 members promoting the Red River Valley in those areas of economics and what-have-you. We are going to try to keep our statement short today. By the way, I heard a comment when Mr. Platt was leaving, there was a question there, would these monies be adequate to finalize the project and how sweet it would be to come up here and say Mr. Chairman, the monies we are asking for would finalize this project. I question whether some of us will live that long, but we will get on with our program.

Mr. BEVILL. Before you start if I may interrupt, I see my friend and colleague Congressman Anthony walked in. Are you on behalf of this project?

STATEMENT OF HON. BERYL ANTHONY, A REPRESENTATIVE IN CONGRESS FROM ARKANSAS

Mr. ANTHONY. I have the privilege of having several constituents from the Red River, Lakeville Project all the way across to the Wichita. I apologize for being late, but I was caught chairing a budget committee.

Mr. BEVILL. He mentioned that. I told him we would recognize you when you got here, so if you would like to I am sure you have a

statement on both projects you will want to put in the record, will you not?

Mr. ANTHONY. Mr. Chairman, I think all I would need to do is go back and pull out my statement of 1978 and 1979 and 1980 and just change it to 1981 consistent with the budget restraints and reintroduce it because I am still in strong support of those projects moving on.

Mr. BEVILL. The record will be open if you would like to do that for five days.

Mr. ANTHONY. I will submit a written statement for the record. I wanted to show my support for my constituents personally and I yield to them.

Mr. BEVILL. We will just move on then.

Notice Congressman Roemer has come in. We will be glad to hear you now.

STATEMENT OF HON. BUDDY ROEMER, A REPRESENTATIVE IN CONGRESS FROM LOUISIANA

Mr. ROEMER. I have a brief statement I would like to put in the record and read. There are several other Members from my area who have something to say also at the appropriate time.

Mr. WELLS. With your permission I introduce Mr. Homer Tanner speaking on behalf of the State of Texas.

STATEMENT OF HOMER TANNER

Mr. TANNER. Mr. Chairman, Mrs. Boggs, Mr. Myers, if you enjoyed Mr. Watkins' comments yesterday you are going to really enjoy my extensive comments today. My name is Homer Tanner. I speak to you as Executive Committee Member of Red River Valley Association from the State of Texas. I am by vocation, the Executive Director of the Northeast Texas Municipal Water District, a political sub-division of the State charged with the orderly development of the water resources of a significant segment of Northeast Texas.

My colleagues and associates have asked that I address you today to summarize our concern for the development of water resource projects in the Red River Valley.

The specific projects we are here to support have been documented in detail. The Corps of Engineers have provided capabilities and funding levels, the Association has provided additional evidence supportive of the valley's needs, specific requests of Texas' interest have been provided and a comprehensive overview by the Texas Department of Water Resources has been prepared. Copies of all documents have been submitted to the staff for inclusion in the record and more importantly consideration by the Committee.

Perhaps the most compelling document for consideration by this committee is the President's Budget Proposal, as modified March, 1981. A review of the document indicates spending levels for projects in the Texas area of concern to be appreciably reduced from stated U.S. Corps of Engineers capabilities, with a drastically reduced funding proposal for navigation feature construction in Louisiana.

The position statement submitted by the Texas Department of Water Resources previously mentioned, clearly sets forth specific items we are here today to present. I wish to draw your attention to the human values associated with this request for dollars.

Red River Valley farmers provide the nation with a major production of agricultural commodities, cotton, grains, vegetables, dairy products and beef. People in the valley produce by manufacture, products of every description for national and international consumption. The exported grains and manufactured products are a significant segment of the, so important to our nation, balance of trade.

People are moving into the valley in ever increasing numbers attracted by living standards and job opportunities. Our requests for project funding are vitally needed to keep pace with the growth and development.

We must enhance water quality through salt abatement programs to ultimately result in increased quantities of domestic and agricultural waters the entire length of the river. Ongoing studies now conclude the waters of the Red will be diverted for domestic utilization at an even more rapid rate than thought as recently as a year ago. Flood control measures speak for themselves as do the water supply projects. Bank stabilization and related projects enhance the entire river and affect all the valley residents not only in Texas but to include neighboring states.

Navigation of the Red River has for years been a major project of the Red River Valley Association. The people who initiated the Association had navigation as a single goal. Through the years the scope of interest broadened to include the broad spectrum of water related projects considered beneficial to all.

People of the valley were overjoyed when the Congress allotted construction money for Lock and Dam #1. Residents in Arkansas, Oklahoma and Northern Texas all saw the beginning of a new era when economical transportation would become reality in the four corner area and above.

There are overriding reasons otherwise set forth by my colleagues here today that speak to the need for continued funding of the navigation feature and we in Texas wish to endorse unequivocably the request for restoration of significant construction funds.

The President has asked us all to share in balancing the national budget. We in Texas can accept that request and will gladly join hands with all other Americans of like mind in accepting reasoned budget cuts that would not cause deleterious effects to valuable ongoing projects.

Thank you for listening to me.

[The statement of Homer Tanner follows:]

STATEMENT OF HOMER TANNER

Mr. Chairman, Members of the Committee, my name is Homer Tanner, I speak to you as the Executive Committee member of the Red River Valley Association from the State of Texas. I am, by vocation, the Exceutive Director of the Northeast Texas Municipal water District, a political Sub-division of the State charged with the orderly development of the water resources of a significant segment of North East Texas.

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Thank you for listening to me.

WILLIAM P. CLEMENTS, JR.
GOVERNOR

OFFICE OF THE GOVERNOR
STATE CAPITOL
AUSTIN, TEXAS 78711

March 23, 1981

The Honorable Tom Bevill
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
U.S. House of Representatives
2305 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Bevill:

Attached please find the supporting testimony of the Texas Department of Water Resources pertaining to certain public works projects administered by the United States Corps of Engineers in the Red River Basin of Texas.

The Texas Department of Water Resources is primarily responsible for the proper development and conservation of our water resources in Texas, and in that regard, has carefully examined and analyzed each of these projects. I concur in their findings and recommendations and trust that this testimony will be carefully considered by the Committee.

Thank you for your consideration.

Sincerely,

W.P. Clements, Jr.

William P. Clements, Jr.
Governor of Texas

RS

Attachment

STATEMENT

OF THE

TEXAS DEPARTMENT OF WATER RESOURCES

REGARDING

U. S. ARMY CORPS OF ENGINEERS INVESTIGATIONS AND PROJECTS

IN THE

RED AND SULPHUR RIVER BASINS AND CYPRESS CREEK BASIN

WHOLLY OR PARTIALLY WITHIN TEXAS

PRESENTED TO THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

COMMITTEE ON APPROPRIATIONS

U. S. HOUSE OF REPRESENTATIVES

March 24, 1981

The Texas Department of Water Resources respectfully submits the following testimony regarding Corps of Engineers public works projects located in the Red and Sulphur River Basins and Cypress Creek Basin in the State of Texas.

Responsibility for Statewide planning and development of water resources rests with the Texas Department of Water Resources. The Department has been statutorily designated as the State agency to cooperate with appropriate agencies of the Federal government and with other State and local governmental entities in matters relating to water resources development. In order to assure orderly development and management of the State's water resources, the Department has formulated and adopted a comprehensive Statewide plan known as the "Texas Water Plan", which under Texas statutes serves as the official guide for future water development in Texas.

The plan indicates the need for specific projects, including alternatives, to meet the State's water needs and to provide for State, regional, and National economic growth and stability. The Department of Water Resources maintains a continuing planning program in order to keep the plan current to address changing economic, social, hydrologic, and environmental conditions in the State. The projects which we offer testimony on to this Subcommittee are all integral elements of the State's water plan.

ARKANSAS-RED CHLORIDE CONTROL PROJECT

The Arkansas-Red River Basins Chloride Control Project, which is directed toward the improvement and preservation of water quality in the states of Texas, Oklahoma, and Kansas, is imperative if full utilization of these surface-water supplies is to be realized. Presently, more than 1,000 miles of streams in each of the two river basins are severely contaminated by natural brines. Consequently, waters of the streams are not suitable for municipal and most industrial and agricultural purposes. Large volumes of salt enter the streams from 15 natural sources, 10 of which are located in Texas. There exists an immediate need for good quality water within and to the west of the areas of natural salt pollution, and a large potential need exists downstream from the areas in the eastern part of the Red River Basin.

The Corps has indicated the capability to expend $595,000 for the continuation of preconstruction planning and design of this urgently-needed project in fiscal year 1982. The Texas Department of Water Resources strongly urges that this capability for fiscal year 1982 be funded in order that the quality of water supplies within the problem areas and in Lake Texoma on the main stem of the Red River can ultimately be improved and put to full beneficial use.

Additionally, Section 74 of the Water Resources Development Act of 1974 authorized initiation of construction of natural salt-control facilities within the Wichita River Basin, Texas, a tributary of the Red River and identified as Area VIII of the Arkansas-Red Chloride Control Project. These natural salt-contributing areas adversely affect the quality of water stored in Lake Kemp, a water supply and flood control reservoir located on the main stem of the Wichita River, to the point that the supply

is unsuitable for many beneficial uses, including municipal water supply. The quality of water cannot be improved, and the supply cannot be fully utilized, unless construction of natural salt-control facilities is completed. The Corps has indicated a capability to expend $12,840,000 to continue construction of natural salt control facilities at Area VIII during fiscal year 1982. Funding at this level would actually advance completion of the Area VIII project by six months. President Reagan, in his budget revisions of February, 1981, has recommended that $11,900,000 be appropriated for this project in fiscal year 1982.

The Department respectfully requests that the Committee assure continuation of construction of this urgently-needed project, either at the Corps indicated capability of $12,840,000 or at the President's recommended level of $11,900,000 for fiscal year 1982.

BIG PINE LAKE

The Big Pine Lake, Texas project was authorized by the Flood Control Act of 1962. All preconstruction planning and design has been completed by the Corps of Engineers. The project, to be located on Big Pine Creek, a tributary of the Red River in Red River and Lamar Counties, Texas, would provide flood control, recreation, fish and wildlife benefits, and a firm water supply of 32 mgd for municipal and industrial use in the area.

The Corps of Engineers has indicated the capability to initiate construction of Big Pine Lake in fiscal year 1982 at an estimated total cost of $75,498,000, with first year funding needs of $1,100,000. The Department respectfully requests that the Committee appropriate the Corps' expressed capability of $1,100,000 for fiscal year 1982 to ensure availability of the benefits from the project at the earliest possible date.

LAKE WICHITA, HOLIDAY CREEK

Lake Wichita was constructed on Holiday Creek by the City of Wichita Falls, Texas in 1901. The dam and spillway, which provides partial flood protection for highly developed urban areas of the City of Wichita Falls, has deteriorated badly and the spillway capacity is inadequate to handle floods which occur in the Holiday Creek watershed. Further, the dam has been assigned a high hazard classification by the Corps under the National Dam Safety Program and has been declared unsafe by both the Corps and the State of Texas. In response to Congressional resolution and studies authorized by the Chief of Engineers, the Corps has completed studies and has recommended a plan to meet the flood control needs of the area which includes replacement of the existing Lake Wichita Dam and enlargement of the channel downstream of the dam. The City of Wichita Falls strongly supports the project and will assume all non-federal responsibilities.

The Corps of Engineers has indicated a capability to expend $100,000 in fiscal year 1982 to complete advanced planning and engineering design of the project. The Department strongly urges appropriation of the full extent of the Corps capability for fiscal year 1982.

RED RIVER LEVEES AND BANK STABILIZATION
BELOW DENISON DAM, TEXAS,
ARKANSAS, AND LOUISIANA

Widely-varying river stages and frequent flooding of the Red River have resulted in severe damage and substantial loss of highly productive agricultural lands along the Red River. Bank caving is increasing at an accelerated rate and channel misalinement in various reaches along the river has become critical. Measures undertaken by the Corps of Engineers, under authority of the Flood Control Act of 1946, River and Harbor Act of 1968, and Water Resources Development Act of 1976, include bank stabilization by means of revetments and dikes and channel realinement by dredging and construction of cutoffs. The Corps of Engineers has expressed the capability to expend $5,990,000 during fiscal year 1982 to continue the bank protection and stablization activities within the reach of the Red River under the jurisdiction of the Lower Mississippi Valley Division of the Corps. The Department respectfully requests that the Committee appropriate the full extent of the Corps capability to ensure continuation of these necessary measures.

The Southwestern Division, Corps of Engineers, which has jurisdiction over this project within the reach from the vicinity of Index, Arkansas to Denison Dam, Texas and Oklahoma, has expressed no capability to continue planning of the project in this reach during fiscal year 1982, citing lack of local cooperation for the project. The Department wishes to advise the Subcommittee that there is substantial interest by the State of Texas in bank stabilization and channel realinement of the Red River in the reach below Denison Dam. Legislation is currently pending in the sixty-seventh Texas Legislature which, if enacted, will provide an appropriate regional governmental entity capable of providing the Corps of Engineers with the necessary items of local cooperation for this project. The Department therefore urges the Committee to provide the Corps with sufficient funds to initiate advance planning and engineering design of bank protection and stabilization measures for this reach during fiscal year 1982.

COOPER LAKE AND CHANNELS, TEXAS

The Cooper Lake and Channels Project, located in the Sulphur River Basin upstream of Lake Wright Patman in the State of Texas, was authorized by Public Law 218 of the 84th Congress. In addition to providing 273,000 acre-feet of water conservation storage space, the reservoir will allow sufficient storage for basin-wide flood protection to convert 120,000 acre-feet of flood control space in Lake Wright Patman into water supply storage for the Texarkana water demand area.

The Department of Water Resources appreciates the consideration this Subcommittee has allowed the project in the past. The project has been subjected to lengthly delays, due in large part in recent years to litigation under the National Environmental Policy Act and subsequent alleged inadequacies in the Environmental Impact Statement. The Corps of Engineers completed a draft supplemental Environmental Impact Statement in October, 1980 and is in process of preparing the Final Supplemental EIS. Completion of Cooper Lake, which has now been delayed more than seven years due to the Federal District Court injunction issued in 1971, is essential to meet

existing and future water needs of the Sulphur River Municipal Water District, City of Irving, Texas, and the North Texas Municipal Water District. The North Texas Municipal Water District includes eleven member cities in the rapidly expanding urban area of more than 530,000 residents in a 1,600 square-mile area to the north and east of Dallas, and also serves 44 other entities, including 17 customer cities, rural water supply corporations, and municipal utility districts in the region. The District faces serious, short-term water supply problems unless construction of Cooper Lake is reinitiated, since its total water supply is currently provided by one reservoir - Lake Lavon.

The Corps of Engineers has indicated the capability to expend $650,000 in fiscal year 1982 to continue construction of Cooper Lake. This project is one of the most urgently-needed water resource projects in Texas. The Department strongly urges the Committee to appropriate the full amount of the Corps capability.

LITTLE CYPRESS CREEK

A study of the feasibility of improvements for flood control, water-conservation, and other water-related purposes in the Cypress Creek Basin was undertaken by the Corps of Engineers in October, 1979 pursuant to a resolution adopted May 9, 1979 by the Committee on Public Works and Transportation, U. S. House of Representatives. This area of northeast Texas is undergoing unprecedented growth due largely to accelerated development and utilization of vast lignite resources. The occurrence of economically recoverable lignite reserves in the region has delayed construction of at least one major Corps of Engineers reservoir project in the area, thus seriously affecting the availability of firm water supplies for this region.

The current feasibility study is expected to require four years for completion. The Corps of Engineers has expressed the capability to expend $350,000 during fiscal year 1982, which would advance the study completion date by two months. The Department respectfully requests that the Committee appropriate the full amount of the Corps capability for fiscal year 1982.

MCKINNEY BAYOU, ARKANSAS AND TEXAS

Serious flooding and drainage problems within the McKinney Bayou watershed, and particularly in the Days Creek and Nix Creek drainage systems within the corporate limits of Texarkana, Texas and Texarkana, Arkansas, have been studied by the Corps of Engineers under authority granted by the Water Resources Development Act of 1976. A preliminary plan of improvements has been prepared by the Corps of Engineers, and the local governmental entities have indicated their willingness and ability to assume the necessary items of local cooperation as required by the Corps.

The Corps of Engineers has indicated the capability to expend $200,000 in fiscal year 1982 to continue advanced planning and engineering design of the project. The Department respectfully requests that the Committee fund the full extent of the Corps capability for fiscal year 1982.

RED RIVER WATERWAY, SHREVEPORT, LA.
TO VICINITY OF INDEX, ARKANSAS-SHREVEPORT, LA.
TO DAINGERFIELD, TEXAS

The Red River Waterway was authorized by the River and Harbor Act of 1968 and Water Resources Development Act of 1976. This reach of the project includes realinement of the Red River channel by means of dredging, cutoffs, and training works and for bank stabilization measures, with the ultimate objective of providing continuous navigation from the Mississippi River to the vicinity of Texarkana, Texas and Texarkana, Arkansas, including Cypress Bayou from Shreveport, La. to Daingerfield, Texas.

The Corps of Engineers has expressed the capability to expend $300,000 during fiscal year 1982 to continue advanced planning and engineering design for the reach of the Waterway to Index, Arkansas. Funding at this level would advance planning by 12 months. The Corps has further indicated that sufficient funds are available to continue planning of the reach from Shreveport, La. to Daingerfield, Texas. The Department strongly supports these navigation features and respectfully requests that sufficient appropriations be provided the Corps of Engineers to continue and complete the advanced planning and design of both reaches of the Waterway.

RECREATION FACILITIES AND OPERATION AND
MAINTENANCE OF EXISTING PROJECTS

The Department respectfully requests appropriations to the Corps of Engineers for operation and maintenance of the following projects during fiscal year 1982: Denison Dam, Lake Texoma (Sanitation facilities)($445,000); Pat Mayse Lake (Sanitation facilities)($235,000); Arkansas-Red Chloride Control Data Stations ($65,000); Denison Dam, Lake Texoma ($3,950,000); Ferrells Bridge Dam-Lake O' the Pines ($1,525,000); Lake Kemp ($411,000); Pat Mayse Lake ($512,000); Wright Patman Lake ($1,832,000); and Caddo Lake ($451,000).

CONCLUDING COMMENTS

The Texas Department of Water Resources requests your support for and consideration of these regional water resource development needs. The Department most respectfully urges the allowance of funds as requested in order to accomplish the coordinated, orderly development of vitally-needed water resource projects in the Red and Sulphur River Basins and the Cypress Creek Basin in the State of Texas.

Respectfully submitted,

TEXAS DEPARTMENT OF WATER RESOURCES

By: Harvey Davis

Harvey Davis
Executive Director

Testimony before the
Subcommittee on Energy and Water
of the House Appropriations Committee

March 24, 1981

by the
Red River Valley Association

E. Rawlins Collerain P.E.
Director
Shreveport Water Utilities
City of Shreveport, Louisiana

William R. Brown, Jr
Chief Adminstrative Officer
City of Shreveport, Louisiana

As the State of Louisiana's second largest city, Shreveport with a current population in excess of 200,000 people is serving the Ark-La-Tex area as a regional goods and service distribution center. From its geographic location in the most northwesterly parish in the state, Shreveport has, over the years, viewed the development of its resources both natural and man made as the key to economic stability, growth and a quality of life for its residents and the residents of those surrounding communities.

In an era which has seen rampant decay of cultral core cities, population declines and economic stress, Shreveport has steadily been able to selectively develop the resources at its disposal to provide a solid, diversified economic base which has resulted in a steady manageable growth for the region.

Presently Shreveport has very effectively utilized air, rail and highway as transportation modes which has enabled it to be a viable competiative marketplace. However, the most viable of all transportation modes has been neglected; the development, or redevelopment of the water way which ironically gave Shreveport its first breath and sent it on its way as a thriving community serving tens of thousands of people daily.

FUTURE EFFECTS OF THE RED RIVER WATERWAY ON SHREVEPORT

From Shreveports perspective there are many benefits to be derived from the full development of the Red River Waterway. They are:

1. Naviagation-to provide effective low cost transportation of goods and materials to and from Shreveport. At a time when energy reserves are dwindling the economics of waterway transportation are the most efficient way to best utilize the petroleum available for the transportation of goods such material.

2. Job development-Jobs created as a result of the project construction will return to the economy future benefits through the training and stablization of the work force. Skills developed through direct work on this project will inevitably carry forward to other non-government related jobs.

   Auxillary employment related to the development of industry and business stimulated by the project will return pure

private sector unsubsidized jobs which will return untolled millions of tax dollars to the federal treasury.

3. Small/Minoriy Business development-It is a recognized fact that small businesses are declining at a very rapid rate. This project will reverse that trend by creating an economic climate which will encourage small business ventures and ensure a better than equal chance of success. This can be achieved with a mininum or no government intervention with SBA loans due to the demands for support services which always accompany projects with economic enhancements to the local economy.

   Coupled with this is the development of minority business enterprises. The creation of business opportunities for minorities will allow the economic improvement of that segment of our society which up to now has been unable to compete economically in the marketplace due to an underdevelopment of business skills and in many cases lack of appropriate opportunities to develop those skills.

   From Shreveports point of view this objective is very consistent with President Reagan's objective to make those who are presently tax receivers into tax producers. The Red River Waterway project is the vehicle to achieve that objective.

4. Water Resource Development-There is a myth that Louisiana has a plentiful supply of water. Like oil this resource is finite and is presently reaching a critical stage in some parts of the state. However unlike oil water is regenerated through rain so it can be reused. Only through our efforts can we take steps to develop those projects which will alow the impoundment of water tp ensure adequate resources when needed. These needs must be anticipated now and steps taken now to meet those future needs. The Red River Waterway project has a tremendous potential for helping to meet our future water needs for industry, agriculture as well as daily human consumption.

5. Bank Stablization and Erosion Control-Although an urban community, Shreveport is very concerned about the effects of erosion on the surrounding agriculture areas. Millions of cubic yards of of topsoil are being washed away each year into the river. Once lost it reduces the productive

capacity of the land thus erodes part of the areas economic base. The lessons taught us by the "dust bowls" of the 30's should be restudied. The Red River Waterway project will reduce significantly the soil erosion problem and return fertile river bottom land to full productivity and reduce maintenance on existing waterways due to silt control.

6. Replacing Depleted Natural Resources-As the oil and gas resources in Louisiana are depleted over the coming years they must be replaced by other resources which will enable Louisiana to transition from one economic base to another. Water is a natural resource which if developed properly can relieve the state of a severe economic crisis when its oil reserve are depleted. We must start now to replace that economic base due to the time involved in water resource development.

7. Recreation Enhancements-Where water exists there is the potential for recreation enhancement. Shreveport is extremely interested in doing its part to make the river a part of a well balanced project serving not only the economic interests of its citizens but its leisure time needs as well.

8. National Defense-It is important that waterway development be viewed as an intergral part of our transportation systems. Interstate highways are viewed as essential to the movement of troops and military material in times of emergencies. We must look at our waterways as equal because it will serve the same purpose. In times of national emergency we will need all of our resources to cope so we must fully develop our resources so we have as many options available to us as possible.

SHREVEPORT IN PREPARATION FOR THE RED RIVER WATERWAY

There are several programs underway currently to prepare Shreveport for the completion of the project.

1. Caddo-Bossier Port Commission-In conjunction with the State, the Port Commission has begun to acquire property for a port site as well as an area for an industrial park. Over the next several years investment will exceed $40 million. This is a substantial non federal investment.

2. Southeast Park-Shreveport has purchased 585 acres on the Red River at a value of $1.2 million. The Corp of Engineers has certified that as part of the Red River Waterway project they will match the city's investment ($1.2 million) in developing this park as part of the recreation portion of the project. The city is ready at this time to develop the park and request that Congress appropriate $1.2 million for development of Southeast Park in Shreveport.

3. The City is expending in cooperation with EPA 82 million to control and treat all wastewater in anticipation of Lock and Dam #5.

4. The City in cooperation with the Corp of Engineers is studying a method for de-salinzation of the Red River to enhance the water for an alternate water supply for the city as well as for agricultural uses. Money must be appropriated by Congress for this purposes/

5. The City is actively involved with the Governor's task force on Red River development and in a coordinated Federal, State and Local effort are planning strategies to deal with
    1. Economic Development
    2. Small/Minority Business Development
    3. Individual Job Development
    4. Community Development

CONCLUSION

In summary, the City of Shreveport, Louisiana is vitally interested and enthusiastically behind the continued finding of the Red River Waterway. Cessation of this project at this time will deal a serious blow to needed services and economic development in Shreveport and throughout the Ark-La-Tex area.

The need for Federal Budget cuts is evident. However, costs in those expenditures which produce future tax revenues make little sense. For any organization to be strong and vibrant it must invest in itself. That investment will produce future returns beyond over current capacity to calculate them. Lack of such an investment can only bring deterioration and despair at a time when the country needs to go to work.

Continued funding will allow us to keep working for our country, for Louisiana and for Shreveport.

Thank you.

William Brown

From the stand point of this Nation, as well as my home state of Louisiana, water is a natural resource that has not been properly managed.

Louisiana is refered to as the Bayou State. In fact, the only water we have is from the rains we receive. The balance flows to us from other areas. Due to this simple fact, we in the state of Louisiana must improve management of our water resources to increase our productivity in the areas of agriculture, industry and human use.

To better manage the waters available to the states of Oklahoma, Arkansas, Texas and Louisiana, the following projects need to be supported and completed on the Red River:

1. Desalinization
2. Bank Stablization
3. Hydroelectric Power
4. Water Transportation

Man since time immortal has been provided with four natural and readly available resources. They are air, land, water and gravity. Full development of the Red River Water Way will make the best use of these four resources at the least cost to the nation.

This great nation of ours, through the advent of Public Law 92-500 has spent untold billions to prevent pollution of our streams that we drink from and the air that we breath. These monies will have been undautilized unless we better manage the resource, called water, provided by nature.

This nation on a daily average receives 4,235 billion gallons of rain. 3,035 billion gallons return to the atmosphere through evaporation, leaving 1,200 billion gallons a day for us, as a nation to utilize. At present we only use 91 billion gallons a day to support agriculture, industry and human life. This is a utilization of only 8.3% of a natural resource available to this nation.

From a water useage stand point, the completion of the Red River Water Way Project will allow greater utilization of a resource that man can not manufacture.

"All the rivers run into the sea; yet the sea is not full." Old Testament: Ecclesiastes, i, 7.

E. Rawlins Collerain

UNITED STATES
HOUSE OF REPRESENTATIVES

BRIEF
IN SUPPORT OF
ADEQUATE APPROPRIATIONS
TO THE CORPS OF ENGINEERS, U. S. ARMY
FOR
WEST AGURS LEVEE

PRESENTED TO

COMMITTEE ON APPROPRIATIONS
UNITED STATES
HOUSE OF REPRESENTATIVES

BY

ARLIS D. SCOGIN, 1ST VICE-PRESIDENT
CADDO LEVEE DISTRICT

STATE OF LOUISIANA

MARCH, 1981

This statement is presented in behalf of the Board of Commissioners of the Caddo Levee District and the people of Caddo Parish, Louisiana. It is my purpose in appearing before you today to urge that adequate funds be provided to the U. S. Army, Corps of Engineers in the coming fiscal year for pre-construction planning on the West Agurs Levee project in my district.

The West Agurs Levee is located at the northern fringe of the metropolitan area of Shreveport, Louisiana, and protects over 700 acres of light industrial lands from flooding. The existing levee was built in 1961 by local interests, serving as an integral part of the Red River main line levee system. As such it should be part of the authorized federal flood control system.

The project "Red River Below Denison Dam" was modified by the Water Resources Development Act of 1976 to include the West Agurs Levee in its authorized flood control system. However, this Levee has not yet been made part of the Federal System because it does not meet certain Federal requirements.

Improvements needed for the levee to meet Federal requirements are estimated to cost $650,000.00 and there are no unresolved environmental problems or relocations requirements. All local assurances set forth in the authorization are available. But, before construction can begin to bring this levee in line with Federal Standards, thereby allowing its inclusion in the Federal System, additional planning is needed.

On behalf of the people of the Caddo Levee District, we, therefore, urge that you appropriate the proposed budget sum of $70,000 for preconstruction planning on the West Agurs Levee Project in Fiscal Year 1982.

COOPER RESERVOIR
March 1981

TO THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES:

Gentlemen:

I am John E. Gay, an attorney of McKinney, Texas. My firm represents the North Texas Municipal Water District, one of the local sponsors in the Cooper Reservoir project. I am accompanied by Mr. Robert Mansell, Administrative Assistant of the North Texas Municipal Water District.

The Cooper Lake and Channels Texas project was authorized by Congress in 1955. Water Supply Contracts were signed with the United States Army Corps of Engineers by the North Texas Municipal Water District, the Sulphur River Municipal Water District and the City of Irving, Texas, in 1968. In May, 1971, the U.S. District Court for the Eastern District of Texas, halted further construction on the project until an Environmental Impact Statement was filed with the CEQ. Since that time, the Environmental Impact Statement has filed, has been found to be deficient by the Court and supplemented by the Corps of Engineers. Final approval should be obtained within the next two months so that the project may once more get under way.

The three entities with Water Supply Contracts have all had to reevaluate their source of supply and find alternate interim sources pending the completion of the Cooper Reservoir. The Reservoir still is of vital importance for the future water supply of the North East Texas area and the project needs to proceed as fast as possible.

In the past, this committee has appropriated over $30,000.00 for the project. Most of the planning has been completed and over 98% of the land for the reservoir has been acquired. This should not go for naught. The North Texas Municipal Water District, on behalf of itself and its partners, request an appropriation of $650,000 so that this needed project can get back on track.

Respectfully submitted,

JOHN E. GAY
Boyd, Veigel & Gay, Inc.
McKinney, Texas 75069
Attorneys for North Texas
Municipal Water District

Mr. WELLS. We have John Stroud representing the State of Arkansas.

Mr. STROUD. Mr. Chairman, I would like to point out our main concerns and certainly join with my friends from Texas in supporting the main thrust of the Louisiana Navigation Project. We have supported that. Although it stops in Shreveport we hope some day it may come upstream in Arkansas and I know Oklahoma and Texas look forward to the same thing. This is the first time in the 14 years I have been here that I have left a blank on the request. A capability of $140 million and a budget item of $27 million. The blank simply being I ask you to do what you can. We all feel $27 million is not fair, not appropriate. But I and I know the other witnesses here today recognize the problem of trying to balance the budget and that to say balance it elsewhere and not with my project just will not get it done. We are ready to bear our part in this endeavor that you are trying hard to reach, a balanced budget. There are two exclusively Arkansas projects I want to mention. One exclusively Arkansas and it is the Comprehensive Bank Stabilization Program in planning from Shreveport to Index; Index being where the river reaches the State of Texas. This has been in planning now five years. The Red River Commission of Arkansas has worked diligently over this period and before to raise the non-Federal costs. We do not have a tax base such as Louisiana has to raise the funds and we get it from the counties, the cities, the small communities and the state legislature. But we have now approximately $3 million invested in money market rates and are anxiously awaiting the completion of planning so this project can go to construction.

Mr. BEVILL. The capability for fiscal year 1982 is $300,000. And the budget item is just $30,000. The $30,000 is basically no continuation of planning. We ask that you consider this being raised to a figure that will let this planning continue in an orderly fashion. The other project I specifically want to mention picks up at Index and goes to Denison Dam. It is mainly of concern to Oklahoma and Texas though it borders one side of the river, borders Arkansas for a few miles. You saw for last year to fund the initial planning of this, this bank stabilization program. The bank paving is as critical above Index as below Index. There is nothing magic happening there except the New Orleans District changes to the Tulsa District. But that is not in the budget at all. A year of planning is done and it certainly is appropriate that you did start it last year because just downstream has been underway now five years and it is an orderly progression. We therefore ask that you reinstate this at some level. The capability is $240,000 and you may see fit for a lesser number and we understand that. In closing I simply want to point out that we continue to support the chloride control programs, the emergency bank protection programs and the Red River levees and bank stabilization below Denison Dam. They are vital to this valley and they are in the budget, not all at full capability. We recognize the problem and we hope you will specifically recall at markup the Shreveport to Index, $30,000 and can come up somewhere close to the $300,000 capability. Thank you sir.

Mr. BEVILL. I noticed our good friend and colleague Congressman Jerry Huckaby is in. Jerry, we will be glad to hear from you at this time if you need to leave or we will be glad to have you stay with us.

TUESDAY, MARCH 24, 1981.

RED RIVER VALLEY PROJECTS

WITNESS

HON. BUDDY ROEMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. BEVILL. Mr. Huckaby, would you like to go ahead and present your statement at this point and make your statement. Also Congressman Roemer.

Mr. ROEMER. Thank you for the time, Mr. Chairman. I will just take a minute and let me say from the outset I support the President's effort to cut Federal spending. I support cutting back and delaying water projects as part of those budget cuts—including water projects in my own district.

At a time when food stamps, school lunch programs, and job training are slated for budget cuts, fairness demands that water projects, too, be cut back.

Furthermore, the potential economic development from any water project will be frustrated until we first reduce interest rates and the rate of inflation.

A hit-list approach to water projects, however, is not in the best interests of this country. For budget cuts to be effective, they must be fair. They should involve everyone cutting back, and everyone accepting delay. A few should not be asked to bear all the sacrifice.

The President has assured members of the Louisiana delegation that the Red River Navigation Project is not on a hit list for termination, but the administration's funding proposal asks basically for that.

I urge that Red River not be terminated, not be removed forever from consideration. I believe that the Red River Project contains many yet uncalculated potential benefits for the people of the Red River Valley.

The addition of hydropower, drinking water, recreation, and increased minority business enterprise could change the presently marginal cost-benefit figures to extremely positive ones. User fees could fund the actual operation of the completed project.

The administration's decisions on this project, I fear, have in part been based on dated information. I strongly believe we must make sure that the spending decisions of this administration at least are based on recent, accurate, and complete information.

The supporters of the Red River Waterway Project have worked for 50 years to make the Red River once again navigable to Shreveport. They deserve the opportunity to present their case for the potential project benefits which may now be undercounted in the current figures.

The grievance is just that all water projects except those human lives depend on should be considered for some percentage cutback or delay in this time of economic crisis. Red River Waterway should not be a solitary sacrificial lamb.

Thank you, Mr. Chairman.

Mr. BEVILL. Very good statement, Congressman Roemer.

The statement I think particularly significant is that we have all got to take some cuts.

Mr. ROEMER. Yes, sir, I believe that.

Mr. BEVILL. I think that is a very good statement and very good position to take.

RED RIVER VALLEY PROJECTS

WITNESS

HON. JERRY HUCKABY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

STATEMENT OF HON. JERRY HUCKABY OF LOUISIANA

Mr. Chairman, I appreciate the opportunity to appear before the subcommittee to emphasize some additional benefits of the Red River Waterway Project which I feel must be considered before we pull the stopper on it.

Let me say at the outset that I support the President's efforts to balance the Federal Budget. But in doing so, I think it is imperative that each segment of our economy bear its fair share of the burden. Extreme care must be taken, if we are to maintain support for the budget cuts, to assure no one group or region of the country suffers more than the other.

I will honestly admit that the Red River Waterway Project, as originally authorized in 1968, with a cost-benefit ratio of 1.18 to 1, is marginal. At that time no one thought of hydroelectric power in 1968, but the plans that have developed for the project—putting hydro plants at the five lock and dam sites—have increased the cost-benefit ratio to a respectable 1.5 to 1, according to the Corps Engineers.

Four Louisiana municipalities have already obtained a preliminary permit from the Federal Energy and Regulatory Commission to construct hydroelectric facilities at the five lock and dam sites.

License applications are pending at FERC and it is expected that approval will be forthcoming in less than a year.

These municipalities will construct the hydro plants at a total cost of $375 million. The unique thing is that not one Federal dollar will be used to finance construction.

Once all five plants are installed and operational, the estimated total capacity will be 210 megawatts and an estimated annual production of one billion kwh, an annual oil equivalent of 3.2 million barrels of oil.

These hydro plants would serve approximately 18 Louisiana municipalities through the Louisiana Energy and Power Authority. The estimated savings to these consumers over a 50-year license period would be more than $3.5 billion in the state of La. That is a

staggering figure because it is more than twice the cost of the total project, which is estimated at about $1.5 billion.

At a time when energy is scarce and the cost is high, we have a golden opportunity with the Red River Project to do something about becoming energy self-sufficient.

In fact, these four municipalities have even indicated a willingness to help the Federal Government pay for the construction of the lock and dams. This is unheard of, but it demonstrates the commitment these municipalities have made to bring reasonably priced energy to the people of Louisiana.

The Federal Government already has quite an investment in the Red River Waterway Project—over $300 million. The Corps of Engineers is requesting $120 million for Fiscal 1982. The Administration is proposing $27 million for Fiscal 1982, which will only be enough money to "tidy up" current operations before bringing the project to a complete standstill since the Administration is cutting off all funding in Fiscal 1983.

Based upon the potential provided by the hydro plants alone, this project deserves reconsideration. We are prepared to sacrifice, but I believe the people of Louisiana are being asked to bear an unfair burden in this case. The Corps can live with $50 million and keep the project viable. This would mean a cut of $70 million, which, I feel, is a reasonable reduction if you relate it to the cuts other projects are facing.

It would help, Mr. Chairman, if the Subcommittee would consider authorizing that the hydro plants be made an official part of the cost-benefit ratio of this project. If this is done, and if the subcommittee studies the benefits of these hydro plants, I believe you will allow this project to continue.

Years from now we will be able to look back and realize what a wise decision we made.

On another issue, I would like to briefly mention my concern about the funding for the Tensas River National Wildlife Refuge. I introduced legislation which was enacted into law last June authorizing $40 million to be appropriated to the Corps and $10 million to the U.S. Fish and Wildlife Service for purchasing 50,000 acres in the Tensas Basin area and to my disappointment, the $40 million was not included in either former President Carter's budget request or President Reagan's budget proposal for Fiscal Year 1982. Although the $10 million was put in the original budget, it was slashed just recently from President Regan's revised budget.

If I may say so, the authorization bill is somewhat unique in its approach because it serves a two-fold purpose: (1) It would preserve some of the finest bottomland hardwoods left in America today, and (2) it would provide lands for the Corps to meet mitigation requirements for flood control projects in the area.

General Read, Division Engineer of the Lower Mississippi Valley Division, testified on February 4 of this year that the Corps has the capability to acquire land in Fiscal Year 1982. $200,000 was appropriated in Fiscal Year 1981 to the Corps for the purpose of evaluating and determining the value of this proposed land acquisition. Therefore, much of the legwork and advanced planning has been done.

My interest in appropriating the funds this coming fiscal year is that the opportunity to acquire this tract of land at the price informally agreed upon may not present itself again. We have been dealing with the owner of this property for almost two years, and he has been surprisingly patient in waiting for Congress and the Federal Government to act.

The urgency to purchase this property is further heightened by the fact that the remaining area in the Louisiana Delta region is being rapidly cleared for agricultural development. Nearly 25 million acres of bottomland hardwood forest once existed in the Lower Mississippi River Delta, but that area has shrunk to less than 5 million acres. We have no guarantee that the land in question will still be available in a year or so from now.

I don't think we should let a bargain like this slip through our hands. The benefits to the Corps and to the public will far outweigh the costs if we acquire this land now.

Thank you, Mr. Chairman, for the opportunity to testify, and I will be happy to answer any questions you or the other Subcommittee members may have.

WITNESSES

HON. SAM B. HALL, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS
WALTER HELM, SULPHUR RIVER MUNICIPAL WATER DISTRICT
DON ABERNATHY, VICE PRESIDENT, SULPHUR RIVER MUNICIPAL WATER DISTRICT

Mr. BEVILL. The Chair recognizes Congressman Sam Hall.

We are pleased to have you with us, Congressman Hall, and you may proceed as you wish.

STATEMENT OF CONGRESSMAN SAM HALL

Mr. HALL. Thank you, Mr. Chairman.

Mr. Chairman and members of the Committee, Mrs. Boggs, again this year I appreciate the opportunity to appear before this Subcommittee with our Texas water resource groups. It is always a pleasure to welcome to Washington my many friends who comprise the great Red River Valley Association. As you know, Mr. Chairman, all over this land of ours people who are concerned about water resource development and planning for our Nation's future water needs, look to the Red River Valley Association for guidance.

Appearing also with me today is a close personal friend and constituent, Walter Helm, a successful businessman from Northeast Texas, who has been in the forefront of our struggle to complete the Cooper Lake Project. Mr. Helm is representing the Sulphur River Municipal Water District and would like to make a very brief statement to the committee in this capacity when I finish my statement.

Mr. Chairman, this is an especially critical time for those of us who have labored so long and hard for the Red River Navigation Project. Expert witnesses are appearing before you today in this connection, so I will not overly indulge the time of this subcommittee.

I do want to put in a strong bid for continuation of the Red River Navigation Project at the amount specified in the Carter adminis-

tration budget. I think it would be an absolute shame to reduce funding for this project after so much work has already been accomplished over the years. We were hoping for a completion date sometime in 1988. But the proposal by the Reagan administration to stretch out the time will only make the project more expensive due to inflation.

Mr. Chairman, I want to turn for just a few moments to my perennial request; that is the Cooper Lake Project. This Committee has also been generous and helpful to the residents of Northeast Texas in appropriating money for the Cooper Reservoir. As you know from my previous testimony, private conversation, and an exchange of correspondence between us, I think Cooper Lake is absolutely vital to the future water needs in my area of Texas.

The Texas Department of Water Resources has an excellent statement for the subcommittee on Cooper, and I urge its positive consideration.

I will not go into detail about why the Cooper Project has been held up for so long a time. Its delay, I might say, has been one of the most frustrating experiences that I have had since coming to Congress in 1976.

But hopefully there is a ray of sunshine. Under the strong, capable leadership of people like Walter Helm, and the Corps of Engineers office in Fort Worth, things are beginning to take shape. The Corps has prepared a Revised Environmental Impact Statement for the United States District Court for the Eastern District of Texas, that hopefully will result in the court lifting an injunction against construction of Cooper.

It is my understanding that the supplemental statement will be published in the Federal Register later this week for a 30-day comment period. At the end of 30 days the Justice Department will be in a position to argue for a lifting of the injunction. In order to satisfy concerns that resulted in the injunction, the Supplemental Environmental Impact Statement calls for the purchase of some 25,000 acres of additional land around the project for mitigation purposes. Obviously we can only speculate at this time as to what the court will do.

However, if the injunction is lifted, it would be very unfortunate if the Corps did not have congressional approval to begin plans for purchasing the mitigated land.

Therefore, Mr. Chairman, I respectfully request this Subcommittee to approve a small amount of funds for Fiscal Year 1982 to help the Corps get started on mitigation. Since we are in the early stages of mitigation, I believe that the sum of $100,000 would be sufficient.

In addition, this year's budget calls for $650,000 for construction of Cooper, and we would like to see this amount remain intact.

Lastly, Mr. Chairman, I would also like to encourage favorable consideration of some other projects in and around my district, one being the continuation of the Little Cypress Creek Study. The budget indicates $270,000 for the second year of a 4-year survey. I am most anxious to see this study through. We desperately need water around the Marshall-Longview area of East Texas, and the Corps of Engineers informs me that solid progress is being made on the survey.

Mr. Chairman, I would like to leave with you the balance of my written statement that I would like to see considered as part of the record, and at this time I would like to indulge the Committee for a short presentation by Mr. Helm.

[The statement of Mr. Hall follows:]

STATEMENT OF CONGRESSMAN SAM B. HALL, JR.

Mr. Chairman, again this year I appreciate this opportunity to appear before the Subcommittee with our Texas water resource groups. It is always a pleasure to welcome to Washington my many friends who comprise the great Red River Valley Association. As you know, Mr. Chairman, all over this land of ours, people who are concerned about water resources development and planning for the Nation's future water needs, look to the Red River Valley Association for guidance.

Appearing also with me today is my close friend and constituent, Mr. Walter Helm. Mr. Helm is a successful businessman and community leader, who has been in the forefront of our struggle in Northeast Texas to complete the Cooper Lake Project. Mr. Helm is representing the Sulphur River Municipal Water District, and he would like to make a brief statement to the Subcommittee in this capacity.

Mr. Chairman, this is an especially critical time for those of us who have labored so long and hard for the Red River Navigation Project. Expert witnesses are appearing before you today in this connection, so I won't overly indulge the time of the Subcommittee. But, I want to put in a strong bid for continuation of the Red River Navigation Project at the amount specified in the Carter Administration Budget. I think it would be a shame to reduce funding for this project after so much work has already been accomplished. We were hoping for a completion date sometime in 1988, but the proposal by the Reagan Administration to stretch out the time will only make the project more expensive due to inflation.

Now I want to turn for a few moments to the Cooper Lake Project. Mr. Chairman, this Subcommittee has always been generous and helpful to the residents of Northeast Texas in appropriating money for Cooper Reservoir. As you know from previous testimony, private conversations and an exchange of correspondence between us, I think Cooper Lake is absolutely vital to future water needs in my area of Texas. The Texas Department of Water Resources has an excellent statement for the Subcommittee on Cooper Lake, and I urge its positive consideration.

I won't go into detail about why the Cooper Project has been held up for so long. Its delay has been the most frustrating experience I've had since coming to Congress. But there is a ray of sunshine. Under the strong, capable leadership of people like Mr. Helm and the Corps of Engineers Office in Fort Worth, things are beginning to take shape.

The Corps has prepared a revised Environmental Impact Statement for the U.S. District Court for the Eastern District of Texas that hopefully will result in the Court lifting an injunction against construction of Cooper. It is my understanding that the supplemental EIS will be published in the Federal Register later this week for a 30-day comment period. At the end of the 30 days the Justice Department will be in a position to argue for a lifting of the injuction.

In order to satisfy concerns that resulted in the injunction, the supplemental EIS calls for the purchase of some 25,500 acres of additional lands around the project for mitigation purposes. Obviously, we can only speculate at this time as to what the Court will do. However, if the injunction is lifted, it would be very unfortunate if the Corps did not have Congressional approval to begin plans for purchasing the mitigated land. Therefore, Mr. Chairman, I respectfully request this Subcommittee to approve a small amount of funds for Fiscal Year 1982, to help the Corps get started on mitigation. Since we are in the early stages of mitigation, I believe that the sum of $100,000 would be sufficient. In addition, this year's budget calls for $650,000 for construction of Cooper, and we would like to see this amount remain intact.

Mr. Chairman, I also want to encourage favorable consideration of some other projects in and around my Congressional District. These include continuation of the Little Cypress Creek Study. The Budget indicates $270,000 for the second year of a four-year survey. I am most anxious to see this study through. We desperately need water around the Marshall-Longview area of East Texas. The Corps of Engineers informs me that solid progress is being made on the survey.

Another project which has been subjected to inordinate delays is the Big Pine Lake authorized by the Flood Control Act of 1962. Water supply problems in Lamar and Red River Counties are serious, and we need to keep the project on-going. I understand that the Corps of Engineers has expressed the capability to begin

construction of Big Pine Lake during Fiscal Year 1982. We are seeking funding in the amount of $1.1 million to facilitate this expressed capability.

I also want to give a strong endorsement to the Big Sandy Lake Project. The Corps budget requests $175,000 for Advance Engineering and Design. Big Sandy is needed to control Sabine River flooding as well as provide for water conservation storage in Wood County.

I feel that I have already taken too much time. In closing I want to reiterate my support for the Red River Navigation Project. The Red River Valley folks will be filling you in about some of our other projects, having to do with Chloride Control and Bank Stabilization, so I won't attempt to steal their thunder.

I would now like for Mr. Helm to make a statement to the Subcommittee on the Cooper Lake Project.

RED RIVER VALLEY PROJECTS

WITNESSES

HON. JOHN PAUL HAMMERSCHMIDT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS
LYNN LOWE, RED RIVER VALLEY COMMISSIONER
VINCENT FOSTER

Mr. BEVILL. Let me ask you this. I know our good friend and colleague, Congressman Hammerschmidt, has come in. Do you mind him testifying at this point?

Mr. HALL. No, sir.

Mr. BEVILL. Since he may have to get back to his committee and committee work.

Congressman John Paul Hammerschmidt, we are always delighted to see you and if you will have a seat and present your case as you wish.

STATEMENT OF CONGRESSMAN HAMMERSCHMIDT

Mr. HAMMERSCHMIDT. Thank you, Mr. Chairman. I really, Mr. Chairman, am just here to support the views of Mr. Wells and the Red River interests, and to identify myself with the views of my distinguished colleague, Sam Hall, and Jerry Huckaby, and particularly to associate myself with the remarks of our colleague, Beryl Anthony, from Arkansas.

And I would ask that my statement be allowed to be submitted for the record.

I would just briefly identify the Red River Commissioner who came in a little late, Lynn Lowe, and Vincent Foster, if the record could show their presence here, and I would ask I be allowed to submit a statement for the record.

Mr. BEVILL. Very good. Permission is granted, and the record will stay open, will be open for 5 days.

Mr. HAMMERSCHMIDT. Thank you.

[The statement of Mr. Hammerschmidt follows:]

TESTIMONY OF CONGRESSMAN JOHN PAUL HAMMERSCHMIDT
Before The Energy and Water Development Subcommittee
of the House Appropriations Committee
in support of the Ouachita River Valley Association
March 24, 1981

It is indeed a pleasure to once again appear before this distinguished panel to express my strong support for the statement to be delivered by Lloyd M. Platt, Executive Officer of the Ouachita River Valley Association, who, over the years, has remained dedicated and vigilant in the protection of the environmental heritage of the Ouachita River Basin, and devoted to the wise use of the Basin's water, soils, air, commercial minerals, renewable agriculture, and timber crops.

Throughout my years in Congress, I have known the Ouachita River Valley Association as a private, nonprofit, benevolent organization, engaged in the promotion of water and related land resource projects that are economically sound and socially justified. The tangible and intangible benefits derived from the Association's sponsored programs are widespread and continue to contribute to the prosperity and security of the State.

During the over 85 years of the Association's service in Arkansas, its members have progressively expanded their project objectives and the benefits sought in order to take full advantage of new water resource technologies.

Today, the Association will state their critical goals with special emphasis on the completion of the Ouachita/Black Navigation Project which consists of two parts - the construction of four new locks and dams to replace the old lock and dam system completed by the Corps

in 1924, and the extensive realignment of the natural channel of the Ouachita River. It is my understanding that two of the locks, Columbia and Jonesville Locks and Dams in Louisiana, are completed, and Felsenthal and Calion Locks and Dams in Arkansas are under construction. Upon completion of the two Arkansas locks and dams and some channel dredging, three-barge navigation will be provided from the mouth of the Black River in Louisiana, to Camden, Arkansas, a distance of 351 miles. The second feature of the project, the proposed channel realignment would have the effect of optimizing navigation.

The completion of this project on the Ouachita River will extend the Valley's present domestic market range an additional 1000 to 1500 miles. The annual commercial tonnage recorded on the River is approaching 1,000,000 tons and this amount will be doubled or tripled within 10 years after its completion.

I wholeheartedly endorse the Ouachita Valley's Association in its petition for FY 82 funds to meet the Corps' capabilities on this project. Although I certainly realize this is a time for austerity in the Federal budget, those initiatives that have already proven cost-effective must be continued.

Again, I would like to thank Chairman Bevill and the Members of the Subcommittee for their time and courteous attention.

Mr. BEVILL. We will hear whoever you wish, Mr. Hall.
Mr. HALL. Mr. Walter Helm.

STATEMENT OF WALTER HELM

Mr. HELM. Mr. Chairman, this project was authorized in 1955. That has been 35 years ago. We have practically all of the land bought, and have spent about $40 million on the project, and it has been tied up now for 6 or 7 years in court.

We would appreciate anything that you can do for us to help us finish this project. It is vitally needed. Congressman Sam Hall explained it to you. And I think he has told you about everything I could tell you; so we appreciate anything you can do for us.

Mr. BEVILL. Thank you, gentlemen. Congressman Hall is not bashful and he will keep us posted. He does a great job, and I know you are proud of him.

Congressman Hall, does that complete your statement?

Mr. HALL. That completes my statement. Thank you, Mr. Chairman.

RED RIVER VALLEY PROJECTS

WITNESS

"JIFF" HINGLE, ASSISTANT SECRETARY, DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Mr. WELLS. Mr. Chairman, the next speaker we have is "Jiff" Hingle, Director, representing the Louisiana Office of Transportation and Development.

STATEMENT OF MR. HINGLE

Mr. HINGLE. Mr. Chairman and members of the committee, my name is "Jiff" Hingle. I am Assistant Secretary for the Office of Public Works, Louisiana Department of Transportation and Development, and chairman of the Red River Waterway Commission. My comments will be directed toward appropriations for projects in and affecting Louisiana, and are made in behalf of the State and the Red River Waterway Commission.

Included in the group who are present here today from Louisiana are the members of the Red River Waterway Commission and several levee boards, representatives of municipalities and local governing bodies, along with other representatives of the State Government, all of whom have traveled a considerable distance at some expense in both money and time, to indicate their support for the recommendations and requests that we will make to you, and their interest in these vital water resources projects.

By far the most critically needed of these projects in the Red Riber Basin of Louisiana, and one which touches the lives of all of those I have mentioned, is the Red River Waterway Project. More than 40 years of constant effort by the Red River Valley Association, State governmental entities, and many local groups and individuals were rewarded when the Rivers and Harbors Act of 1968 was approved by the 90th Congress, authorizing the construc-

tion of the project. This action was taken only after very thorough studies of the economics of the project, done by the Corps of Engineers, proved that it is justified, a requirement that is not placed on many other programs receiving Federal funding. The economic worth of the project was and is obvious in spite of the long-known fact that the rules governing Corps studies do not allow full advantage to be taken of some types of benefits, and the fact that the benefits from more readily available water supplies and from hydropower generation have not yet even been fully assessed, much less included in the preauthorization studies.

The Red River Waterway Project again came under close scrutiny when it turned up on the water project "hit list" of the previous administration. Again its worth was recognized and it was restored to approved status and construction continued.

We now find the project not only being questioned, but singled out as one of the few to have their funding so severely cut as to be tantamount to complete abandonment. Based on some of the figures we have heard quoted, the total amount of cuts proposed in the Civil Works Construction Program is about $177 million. The $93 million cut in the Red River Waterway Project then represents about 53 percent, or more than half, of the total cut, whereas the originally budgeted amount for the project represents only about 5 percent or 6 percent of the Civil Works Construction Program of the Corps.

We do not ask to be left unscathed while everyone else shares in the belt-tightening process. Nor do we argue that getting control of Federal spending is inappropriate. Quite the contrary. We only point out that the means being employed are far from evenhanded, and the people of the Red River Basin are being asked to bear an inordinate share of the proposed reductions. We request that the Red River Waterway Project be funded at the same level as other similar projects and other programs.

Although the waterway project is our most critical need in the Red River Basin of Louisiana, there are a number of other projects in the basin area for which funds are required in the coming fiscal year. These projects and needs are addressed in our written brief, which has been filed for the record with your staff. We solicit your favorable consideration of these requests. We also wish to be recorded in support of the basin-wide requests made by the Red River Valley Association and the representatives of our sister States in the basin testifying here today.

Thank you for this opportunity to appear before you and express our views.

Mr. BEVILL. Thank you.

[The statement follows:]

Mr. Chairman and members of the Subcommittee, my name is "Jiff" Hingle. I am Assistant Secretary for the Office of Public Works, Louisiana Department of Transportation and Development, and Chairman of the Red River Waterway Commission. My comments will be directed toward appropriations for projects in and affecting Louisiana, and are made in behalf of the State and the Red River Waterway Commission.

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RED RIVER VALLEY PROJECTS

WITNESS

CARROLL E. LANIER, MAYOR, ALEXANDRIA, LOUISIANA; CHAIRMAN, LOUISIANA ENERGY AND POWER AUTHORITY

Mr. WELLS. Mr. Chairman, we have the Mayor of my home town, Carroll Lanier, who is also chairman of the Energy and Power Authority.

Mr. BEVILL. We will be glad to hear from you, Mayor.

STATEMENT OF MR. LANIER

Mr. LANIER. Thank you for giving us this time.

I am appearing in a dual role as Mayor of Alexandria and also chairman of the Louisiana Energy and Power Authority.

Mr. BEVILL. I had a great-uncle practicing medicine about 100 years ago in Alexandria. I found one of his old medical things, and I gave it to Gillis, and he really enjoyed reading it, sir.

Mr. LANIER. What was his name?

Mr. BEVILL. Bevill. It was on that side.

Mr. LANIER. I just dug up some old buildings that were torn down, old foundations prior to the Civil War, and found some bottles under there from an old doctor. It was not Dr. Bevill, though.

Mrs. BOGGS. I have to tell you, the Mayor, in part of his presentation, is representing my hometown, New Roads.

Mr. BEVILL. You get more important as time goes on.

Mr. MYERS. You have a heavy burden representing all of these people.

Mr. BEVILL. How do you represent so many distinguished people like that?

Mr. LANIER. I am just fortunate, sir.

I am representing the citizens of Alexandria, Houma, Jonesville, New Roads, Morgan City, Opelousas, Lafayette, Plaquemine, and Winnfield as part of the Louisiana Energy and Power Authority or group that has joined together to try to produce firm power at the cheapest possible cost to our customers. I also represent the cities of Alexandria, Jonesboro, Vidalia, and New Roads, all of whom have permits on the five locks and dams on the Red River.

If this project were to proceed, in energy conservation alone the five locks and dams would save 3,265,290 barrels of oil per year—at OPEC prices that is very significant—or 22,075,200,000 cubic feet of natural gas, or 769,586 tons of coal annually. It would generate 210 megawatts annually and save the customers of my 18 cities and also some outside, because the hydro would be transmitted to other areas, hundreds of millions of dollars annually.

As an example, in my own city of Alexandria and at present-day prices, Lock and Dam No. 2 and the proposed hydroelectrical plant would reduce my constituents' costs for electricity an estimated 12 percent today, and an estimated 35 percent by 1986. I might, as an aside, say that this year my city's annual budget, which goes into effect May 1, is $64 million; $33 million of that is for fuel. With gas all around me that is very expensive, even though it is coming out of there.

Since January of 1974 the city of Alexandria's cost of natural gas has increased 15.59 percent, and since I have drafted this Thursday it has gone to 15.85.

Mr. BEVILL. What would you do if you did not have any natural gas?

Mr. LANIER. I tell you——

Mr. BEVILL. It would be a problem.

Mr. LANIER. We talk about deregulation. We have been deregulated for 4 years, and let me tell you, it is very expensive.

In summation, our request to you, gentlemen, is a resolution to the U.S. Army Corps of Engineers to include the hydroelectrical benefits to the cost-benefit ratio of the Red River Waterway. We are not asking for an appropriation; in fact, quite the opposite. We propose to build the hydroelectric plants with local public funds, private funds, or a combination of both.

Mr. BEVILL. I think he ought to stay around.

Mr. MYERS. That is what the administration says. The administration says what will happen and you are saying it will.

Mr. LANIER. We are more than willing to do our share. Since this project has been authorized in the city of Alexandria in the last 14 months I have spent $120,000 of local funds not only on the hydro but on the industrial park, which would be the first one in the Red. I did not think I would be misled, but $120,000 is not a lot of money by national standards, but for a city our size it is a considerable amount of money, and we spent money in good faith planning for these facilities.

Again, as most of the speakers have said, I know the city of Alexandria and Louisiana Energy and Power Authority, the cities I represent, we want to do our share. All we are asking is that any cuts to be made in water projects be done on a national basis. In fact, I believe you could cut all water projects 15 percent and come up with $400 million to $500 million more cuts than the President has proposed just by cutting the Red.

Thank you so much for your time. Thank you.

Mr. BEVILL. Thank you. Very good statement.

[The information follows:]

STATEMENT OF CARROLL E. LANIER

Ladies and gentlemen, I appear before you as the Chairman of the Louisiana Energy and Power Authority representing the Cities of Alexandria, Houma, Jonesville, New Roads, Morgan City, Opelousas, Lafayette, Plaquemine and Winnfield, Louisiana. This is a group of cities which have joined together to work individually and collectively and in concert with both investor-owned and coop utilities to provide our customers with firm electrical power at the cheapest rate possible.

I also represent the Cities of Alexandria, Jonesboro, Vidalia and New Roads, Louisiana, all of whom have preliminary permits from the Department of Energy on the hydro electrical plants on the proposed Lock and Dams 1, 2, 3, 4 and 5, on the Red River Waterway.

In energy conservation alone these locks and dams would save 3,265,290 barrels of oil per year or 22,075,200 MCF of natural gas per year. The five hydro facilities would have an electrical generating capacity of 210 megawatts annually and save our customers hundreds of millions of dollars in the years to come.

As an example, in my own City of Alexandria and at present day prices, Lock and Dam #2 and the proposed hydroelectrical plant would reduce my constituents' costs for electricity an estimated 12 percent today and an estimated 35 percent by 1986.

Since January of 1974, the City of Alexandria's cost of natural gas has increased by 1,559 percent and we have no reason at this time to see any relief in the future.

In summation, our request to you, gentlemen, is a resolution to the U.S. Army Corps of Engineers to include the hydro-electrical benefits to the cost benefit ratio of the Red River Waterway. We are not asking for an appropriation, in fact, quite the opposite. We propose to build the hydro-electric plants with local public funds, private funds or a combination of both. We request that the Corp of Engineers not be given the authority to do the hydro-electric portion of the project. We do have the ability to do these as pointed out.

Thank you very much for hearing and considering our request.

RESOLUTION

A RESOLUTION DIRECTED TO THE HONORABLE RONALD REAGAN AND MEMBERS OF THE HOUSE OF REPRESENTATIVES AND SENATE OF THE UNITED STATES OF AMERICA FROM THE BOARD OF DIRECTORS OF LOUISIANA ENERGY AND POWER AUTHORITY

Be it resolved by the Board of Directors of Louisiana Energy and Power Authority, a political subdivision of the State of Louisiana, with full corporate power to provide facilities for the generation and/or transmission of electric power and energy, presently having as members, the Cities of Alexandria, New Roads, Lafayette, Winnfield, Morgan City, Houma, Plaquemine, Jonesville, and Opelousas, Louisiana; that:

Section 1: This resolution be transmitted by the Chairman of the Board, Mayor Carroll Lanier, of the City of Alexandria, to the Honorable Ronald Reagan, President of the United States, and to the Honorable Members of the United States House of Representatives and Senate;

Section 2: That the said Honorable President and members of Congress are urged to do everything in their respective powers to retain existing appropriations and to provide the further appropriations necessary to the prompt and final completion of the Red River Navigation and Waterways Projects planned for the Red River in the State of Louisiana.

Section 3: In making this request, the President and the members of Congress are urged to consider, in addition to the improvements to navigation provided by the proposed Red River Projects, the benefits and advantages which would flow as a result of those projects to the citizens of the State of Louisiana in the form of hydroelectric power generation.

Section 4: This Board respectfully submits that the construction of the hydroelectric generation facilities planned for the Red River will serve to provide a continuing source of electrical energy for the consumers in the State of Louisiana (optimum utilization of a renewable natural resource), and will further serve to reduce this country's dependency on the domestic and foreign petroleum products needed to fuel gas and oil-fired electric generating units.

Section 5: For these reasons and others, this Board respectfully requests that the President and members of Congress commit themselves to the support of the propositions set forth in this resolution.

CERTIFICATE

I hereby certify that the above and foregoing is a true and correct excerpt from the Minutes of the Regular Meeting of the Board of Directors of Louisiana Energy and Power Authority held at Winnfield, Louisiana, on March 18,1981, and that the same remains in full force and effect.

SYLVAN J. RICHARD,
General Manager.

Attest:

CARROLL E. LANIER,
Chairman of the Board of Directors.

RED RIVER VALLEY PROJECTS

WITNESS

DEWEY E. BURCHETT, JR., SECRETARY, BOSSIER LEVEE DISTRICT, REPRESENTING BOSSIER LEVEE DISTRICT AND THE CITY OF BOSSIER CITY

Mr. BEVILL. Yes, sir.

Mr. WELLS. Mr. Chairman, speaking on behalf of Bossier City Levee District and the city of Bossier City, Dewey Burchett.

Mr. BURCHETT. Mr. Chairman, I am among friends, I know, and I see all of these familiar faces. I want to thank you on behalf of the board of commissioners for the Bossier Levee District for letting us appear briefly.

The Bayou Bodcau and Tributaries Project, as you know, study was authorized in 1956. Finally the project was drawn up and completed in 1965. Construction began in 1974, and then in 1977 the project appeared on President Carter's Hit List. When we are talking about taking the cuts, and we all recognize cuts are going to have to be made, I would like to respectfully remind the committee that we have taken our cuts at zero since 1977 because we have not gotten any of this money.

Basically the reason that the project appeared on the hit list, as I understand it, is the fact that the information was based on erroneous data that the project would affect in a positive way just a very few landowners, when in truth and in fact it would affect 65,000 residents of the city of Bossier City plus a major Air Force base, Barksdale Air Force Base. We have submitted into the record a

letter from the base commander that talks about the concrete slabs that were damaged recently, as recently as 2 or 3 years ago as a result of this flooding; also, Colonel Luke talks about the $113 million facility that the Federal Government has at Barksdale Air Force Base that is subject to flooding if this project is not completed.

So, briefly I would just like to bring that to the committee's attention, and ask you to look at these documents, and thank you very much, Mr. Chairman, for letting us appear.

Mr. BEVILL. We are used to hit lists. We hear them every year, you know.

Thank you very much.

[The statement of Mr. Burchett follows:]

SUMMARY OF REQUEST

This statement is presented in behalf of the Board of Commissioners of the Bossier Levee District, the City of Bossier City, and the people of Bossier and Red River Parishes, Louisiana, to urgently request that Congress rescind the legislative restrictions on the Bayou Bodcau and Tributaries Project, and that you appropriate adequate funding to the Corps of Engineers for construction on this project in fiscal year 1982.

DISCUSSION OF REQUEST

Congress, in 1956, authorized the study of the Bayou Bodcau and Tributaries Project in Bossier Parish. In 1965, after nine years of studies and delays and after a well justified plan of improvement was developed, the project was finally authorized for construction. In 1974, after another nine years of delays, studies and preconstruction planning, construction was finally begun, and the project was progressing satisfactorily.

Then, in March, 1977, this project, along with many other water resource projects throughout the Nation, was reviewed by the Department of the Army, at the request of the President, under new criteria for environmental, economic, safety and other factors. Although many other projects failed, this project passed all tests under the new review criteria; that is (1) the project will have no major adverse environmental impact, (2) the project benefits exceed the project costs, even at the new 6-3/8 percent discount rate, and (3) no credible question remains to be resolved concerning the safety of the project.

In spite of these facts, a study team, appointed by the President, arbitrarily decided that annual benefits in excess of project costs, were not adequate to offset the adverse environmental effects, and it was recommended that the project be terminated. Congress subsequently passed legislation

modifying the project and eliminating those project features that would provide the greatest benefits to the people of the area.

We have been informed that the determining factors in the decision to modify the project in 1977 were:

(1) That only 60 landowners would benefit from the project.

(2) 1560 acres of wildlife habitat would be lost.

(3) 11.6 miles of fishing stream would be lost.

(4) Annual benefits would be inadequate to offset environmental effects.

We believe the above information to be absurd and significantly in error. We think the following is more factual.

(1) Approximately 65,000 people in Bossier City and Bossier and Red River Parishes will be affected by this project.

(2) The bulk of the land clearing caused by this project has already been done by features already constructed.

(3) There will be no loss of fishing stream because Flat River is a drainage ditch and an intermittent stream that is nearly dry in late summer, and consequently has a very small fish population.

(4) The Wildlife mitigation measures of the project more than offset the adverse impacts.

(5) A federal installation, vital to the defense of the Nation, Barksdale Air Force Base, is well within the area that would be protected by the project. Under present conditions, a flood in just one year could cause millions of dollars of damage to federal property.

The Bayou Bodcau and Tributaries Project is a complex project for the solution of complex and interrelated drainage and flood control problems. Both levee construction and channel improvement work are project features each of which depends on the other for successful operation of the over-all project. At the time the project was delayed, the levee portion of the Bayou Bodcau and Tributaries Project was approximately 30% complete and no channel improvement work had been accomplished. The State of Louisiana, The Bossier Levee District, and other government agencies within the levee district have recently begun construction on the channel feature of this project. The construction of Flat River Drainage Improvements is estimated to cost $5,000,000.00 for project completion. Currently 1.2 million dollars of drainage improvements is under way and 2.5 million dollars is planned for the 1982 fiscal year. The State of Louisiana and the interested local agencies in Bossier and Red River Parishes realize the importance of this project and are spending local funds to construct the channel portion of this project.

It should be noted, however, as explained above for the project to function properly both the levee and channel features must be constructed. The Sponsors of this project cannot complete this very important project without Federal participation as their funds are committed to the extreme limits presently and in the future. Furthermore, until this project is completed the construction of the Cypress-Black Bayou Watershed Project, an authorized P.L. 566 Project for drainage, flood control, and agricultural water management cannot begin.

We are therefore urging that Congress allow the construction of the Bayou Bodcau and Tributaries Project as it was originally planned and that it be funded at a level adequate to achieve project completion at the earliest possible date.

OFFICE OF THE MAYOR
CITY OF BOSSIER CITY, LOUISIANA

MARVIN E. ANDING
MAYOR

March 13, 1981

Congressman Charles Roemer III
1725 Longworth HOB
Washington, D. C. 20515

Dear Congressman Roemer:

I am requesting that Dewey Burchett, Bossier Parish Levee Board, to deliver this letter to your office when he visits on March 23, 1981. As you know, I am in a re-election campaign which, added to my duties as mayor, requires I remain here.

The Flat River-Bodcau Bayou situation remains of great concern to us, as discussed with you in the past. While some work is underway on Flat River, south of Bossier City, there are many miles of drainage-ditch systems within and north of Bossier City which are a part of the Bodcau drainage system which now even more urgently need the major level of attention and dollars discussed for several years in the Bodcau-Flat River Project. Our city continues to grow and improve, greatly underscoring the need for immediately improving surface drainage within Bossier City. The costs of these drainage improvements exceed our ability to fund them, to a very large degree these ditches/bayous are a part of the State/Federal flood control system, and our need for improvement is immediate, not long range.

Just yesterday (3-12-81) I received calls from residents in the Plantation Park neighborhood in the city expressing concern that the heavy rains in May of this year will again subject them to flooding of their homes, since there is no evidence any progress has been made to continue the "Flat River Project" on into the city of Bossier City to improve ditch tributaries which inter-connect with the Flat River south of Bossier City.

We do recognize and appreciate your continuing assistance to this area and seek your understanding and agreement with the urgency of moving forward NOW on the Bodcau drainage improvements.

Sincerely,

Marvin E. Anding
Mayor

MEA/db

OFFICE OF THE MAYOR
CITY OF BOSSIER CITY, LOUISIANA

MARVIN E. ANDING
MAYOR

March 13, 1981

Senator Russell B. Long
217 Russell Senate Office Bldg.
Washington, D. C. 20510

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Sincerely,

Marvin E. Anding
Mayor

MEA/db

Thanks for the telegram -

OFFICE OF THE MAYOR
CITY OF BOSSIER CITY, LOUISIANA

MARVIN E. ANDING
MAYOR

March 13, 1981

Senator J. Bennett Johnston
421 Russell Senate Office Bldg.
Washington, D.C. 20510

Dear Senator Johnston:

I am requesting that Dewey Burchett, Bossier Parish Levee Board, to deliver this letter to your office when he visits on March 23, 1981. As you know, I am in a re-election campaign which, added to my duties as mayor, requires I remain here.

The Flat River-Bodcau Bayou situation remains of great concern to us, as discussed with you in the past. While some work is underway on Flat River, south of Bossier City, there are many miles of drainage-ditch systems within and north of Bossier City which are a part of the Bodcau drainage system which now even more urgently need the major level of attention and dollars discussed for several years in the Bodcau-Flat River Project. Our city continues to grow and improve, greatly underscoring the need for immediately improving surface drainage within Bossier City. The costs of these drainage improvements exceed our ability to fund them, to a very large degree these ditches/bayous are a part of the State/Federal flood control system, and our need for improvement is immediate, not long range.

Just yesterday (3-12-81) I received calls from residents in the Plantation Park neighborhood in the city expressing concern that the heavy rains in May of this year will again subject them to flooding of their homes, since there is no evidence any progress has been made to continue the "Flat River Project" on into the city of Bossier City to improve ditch tributaries which inter-connect with the Flat River south of Bossier City.

We do recognize and appreciate your continuing assistance to this area and seek your understanding and agreement with the urgency of moving forward NOW on the Bodcau drainage improvements.

Sincerely,

Marvin E. Anding
Mayor

MEA/db

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 2D COMBAT SUPPORT GROUP (TAC)
BARKSDALE AIR FORCE BASE, LOUISIANA 71110

20 March 1981

Honorable Marvin E. Anding
Mayor of Bossier City
635 Barksdale Blvd
Bossier City, LA 71111

Dear Mayor Anding

I am aware of your continuing efforts to improve drainage and eliminate flooding problems in Bossier City. I certainly share your concern as both Barksdale Air Force Base and Bossier City depend on Cooper's Bayou and Red Chute Bayou for drainage of flood waters. These channels collect run-off from areas to the north of Bossier City and pass through the base with addition of heavy run-off from our expanse of airfield pavements and developed areas. Over the years, these primary channels have been dredged and improved through the city and the base, but a significant problem area exists at our southern boundary. Cooper's Bayou and its tributary, Mack's Bayou, feed into an unimproved drainage system to the south. This acts as a natural barrier to flow and creates severe flooding on Barksdale Air Force Base.

As you have noted within the city, flooding has become an increasing problem with continued residential and commercial development to the north. Although I realize that Louisiana law states that the downstream estate must receive the water of the upstream estate, I am concerned that the construction of homes north and northeast of Barksdale is outpacing the ability of the base's drainage systems to accommodate the additional run-off.

The base is now experiencing flooding conditions several times a year during intense rainfall. We have noted through the years that Red Chute Bayou, Cooper's Bayou, Mack's Bayou and Flat River have run bank full even with moderate rains. We attribute this to faster run-off from the north of the base as well as slower run-off from streams, including Flat River, south of the base that ultimately into Red River.

During heavy storms, many of our main thoroughfares become impassable and flood waters rise to within a few feet of our airfield pavements. A less dramatic, but equally serious consequence of increasing water levels became apparent in the fall of 1978 with the failure of subbase beneath the north and south ends of our runway. A total of 36 concrete slabs had to be replaced to insure continued airfield use. Further, the growing threat of flooding places at risk a real property investment of 113 million dollars including 913 base buildings and 1,034 family housing units.

I am convinced that flooding problems for both Bossier City and Barksdale Air Force Base will not be alleviated until the drainage system to the south is improved. I refer specifically to the Flat River system which serves as the sole drainage channel for all lands lying between the Red River levee on the west and the Red Chute levee on the east. The proposed Corps of Engineer project to improve the Flat River is essential to the solution of this growing problem.

I realize that neither of our budgets or resources are adequate to meet the need for Flat River improvement, but unless we combine forces and make our voices heard, this essential project will once again be delayed. The ultimate result will be worsened flooding in and around Barksdale Air Force Base and Bossier City. My staff and I stand ready to assist you in any way possible to gain reinstatement of the Flat River project.

Sincerely

Guy D. Luke

GUY D. LUKE, Colonel, USAF
Commander

Mr. WELLS. Mr. Chairman, I think that concludes our speakers. I would like to reiterate what most all of our speakers, and I think all of them, not most of them, said, that our Red River Valley Association met in the first week or so of February, and it was unanimous at that time that we recognized the budget cuts and inflation period we are living in, and our 500-member association went on record at that time that that was going to be our stance when we came to Washington, that we would recognize cuts in funding and so forth as long as it was done on a share-and-share-alike basis.

I would like to show you a little map of what we have completed down here on the Red River. The green are projects that have been completed on these sections of the Red. It is rather impressive, the revetments, the cutoffs, the realined river realinements and so forth. We are willing to postpone the completion date of Red River, and we would hope that this committee could impress that on the Congress, that we would like to have our fair share of funding on Red River, as long as it is cut across the board and across the Nation, and with that we thank you for the time, and it is a pleasure being here with you again.

Mr. BEVILL. Thank you; very good.

Mrs. BOGGS. Mr. Chairman, I think maybe they should tell us how much Louisiana has already participated in this program, and what the assurances are from the State for the project.

Mr. HINGLE. The seven parishes that are affected by the Red River, the residents of those parishes in late 1960 voted a 7-mill tax upon themselves. To date we have raised some $20 million. Of that, $8 million has been expended by the Red River Waterway Commission for purchases of property and damages to property. We anticipate spending some $90 million as the State's share of the project, $45 million as cash contributions to the Corps of Engineers, and $45 million for purchase of property.

I believe we are the only project that has been authorized to do this. I believe the Arkansas River, when it was authorized, the Corps of Engineers picked up the entire cost. The State did not contribute anything.

Mrs. BOGGS. And I was very pleased that you have so many people here from Texas and Arkansas and Oklahoma, because one of the criticisms that I understand was leveled at the project at OMB is that it is a single-State project. And you obviously do not think this is a fair criticism, since all of you are here supporting it.

Do you feel that other States in the region will benefit from the completion of the project?

Mr. WELLS. I think the testimony here today bears that out. We have had the representatives from Arkansas—for some reason Oklahoma did not show up.

Mr. WATKINS. We did not have the money to get here.

Mrs. BOGGS. We have Mr. Watkins protecting your interests.

Mr. WELLS. That is good.

Mr. TANNER. Mr. Watkins was working at it yesterday, too.

Mr. WELLS. I have been a member of this Red River Valley Association for some 25 or 30 years, and I do not know of a time that we ever had any argument amongst the four States. We have always been together and supportive of a navigation project from

the confluence, the Red runs into the Atchafalaya on up, and Red River Valley Association recently completed a study there, Shreveport to Daingerfield, that cost in the neighborhood of $50,000, of the economic benefits of trying to extend from Shreveport to Daingerfield. So as far as I know, there is complete harmony amongst the States along the Red River.

For the benefit of the Committee that river is about 1,250 miles long, and really affects some other areas that are outside of the States of Oklahoma, Arkansas, Texas, and Louisiana.

Mrs. BOGGS. Do you think it is important we make certain, as Mr. Long suggested in his testimony, that Lock and Dam No. 2 is indeed begun so we will be assured of the continuation of this project?

Mr. WELLS. Mrs. Boggs, Lock and Dam No. 1 would be no good without Lock and Dam No. 2. There five pool stages to be put into effect with the five locks and dams, and each one of them stands on its own footing. To complete Lock and Dam No. 1 without Lock and Dam No. 2, the pool stage put into effect by Lock and Dam No. 1 would put a pool upstream of something like 16 miles that would end below Marksville, Louisiana, where there is nothing but wooded areas and soybean areas down there; sparsely inhabited. It would not put a navigation pool to Alexandria.

The second lock and dam would be something like 12 miles below Alexandria, which is your first major big town on the Red River. We are an incorporated limits of about 60,000 people encompassing about 140,000 in the area there near Alexandria. It would take Lock and Dam No. 2 to forward us pool stage at Alexandria.

Mrs. BOGGS. Thank you very much.

Thank you, Mr. Chairman.

Very good, very good presentation.

Mr. WATKINS. Mr. Chairman, I know my friend from Indiana said the briefer we are the more money we get. I do not know how much money we started with, but I want to be very brief, because we cannot afford to lose too much. I would like to say to all of you I appreciate your dedication and interest in being here, and I want you to know we appreciate the Red River Valley Association. Miss Lindy and I started a new coalition, though, this week. We call it the Red River Rednecks. So we want you to know we have got 20, we think we have more than that, on this committee; and we appreciate it and we hope you will include the entire segment of Red River in your promotion, all the way up to Denison Dam, along the back door where I grew up a boy, right in the Bryan County area. So we hope instead of seeing separate segments we can look at it in total, just as the Arkansas was developed, because that is the way we can make sure that all four States plug in there and keep working hard to get it.

So I appreciate all of this very much, and I do not want to reduce that amount of money I know Mr. Myers has in for it, so I will stop right now.

Mr. WELLS. Thank you very much.

Mr. BEVILL. Very good. Thank you.

TUESDAY, MARCH 24, 1981.

PORT OF NEW ORLEANS

WITNESSES

HERBERT R. HAAR, JR., ASSOCIATE PORT DIRECTOR, PORT OF NEW ORLEANS
SAM GIALLANZA, SENIOR VICE-PRESIDENT, NEW ORLEANS STEAMSHIP ASSOCIATIION
CHANNING F. HAYDEN, JR., VICE PRESIDENT—RESEARCH, NEW ORLEANS STEAMSHIP ASSOCIATION
CAPTAIN DANIEL R. MEYERS, JR., PRESIDENT, ASSOCIATED BRANCH PILOTS FOR PORT OF NEW ORLEANS
NED REED, PORT DIRECTOR, PORT OF NEW ORLEANS

Mr. BEVILL. Mr. Haar, we are pleased to have you with us again, and you may introduce your associates and proceed as you wish.

Mr. HAAR. Thank you very much, Mr. Chairman. It is a pleasure to be back again to appear before your Committee. I have with me today Ned Reed, our Port Director from the Port of New Orleans, on the extreme right, and Sam Giallanza next to me on the right, who is Senior Vice President with the New Orleans Steamship Association, and Captain Dan Meyers, who is President of the Associated Branch Pilots, who bring all of the ships in through the mouth of the Mississippi River.

I would like to first, Mr. Chairman, present a summary of my full statement, but I would like to request that the full statement be included in the record.

Mr. BEVILL. Permission is granted.

[The information follows:]

SUMMARY OF TESTIMONY OF THE BOARD OF COMMISSIONERS OF THE PORT OF NEW ORLEANS BY HERBERT R. HAAR, JR., ASSOCIATE PORT DIRECTOR IN REFERENCE TO THE FOLLOWING PROJECTS

1. Mississippi River-Gulf Outlet, La., New Ship Lock

It is recommended that the Congress provide $1,050,000 which represents the Corps of Engineers' capability and the figure in the President's Fiscal Year 1982 budget for the Mississippi River-Gulf Outlet, Louisiana, under Construction General, which includes this project. This project will result in hundreds of new jobs during construction and over 10,000 permanent new jobs during the life of the project after completion. The design for the New Lock is underway by the New Orleans District Engineer, and this project is considered the second most important navigation project in the Nation.

2. Repairs to jetties, dikes and maintenance dredging of Southwest Pass and maintenance dredging of the Mississippi River from Baton Rouge to the Gulf and construction of New Anchorage area

These deficiencies resulted in part in the inability of the Corps of Engineers to maintain project depth in the Mississippi River Passes during most of 1973, a good part of 1974, and from March 1 to August 4, 1975, with an impact of over $500,000,000 in foreign trade being detained at the Ports of New Orleans and Baton Rouge, during the year 1974. It is therefore strongly recommended that the full Corps of Engineers' capability of $41,873,000 for Operation and Maintenance, General Funds, be appropriated by the Congress rather than the $26,073,000 that is included in the President's Fiscal Year 1982 Budget and that the Corps' full capability of $4,400,000 under Construction General be appropriated by the Congress which is the same figure contained in the President's Fiscal Year 1982 Budget.

3. Mississippi River-Gulf Outlet, La., maintenance dredging

It is recommended that Operation and Maintenance, General Funds in the amount of $11,600,000 for Fiscal Year 1982 be appropriated by the Congress which is greater than the figure included in the President's budget for this item ($7,089,000).

4. Fifty-Five foot channel for Lower Mississippi River

It is recommended that the Corps of Engineers be directed to develop their final plans for this project on the basis of full Federal funding as has been the case on previous deepenings of this segment of the waterway which serves all of mid America. In the event the fast track legislation is enacted then it is recommended that $4,500,000 be authorized to continue planning for this project in Fiscal Year 1982.

5. Environmental Impact Statements (EPA/Corps), study of dredged material ocean dump sites

It is recommended that the Corps of Engineers be provided $5,000,000 in Fiscal Year 1982 to insure the timely accomplishment of this project which is required under the London Ocean Dumping Convention and U.S. law.

TESTIMONY OF HERBERT R. HAAR, JR.

Mr. Chairman, I am Herbert R. Haar, Jr., Associate Port Director of the Port of New Orleans. I am here to testify for the Board of Commissioners of the Port of New Orleans, a unit of local government of the State of Louisiana, on six projects of vital interest to the development of Louisiana, neighboring Gulf States, and the Nation. The Port of New Orleans area is the No. 1 grain exporter in the world; the No. 2 port in the Nation with an estimated value of $15 billion in foreign commerce in Calendar Year 1980; and one of the top five ports in the world with 287 million tons (freight and through traffic) moving through its area in 1978. Continued growth and development of the port is being inhibited by the lack of adequate deep-water channels (40 Feet Actual vs. 55 feet being studied) for the larger vessels now in world commerce and also by frequent occurrences in recent years of less than authorized project depths at the Mouth of the Mississippi River caused by heavy silting in Southwest and South Passes.

The Port of New Orleans is the second port in the nation, and the Port of Baton Rouge 125 miles upriver is the fourth. Both are entirely dependent upon timely and adequate dredging of the Southwest Pass to provide access to the Gulf. In only three years, 1972, 1976, and 1977, out of the past nine has full project depth been maintained by the Corps of Engineers at Southwest Pass for the entire high water season.

This shoaling of the mouth of the Mississippi is not just a local problem. It is of national concern with serious consequences to the economic health of the Nation. Nineteen thousand miles of inland waterways, serving a third of the United States, converge on the Port of New Orleans. More grain moves through the Port than any other port in the world. The importance of this situation is highlighted by the fact that in 1980 the estimated value of the foreign trade in the lower Mississippi River was $40 billion.

Of equal importance to improved dredging equipment is the maintenance and improvement of various structures that make up the training works of Southwest Pass. It is, therefore, strongly recommended that the full Corps of Engineers' capability of $41,873,000 be appropriated by the Congress rather than the $26,073,000 included in the President's Fiscal Year 1982 Budget under the maintenance project entitled, "Mississippi River, Baton Rouge to the Gulf of Mexico, Louisiana." It is also requested that the Corps' capability of $4,400,000 for Fiscal Year 1982 for construction of pile dikes in Southwestern Pass be provided by the Congress which is the same figure contained in the President's Budget for Construction, General, for this project.

A new lock to connect the Mississippi River and the Mississippi River-Gulf Outlet has been long authorized by the Congress and is in a design status. The existing 58 year old lock built by the Port of New Orleans and leased to the Corps of Engineers, New Orleans District, is in need of a major overhaul. This undersized lock, now providing this connection, has been carrying its peak design capacity tonnage for years with increasing delays experienced by waterway operators transiting the lock. The Corps has estimated tonnage demand for this lock will increase at the rate of 1 million tons per year for the next 50 years. The Governors of Alabama, Arkansas, Iowa, Louisiana, Mississippi, Oklahoma and South Dakota have gone on record previously in strong support of this project. This project is vitally important to the future of the Port of New Orleans, the entire Mississippi Valley, all of the Gulf

States and has been classified by a former Chief of the U.S. Army, Corps of Engineers as the second most important navigation project in the United States.

In addition to the Mississippi River, the Port of New Orleans is serviced by the Mississippi River-Gulf Outlet. The Port's first three full container berths have been completed within the past several years and a fourth will soon be put in service, and numerous other port facilities and industries depend solely on this dredged 36 foot deep channel. The number of passages of deep-sea vessels through this channel has more than doubled in the last ten years and totaled almost 1600 passages in 1979. Deep and shallow draft vessels carrying 10 million tons of cargo in foreign and domestic commerce used the channel in 1979. Traffic in this channel is projected to increase almost 10 percent per year, and it is conservatively projected that this cargo will exceed 20 million tons in the next decade. It is recommended that $11,600,000 for fiscal year 1982 be appropriated by the Congress which is greater than that included under operation and maintenance general funds in the President's fiscal year 1982 budget for this item ($7,089,000) but less than the Corps' capability of $16,089,000.

A fifty-five foot channel for the lower Mississippi River from Baton Rouge to the Gulf is urgently needed to service the foreign trade and commerce of the midAmerican hinterland which accounts for 35 percent of the population; 34 percent of the purchasing power; 41 percent of the productive industry; and 40 percent of the employment of the United States. Over 572,181,000 tons of waterborne commerce (over one-fourth of the Nation's total) moved through this area in calendar year 1978. Additionally, exported coal from the Port of New Orleans area was only a million and a half tons in 1979 and is expected to reach 7 million tons in 1980. But present Port of New Orleans projections (based on actual announced development projects) show that this tonnage could increase to approximately 60 million tons by 1983 and double that figure by 1990.

Some of the reasons U.S. coal exports surged during 1980 may be temporary. Domestic unrest and economic uncertainty in Poland, labor disputes in Australia, political sensitivity about dealing with South Africa, the Iran-Iraq War, the continued rises in oil prices including the cost of tanker fuel, all contributed to the escalation in U.S. coal export demand. However, energy planners around the world predict that the world demand for steam coal will continue to rise dramatically from now through the end of this century.

Meanwhile, our competitors are moving aggressively to advance their positions in world trade. Australia, South Africa, Canada and Poland are major exporters of coal on the world market. The first three countries will comprise the major U.S. competition for markets in Western Europe and Asia through the end of this century. These countries are moving quickly to update their port facilities and harbors, to improve shipping and loading facilities, and to enlarge the world coal fleet to achieve economies of scale. For example, Port Kembla and Newcastle, coal ports in Australia which serve primarily steam coal customers, will be able to accommodate substantially larger vessels (110,000 dwt.) by mid-1982. These very large colliers can move to Europe at costs perhaps 35–40 percent below existing costs. This would make ocean freight rates from Australia roughly comparable with present U.S. freight rates to Western Europe.

South Africa, too, is expanding a major port at Richards Bay. It is expected to be completed by 1985. It will handle 150,000 dwt. vessels. This modern facility represents significant public and private investment to advance coal exports.

Canada is currently engaged in negotiations to supply $400 million of coal a year to Japan—4.7 million metric tons of metallurgical and 1 million metric tons of steam coal. The contract is reportedly dependent upon a $1.7 billion promise of investment in mines, railroads, ports and other facilities to enable the Japanese to load coal.

Other countries are moving decisively to make the public investments which will attract a greater steam coal export trade. In order to achieve its potential market share, the U.S. must also be willing to commit public resources to create the supporting structures necessary for coal export.

By lowering the delivered cost of U.S. coal through port and channel improvement, the United States enhances its competitive position. Predictions of coal buyers' market behavior are highly uncertain; however, failure to take any action to improve our ports may be viewed by potential customers and allies as inconsistent with our national commitment to make coal available for export. Finally, it should be clear that enhancing coal exports, as part of the international effort to increase the production and use of coal, produces benefits beyond those directly attributable to ocean shipping.

General Read, Division Engineer for the Corps of Engineers for Lower Mississippi Valley Division, in his testimony before your Subcommittee recently stated that in

the event congressional authorization was forthcoming in the near future for the fast tracking of the deepening of the lower Mississippi River to 55 feet that $4-½ million would be needed to continue planning for this project in fiscal year 1982. I would hope that if this situation develops that you gentlemen would see fit to support such a level of funding.

A critical need which is vital to the ports of this nation is early resolution of problems in disposal of dredge spoil through ocean dumping or alternate means. The conditions stem from the London Ocean Dumping Convention and the U.S. Marine, Protection Research, and Sanctuaries Act of 1972 which requires an Environmental Impact Statement for each dump site before the permit is issued. There are approximately nationwide 130 dredged material ocean dump sites which must be studied by the Corps of Engineers preliminary to evaluation by the EPA. Accordingly, it is recommended that the Corps of Engineers be provided $5 million in fiscal year 1982 for this purpose.

I have with me representatives of the New Orleans Steamship Association, Associated Branch Pilots and Crescent River Port Pilots to file and make brief statements in support of the projects that the Port of New Orleans has recommended. We especially call your attention to Capt. Meyers' of the Associated Branch Pilots testimony on the need for the Pilottown anchorage which we fully support.

Mr. HAAR. Mr. Chairman: I am Herbert R. Haar, Jr., Associate Port Director of the Port of New Orleans. I am here to testify for the board of commissioners of the Port of New Orleans, a unit of local government of the State of Louisiana, neighboring Gulf States, and the Nation. The Port of New Orleans—I might say that is the 234-mile stretch from Baton Rouge to the Gulf, the deepwater portion, which was $40 billion in 1980—area is the number 1 grain exporter in the world, and the number 2 port in the Nation, with an estimated value of $15 billion in foreign commerce in calendar year 1980; and one of the top five ports in the world, with 287 million tons (freight and through traffic) moving through its area in 1978. Continued growth and development of the port is being inhibited by the lack of adequate deepwater channels (40 feet actual versus 55 feet being studied) for the larger vessels now in world commerce, and also by frequent occurrences in recent years of less than authorized project depths at the mouth of the Mississippi River caused by heavy silting in Southwest and South Passes. Southwest Pass is the last 21 miles of the river before you get into the open Gulf.

It is, therefore, strongly recommended that the full Corps of Engineers' capability of $41,873,000 be appropriated by the Congress rather than the $26,073,000 included in the President's Fiscal Year 1982 Budget under the maintenance project entitled "Mississippi River, Baton Rouge to the Gulf of Mexico, Louisiana." It is also requested that the Corps' capability of $4,400,000 for Fiscal Year 1982 for construction of pile dikes in Southwest Pass be provided by the Congress, which is the same figure contained in the President's Budget for Construction, General, for this project.

A new lock to connect the Mississippi River and the Mississippi River-Gulf Outlet has been long authorized by the Congress and is in a design status. The existing 58-year-old lock built by the Port of New Orleans and leased to the Corps of Engineers New Orleans District is in need of a major overhaul. This undersized lock, now providing this connection, has been carrying its peak design capacity tonnage for years, with increasing delays experienced by waterway operators transiting the lock. The Corps has estimated tonnage demand for this lock will increase at the rate of 1 million tons per year for the next 50 years. We therefore recommend the

$1,050,000 in the President's Budget be appropriated for this project in Fiscal Year 1982.

There are numerous other ports and port facilities and industries that depend solely on an alternate channel called the Mississippi River-Gulf Outlet. The number of passages of deep-sea vessels through this channel has more than doubled in the last 10 years and totaled almost 1,600 passages in 1979. Deep- and shallow-draft vessels carrying 10 million tons of cargo in foreign and domestic commerce used the channel in 1979. Traffic in this channel is projected to increase almost 10 percent per year, and it is conservatively projected that this cargo will exceed 20 million tons in the next decade. It is recommended that $11,600,000 for fiscal year 1982 be appropriated by the Congress which is greater than that included under operation and maintenance general funds in the President's fiscal year 1982 budget for this item ($7,089,000), but less than the Corps' capability of $16,089,000. I might just mention, sir, the problem here is that Mount St. Helens and the hurricane that hit the Gulf coast caused the diversion of funds by the Office of Chief Engineers from this project; that caused such a shortfall during the current fiscal year that they have not been able to do the maintenance dredging that was scheduled, and we have had extensive shoaling as a result of that, and now we are trying to play catchup ball.

A 55-foot channel for the lower Mississippi River from Baton Rouge to the Gulf is urgently needed to service the foreign trade and commerce of the mid-America hinterland which accounts for 35 percent of the population, 34 percent of the purchasing power, 41 percent of the productive industry, and 40 percent of the employment of the United States. Over 572,181,000 tons of waterborne commerce (over one-fourth of the Nation's total) moved through this area in calendar year 1978. Additionally, exported coal from the Port of New Orleans area was only a million and a half tons in 1979 and is expected to reach 7 million tons in 1980. But present Port of New Orleans projections (based on actual announced development projects) show that this tonnage could increase to approximately 60 million tons by 1983 and double that figure by 1990.

Peabody Coal Company has stated the following in support of deepening the Mississippi River from Baton Rouge to the Gulf:

> Some of the reasons U.S. coal exports surged during 1980 may be temporary. Domestic unrest and economic uncertainty in Poland, labor disputes in Australia, political sensitivity about dealing with South Africa, the Iran-Iraq war, the continued rises in oil prices including the cost of tanker fuel, all contributed to the escalation in U.S. coal export demand. However, energy planners around the world predict that the world demand for steam coal will continue to rise dramatically from now through the end of this century.
>
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Other countries are moving decisively to make the public investments which will attract a greater steam coal export trade. In order to achieve its potential market share, the U.S. must also be willing to commit public resources to create the supporting structures necessary for coal export.

By lowering the delivered cost of U.S. coal through port and channel improvement, the United States enhances its competitive position. Predictions of coal buyers' market behavior are highly uncertain; however, failure to take any action to improve our ports may be viewed by potential customers and allies as inconsistent with our national commitment to make coal available for export. Finally, it should be clear that enhancing coal exports, as part of the international effort to increase the production and use of coal, produces benefits beyond those directly attributable to ocean shipping.

General Read, Division Engineer for the Corps of Engineers for the Lower Mississippi Valley Division, in his testimony before your Subcommittee recently stated that in the event congressional authorization was forthcoming in the near future for the fast-tracking of the deepening of the lower Mississippi River to 55 feet that $4½ million would be needed to continue planning for this project in Fiscal Year 1982. I would hope that if this situation develops that you gentlemen would see fit to support such a level of funding.

A critical need which is vital to the ports of this Nation is early resolution of problems in disposal of dredge spoil through ocean dumping or alternate means. The conditions stem from the London Ocean Dumping Convention and the U.S. Marine, Protection Research, and Sanctuaries Act of 1972 which requires an Environmental Impact Statement for each dump site before the permit is issued. There are approximately nationwide 130 dredged material ocean dump sites which must be studied by the Corps of Engineers preliminary to evaluation by the EPA. Accordingly, it is recommended that the Corps of Engineers be provided $5 million in Fiscal Year 1982 for this purpose.

Captain Dew Cross, president of the Crescent River Port Pilots, had planned to be with us, but at the last minute he was unable to come. But I would like to have his statement, sir, included with my record testimony.

Mr. BEVILL. Permission is granted.

Mr. HAAR. Thank you, sir. They would like to make brief statements in support of the projects that the Port of New Orleans represents. We especially call your attention to Captain Meyers' of the Associated Branch Pilots testimony on the need for the Pilottown anchorage, which we fully support.

Before I call on Mr. Giallanza, I would like to just thank this Subcommittee for your support in recent years that has allowed the large new hopper dredges for the Lower Mississippi Valley Division to now be in the final stage of completion and to be coming on line later this year. This will be of great assistance in our problems in

Southwest Pass and other ports in the Gulf coast, so we are most appreciative of the fine support you have provided in the funding of this dredge.

Sir, this concludes my testimony, and I would like to ask Mr. Giallanza to give a short statement.

Mr. BEVILL. Mr. Giallanza.

STATEMENT OF SAM GIALLANZA

Mr. GIALLANZA. Mrs. Boggs, Mr. Bevill, Mr. Myers, it is an honor to be here. I am Sam Giallanza, a Senior Vice-President of the New Orleans Steamship Association. I would like to introduce Channing Hayden, Vice-President of our association in charge of research. Our membership, some 70 steamship owners, operators, agents, and stevedores, represents hundreds of ship owners in international commerce. Our members serve the public and private facilities on the Mississippi River from the Gulf of Mexico to Baton Rouge and on the Mississippi River-Gulf Outlet.

We fully endorse the testimony of Colonel Haar of the Board of Commissioners of the Port of New Orleans. The projects he mentioned are vitally important to the international commerce of the Lower Mississippi River.

In the interest of time, I will touch upon only a portion of my written statement now while requesting that my full written statement be included in the record.

Mr. BEVILL. It will be included.

[The information follows:]

SUMMARY OF TESTIMONY OF SAM GIALLANZA, SENIOR VICE PRESIDENT OF THE NEW ORLEANS STEAMSHIP ASSOCIATION, IN REFERENCE TO THE PROJECTS OF PUBLIC INTEREST IN THE PORT AREAS OF NEW ORLEANS AND BATON ROUGE

1. Repairs to jetties, dikes and maintenance dredging of Southwest Pass and maintenance dredging of the Mississippi River from Baton Rouge to the Gulf and construction of new anchorage area

The Lower Mississippi River from the Gulf to Baton Rouge, ranks as the No. 1 grain exporting port in the world, the No. 2 port of the United States, and a leading world port. If the cargo-carrying capacities of vessels are again restricted by reduced entrance channel depths, this area will rapidly lose its status as a leading port, and this will have a detrimental effect on the National economy. The President's Budget Appropriation of $26,073,000 could result in an increase in the cost to the Corps of maintaining the project channel in the future. We urge that the Corps of Engineers' full Fiscal Year 1982 capability of $41,873,000 for Operation and Maintenance, General, Mississippi River, Baton Rouge to the Gulf, be appropriated. The additional $15.5 million would be used for training dikes at Southwest Pass, an investment which will save significant dredging costs in future years. The President's Budget fully funds the Corps' Construction, General, Mississippi River, Baton Rouge to the Gulf capabilities. We urge approval of this $4,400,000.

2. The Mississippi River-Gulf Outlet maintenance dredging

The number of vessels using the Mississippi River-Gulf Outlet has continued to increase. Located on this waterway are the Port's Bulk Handling Plant, the new container facilities, the ro-ro terminal and additional facilities under construction which provide newer cargo handling methods to accommodate the larger ships now serving international trade. It is recommended that $11.6 million be appropriated for Operation and Maintenance, General Funds, Mississippi River-Gulf Outlet. While this is $4.5 million higher than the President's Budget, it is $4.5 million less than the Corps' full capability. The additional money will be used to restore this channel to project dimensions.

3. The Mississippi River-Gulf Outlet New Ship Lock

The design for the urgently needed new ship lock is now underway. This lock once in operation will relieve existing hazardous congestion and costly delays to naviga-

tion as well as to enable the economic growth development of water-oriented industries along the Mississippi River and the Mississippi River-Gulf Outlet and to maintain viability and promote the future growth of the Port area of New Orleans. It is urged that the Congress provide the $1,050,000 as requested in the President's Budget for Fiscal Year 1982, to satisfy the Corps of Engineers' capability for continuing this project.

4. Fifty-five foot Channel for Lower Mississippi River

It is recommended that the Corps of Engineers be directed to develop with all deliberate speed their final plans for this project on the basis of full Federal funding as has been the case on previous deepenings of this segment of the waterway which serves all mid-America.

PREPARED TESTIMONY OF S. GIALLANZA, SENIOR VICE PRESIDENT OF THE NEW ORLEANS STEAMSHIP ASSOCIATION

Mr. Chairman, my name is S. Giallanza. I am Senior Vice President of the New Orleans Steamship association, whose membership comprises seventy steamship owners, operators, agents and stevedores in the Port of New Orleans, associated with hundreds of ship owners in international commerce.

I am here today to testify in behalf of four projects vital to the future development of foreign commerce in the Port of New Orleans, as well as the innumerable facilities on the Lower Mississippi River from the Gulf to Baton Rouge. These projects, listed below, have impact on the national level in terms of the United States' ability to remain competitive in world trade and should be funded as noted below.

1. Repairs to jetties, dikes and maintenance dredging of Southwest Pass and maintenance dredging of the Mississippi River from Baton Rouge to the Gulf and construction of new anchorage area.
2. Maintance Dredging of the Mississippi River-Gulf Outlet.
3. Continuation of the Design Program of the Mississippi River-Gulf Outlet New Ship Lock.
4. Development of final plans for the Fifty-Five Foot Channel for Lower Mississippi River.

The importance of maintaining project channel dimensions to the economy of this area is only surpassed by the need for increased channel depths to accommodate the growth in ships' sizes needed to accommodate foreign trade. The economy of larger vessels has been proven by all maritime nations of the world. The growth in vessel sizes includes all classes—tankers, bulk carriers, OBOs, Ro-Ros, barge carriers and container vessels.

The Mississippi River deepwater ports, so essential to our nation's economy and defense, continue to experience rapid growth. In 1978 (latest figures available), the Corps of Engineers' statistics reflected that 572,181,000 tons of waterborne commerce, a 20 percent increase over 1976, was moved through the Lower Mississippi from Baton Rouge to the Gulf.

New Orleans, located at the mouth of the Mississippi River, is a natural port for the most modern concept in ocean commerce—the barge-carrying vessel. In past years, several of our member companies, operators of LASH and SEABEE vessels, have been forced to divert some of their scheduled New Orleans calls to other Gulf ports to offload before calling at New Orleans and then call again at another port to topoff before sailing foreign. The diversion to other ports, necessitated by shoaling in Southwest Pass, involved added costs running into millions of dollars as well as the loss of employment opportunities in our area.

Until 1960, our port area was served by one grain elevator; this year 12 elevators will supply grain to vessels. The Continental Grain Elevator is being rebuilt following an explosion in December of 1977 and is expected to be back to full operation this year. The Lower Mississippi River is the leading grain exporting area of the world. Of the more than 1,780 vessels that annually load millions of tons of grain at these elevators, nearly all are of the larger bulk-carrier and tanker class; and many, because of shoaling and/or insufficient project draft at Southwest Pass, are forced to sail with slack holds.

If we are to continue as the No. 1 grain exporting area, the No. 2 port of the United States, and a leading world port, we must be able to efficiently serve the larger, more efficient vessels. To do so, the entrance to our port, Southwest Pass, must not only be maintained at all times at its authorized project depth, it must be deepened.

In addition to the approximately 55 million tons of grain moved in 1980, millions of tons of petroleum and petroleum products, again carried by large vessels, were

moved to and from refineries located on the river between Baton Rouge and the Gulf of Mexico.

The number of vessels that exceed 100,000 deadweight tons calling on the Lower Mississippi River is constantly increasing. There were 681 vessels during 1980 in excess of 100,000 deadweight tons which transited Southwest Pass. This is 27½ percent more than the number of vessels of this class that called during 1978.

We make a special appeal for appropriation of funds for Fiscal Year 1982 to maintain New Orleans as a deepdraft port and to avoid in future years the serious silting problems that existed in Southwest Pass in the past. The following data reflects the shoaling in the Pass which has restricted the movement of world commerce through the Lower Mississippi River.

HISTORY OF DAYS DURING WHICH SOUTHWEST PASS WAS LESS THAN PROJECT DEPTH

Year	Less than 40 feet at Southwest Pass
1970	205 Days—56.2%
1971	139 Days—38.1%
1972	0 Days—0%
1973	278 Days—76.2%
1974	227 Days—62.2%
1975	157 Days—43.0%
1976	0 Days—0%
1977	0 Days—0%
1978	0 Days—0%
1979	94 Days—25.7%
1980	60 Days—16.4%

It should be noted that beginning in 1979, after three full years of project depth, we were again faced with draft restrictions at the entrance to the Mississippi River.

An an example, during a period of restriction we made a study of 50 of the many vessels that were unable to load their full cargoes as a result of siltation in the Pass. These vessels, only a few of the 7,500 that call at this Port area annually, left behind 350,000 tons of foreign commerce valued at more than $50,000,000. This tonnage, forced to be withheld from export, deprived this area of millions of dollars in economic benefits. On the current market the value of this cargo would be greatly increased. Recently, during a period of shoaling, a bulk carrier of 122,266 deadweight tons was limited to a loading draft of 36 feet rather than the project depth of 40 feet. This vessel was forced to leave behind 11,328 tons of cargo that had a market value in excess of $1.2 million.

We cannot emphasize too strongly that draft restriction will have a detrimental effect on the future of the Mississippi River Port facilities and the important Mississippi Valley they serve. The inability to constantly maintain project depth deters charterers and owners from entering into contracts for loading full cargoes of bulk commodities at local port facilities due to the uncertainty of the controlling draft. The uncertainty of channel depths will cause the entire area from the Gulf to Baton Rouge to become a penalty port area.

As can be seen, one of the most important and difficult jobs in our area is maintaining the 40 foot project dimension at Southwest Pass. The President's Budget for Operation & Maintenance, General, Mississippi River, Baton Rouge to the Gulf is $26,073,000. The Corps capability in this area is $41,873,000. The additional $15.5 million, if approved, would provide for training dikes at Southwest Pass. These dikes would use the flow of the river itself to help maintain the project depth of the channel. Such dikes would tend to lower dredging costs in the future. We appreciate the need to reduce federal expenditures; however, current investments in this project would result in Federal cost savings in the future.

We urge the approval of the President's Budget of $4.4 million for Construction, General, Mississippi River, Baton Rouge to the Gulf.

For many years now, I have appeared before you requesting funds for the construction of a Large Class Hopper Dredge for our District. I am happy to report that no additional funds for this project are needed. The project is on schedule and is expected to be completed this year. Please accept the thanks of the entire deepdraft industry on the Lower Mississippi River for your support and, more importantly, the money to see this project to completion.

The growth of the Port of New Orleans extends to the Bulk Handling Plant and the Port's container and ro-ro facilities, among other, located on the Mississippi

River-Gulf Outlet. This seaway has a project depth of 36 feet. Shoaling has resulted in the loss of porject draft. We request that the Congress appropriate $4.5 million over the President's Budget of $7,089,000 for Operations & Maintenance, General, Mississippi River-Gulf Outlet. This will still result in funding at $4.5 million less than the Corps' capabilities.

The Public Bulk Terminal and the container terminal are located on the Mississippi River-Gulf Outlet while the grain facilities, many LASH/SEABEE terminals, and the public wharves are located on the Mississippi River. An adequate route between the Mississippi River-Gulf Outlet and the river is essential. The shortest and most efficient route is an antiquated 50 year old lock with a width of 75 feet and limited to a depth of 30 feet. Its maximum capacity has long been exceeded. The waiting time for passage through the lock at present averages from 8 to 10 hours, however, waiting time on occasion has been in excess of 24 hours.

An adequate ship lock, 150 feet by 1200 feet by 50 feet, has been authorized; and we urge that Congress provide $1,050,000 to support the Corps of Engineers' capability for continuing the design of this project. This amount was included in the President's Budget for Fiscal Year 1982.

The need to deepen the channel serving the deep water area of Louisiana is under scored by the potential growth of two export cargoes—grain and coal. In 1960, the first pro rate grain elevator was built in New Orleans. By 1980, after several additional elevators had been built, grain exports had grown to 55 million tons per year on the Lower Mississippi. This tremendous and continuing growth lends credence to the predictions of further growth in grain exports. Studies by the Board of Commissioners of the Port of New Orleans predict that grain exports will reach 150 million tons per year by the Year 1990.

Our experience with grain exports also tends to substantiate the predictions for potential coal exports. Studies by the Board of Commissioners predict Lower Mississippi River coal exports will reach 200 million tons by the Year 2000.

However, these potential levels may only be reached with a 55 foot channel. It is estimated that $4 per ton or more can be saved exporting grain if the channel can accommodate vessels loaded to 55 feet—$400,000 or more can be saved on just one ship loading 100,000 tons of grain. Brazil, Argentina, Australia, and Canada are becoming more aggressively competitive in the world grain market. It would not be surprising in the future to find America's competitive edge in world grain trade determined solely by the lower transportation costs noted above.

Combined with the projected growth in grain exports is the potential for explosive growth in coal exports. Here, too, is a potential savings in transportation costs to our customers—$6 per ton or more if the channel would allow vessels to load to 55 feet. In addition, a 55-foot channel will give added impetus to the construction of needed coal loading facilities. It will provide an inland water transportation route from the Eastern & Mid-Western coal fields. It has been proven that inland water transportation is the most economical way to transport cargo. A 55 foot channel will also provide a U.S. port with a controlling draft comparable with the European ports which will receive the coal.

The increase in grain and coal exports will have several positive effects on the U.S. economy. Grain, traditionally, has had a positive effect on our balance of payments. The same can be expected of coal exports. But the greatest effect that deepening the channel will have is the creation of new jobs. Based on data from a University of New Orleans study, the increased grain and coal exports through the Lower Mississippi River could result in an additional 35,000 jobs, or more, being created in the area. Based on the impact on the Lower Mississippi River, the jobs created nationally will be very significant. Because of its tremendous positive impact, the Corps' 8.5 to 1 cost-benefit ratio of this $400 million project may be conservative.

In order that the strength and growth of the Mississippi Valley will continue, we urge your support for the needed funds to serve the foreign commerce in this area, which in turn serves the needs of our country.

I appreciate the opportunity to appear before the Committee.

Mr. GIALLANZA. The need to deepen the channel serving the deepwater area of Louisiana is underscored by the potential growth of two export cargoes—grain and coal. In 1960, the first private grain elevator was built in New Orleans. Since then additional elevators have been built, and in 1980 grain exports had grown to 55 million tons per year on the lower Mississippi. This tremendous and continuing growth lends credence to the predictions of further growth in grain exports. Studies by the New Orleans Port Authori-

ty predict that grain exports will reach 150 million tons per year by the year 1990. That is not too far away.

Our experience with grain exports also tends to substantiate the predictions for potential coal exports. Studies by the Board of Commissioners predict lower Mississippi River coal exports will reach 200 million tons by the year 2000.

However, these potential levels may only be reached with a 55-foot channel. It is estimated that $4 per ton—and that is a minimum—or more can be saved exporting grain if the channel can accommodate vessels loaded to 55 feet—$400,000 or more can be saved on just one ship loading 100,00 tons of grain. Brazil, Argentina, Australia, and Canada are becoming more aggressively competitive in the world grain market. It would not be surprising in the future to find America's competitive edge in world grain trade determined solely by the lower transportation costs.

Combined with the projected growth in grain exports is the potential for explosive growth in coal exports. Here, too, is a potential savings in transportation costs to our customers—a minimum $6 per ton or more if the channel would allow vessels to load to 55 feet. In addition, a 55-foot channel will give added impetus to the construction of needed coal loading facilities. Of course this brings new construction in the area of the Lower Mississippi Valley.

It has been proven that inland water transportation is the most economical way to transport cargo. With a 55-foot channel for America's natural water highway, the Mississippi River would provide a complete water route from U.S. coal fields to sea with a port of exit which has a channel depth comparable to the European ports that are ready to receive U.S. coal.

The increase in grain and coal exports will have several positive effects on the U.S. economy. Grain, traditionally, has had a positive effect on our balance of payments. The same can be expected of coal exports. But the greatest positive effect that deepening the channel will have is the creation of new jobs. Based on data from a University of New Orleans study, the increased grain and coal exports through the lower Mississippi River could result in an additional 35,000 jobs, or more, being created in the area. Based on the impact on the lower Mississippi River, the jobs created nationally will be very significant. Because of its tremendous positive impact, the Corps' 8.5 to 1 cost-benefit ratio of this project may be conservative.

Mr. GIALLANZA. Let me clarify one point which seems to generate quite a bit of confusion. For most of the 250 miles from the Gulf of Mexico to the Port of Baton Rouge, the Mississippi River has an average depth of about 100 feet. The dredging and maintenance which we are supporting would be in the 22-mile stretch from Head of Passes to the Gulf of Mexico, and nine short areas in the main stream of the Mississippi River from Head of Passes to Baton Rouge.

Thank you for allowing me to appear before you today. On behalf of our industry, I urge you to support the request for funds to accommodate the projects included in my statement. I especially urge you to invest in the 55-foot channel for the lower Mississippi River. That investment will produce dividends in the form of jobs into the future.

I have come before the committee for many years, and you have been helpful to us. This year we will get the dredge we waited so long for. It will be working the Southwest Pass and gulf ports, so please accept our thanks.

I would like to make a comment that has nothing to do with the testimony today and address my remarks to Congressman Bevill and Mrs. Boggs for the Deep South. I want you to know the tigers go up to Philadelphia this weekend, and I am glad I am here today and not before Congressman Myers on Monday.

Mr. MYERS. There is one way you can find me in a very generous mood. Alabama was very hospitable. I think really LSU will be hospitable, too. Southern hospitality.

Mr. HAAR. I would like to call on Captain Meyers to present the final statement.

STATEMENT OF DANIEL MEYERS

Mr. DANIEL MEYERS. Mr. Chairman, Mrs. Boggs, Mr. Myers, I want to thank you for letting me be here. I am Daniel Meyers, Jr., president, Associated Branch Pilots. I have submitted my statement for the record, and I will read my short statement.

[The information follows:]

STATEMENT OF CAPT. D. R. MEYERS, JR., PRESIDENT, ASSOCIATED BRANCH PILOTS

Southwest Pass which is the gateway to the Mississippi River, The Mississippi Valley and over fifty percent of the movement of our country's waterborne commerce. My Association pilots this 22 mile long section from the head of passes to the Gulf of Mexico and in the President's Budget of $26,073,000 will not fund the much needed repairs to the training works in Southwest Pass. Dredging cost for Southwest Pass have increased by leaps and bounds in recent years. This is partially due to inflation, and partially because of lack of sufficient funding has made it necessary to repeatedly defer normal maintenance of the training works in Southwest Pass. This deferred works amounts to $15 million and could be accomplished in Fiscal Year 1982 if funds were made available.

In 1980 my organization made 3,643 transits through Southwest Pass with vessels whose deadweight tonnage exceeded 50,000 tons. In 1973 we only had 262 transits over 50,000 deadweight tonnage. The volume of transits has increased from 12,438 turns in 1973 to 16,237 turns in 1980. Almost all the ships in excess of 50,000 deadweight tons could load to a draft greater than 46 feet.

With the export of coal now and increasing in the future we need a deeper channel because the ships calling to the ports on the Mississippi River are going to get larger and increase in volume.

The New Orleans District is nearing the completion of a study of the feasibility of larger deep draft approaches to the ports of New Orleans and Baton Rouge, Louisiana. The plan tentatively recommends the enlargement of the 40 foot channels in the Mississippi River and Southwest Pass to a project depth of 55 feet up to Baton Rouge. I understand the estimated annual benefits and average annual costs is $787 million, and the ratio of average annual benefits to costs is 8.5 to 1. The final report and EIS are schedule to be submitted to the Corps higher authority to May 1981 and could reach Congress in late 1981 or early 1982, and we urge a favorable consideration.

For many years now the Pilottown anchorage has been inadequate. Three years ago the Congress authorized the enlargement and deepening of the anchorage. However, because it is necessary for the US Army Corps of Engineers to coordinate its work with various other federal and state agencies, construction of the project has not yet started. During the frequent periods of intense fog in the lower river and in Southwest Pass, a proper anchorage is essential to safe navigation of the Mississippi River project. While the benefits resulting from construction and subsequence maintenance of this anchorage are somewhat intangible and hard to get a handle on, they are tremendous and a ratio of benefits to cost would necessarily be extremely high. Consequently, we urge that you provide the Corps with the funds required to continue work on this project.

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Mr. DANIEL MEYERS. Southwest Pass is the gateway to the Mississippi River, the Mississippi Valley, and over 50 percent of the movement of our country's waterborne commerce. My Association pilots this 22-mile-long section from the Head of Passes to the Gulf of Mexico, and the President's Budget of $26,073,000 will not fund the much-needed repairs to the training works in Southwest Pass. Dredging costs for Southwest Pass have increased by leaps and bounds in recent years. This is partially due to inflation, and partially because lack of sufficient funding has made it necessary to repeatedly defer normal maintenance of the training works in Southwest Pass. This deferred works amounts to $15 million and could be accomplished in Fiscal Year 1982 if funds were made available.

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Again, I want to thank you for letting me testify each year because that is my area which is the problem. We have done a good job. We have increased our tonnage, and I think we need a 55-foot channel. And we appreciate whatever the subcommittee can do and we thank you for the money in the past for keeping our channel dredged and safe. Thank you.

Mr. BEVILL. Mrs. Boggs' bill, with our names on it and many others—we hope to get that through and get you that 55-foot channel.

Mrs. BOGGS. It is appropriately named H.R. 55. I would like to say too, Mr. Chairman, that our colleague Congressman Livingston is a supporter of the testimony of our panel, and as all of you know we are very happy—he is now on the Appropriations Committee, and we are very happy to have him aboard. He has been very helpful in all of these regards in years gone by and will continue to be in his new position. We should use that testimony in support of our bill.

Mr. BEVILL. We might be quoting you on the floor.

Mrs. BOGGS. Why are the training works at Southwest Pass important? Do they function in a manner that results in reducing the maintenance dredging requirements over the long term?

Mr. HAAR. Yes. If you think back on the history of Louisiana and the Port of New Orleans, for many years from the time the port was first established and the Louisiana Purchase was consummated really with the purpose of acquiring the Port of New Orleans. There has been a problem of shoaling at the mouth of the river and the Corps of Engineers back in the 19th century—and I think the date if I remember correctly was around 1879 or 1880—contracted with Eads, famous bridgebuilder, famous in the history of the Mississippi River, who came up with a "no power, no pay" plan. He developed jetties and a system of training works was first put in in the South Pass that gave the lower Mississippi River the first dependable navigation ongoing dependable draft from that time period forward. Later of course the same idea was developed for Southwest Pass. You have jetties that extend landward in, constructed of stone that increase the velocity and the flow of the water through Southwest Pass. Also there is a construction of pile dikes that go out perpendicular from the side of the channel. All of this serves to constrict the flow of the water, and increase the velocity through Southwest Pass, and this reduces the requirement for maintenance dredging and produces an effect that in a sense you have self-cleaning action in a large part. So they have had this plan for some 100 years.

These extensive training works were extensively damaged by hurricanes and high waters during the 1970s, and now this problem. There is probably a deficit of over $100 million, a backlog of repair work that is required. That is why we are making this strong recommendation here today that an extra $16 million be made available over and above just the dredging moneys so it can be expended to go in and replace some of the pile dikes that have been destroyed by past hurricanes and floods to raise the jetties where they need to be raised and to do other remedial work that will make that channel function hydraulically the way it was designed to function. New Orleans district and the Corps have estimated if we had bad high water the next 2 or 3 years, that this amount of money could amortize itself and save dredging costs in that time frame.

Mrs. BOGGS. That was a splendid explanation. I understand from your testimony that the Mississippi River/Gulf Outlet is carrying a greater share of cargo bound for the Port of New Orleans. Is the

cargo volume higher than originally projected in the design of the project? Is the lack of project depth in the Outlet significantly hampering the flow of commerce and causing a hazard to navigation?

Mr. HAAR. Yes; yes it is. That project depth which is authorized at 36 feet has been reduced by the pilots because of shoaling to 33 feet. Sometimes with larger vessels they have only daytime passage that is permitted, so it is a difficult situation, and unless the channel is dredged in the not too distant future we could have further shoaling there, and in order to return that channel to its normal operating depth and to remove the problems that we now have, we need to go forward just as soon as possible with the maintenance dredging which has been delayed during the past fiscal year for the region that I mentioned in my testimony.

Mrs. BOGGS. I noticed too in Captain Ducros' written testimony that he says that the limitations of the present channel and the river, which of course his association members have jurisdiction over, are aggravated by silting and shoaling resulting from the strandings at numerous points along the route, and such strandings compound already difficult and dangerous traffic problems brought on in part by inadequate channeling. Do you agree with that as well?

Mr. HAAR. I think on the river he is speaking of times when we have had shoaling during periods of high water. I think this goes back to the training works, that we do have problems during periods of extremely high water with the water instead of flowing rapidly through Southwest Pass leaching out to the side and the channel not operating the way it should. Then I think you have a greater problem during those periods of having the ship go aground in the Southwest Pass. I think that is what he is referring to there.

Mr. DANIEL MEYERS. I think he is talking about in the past year we have had a problem at the gap where they have had to dredge to get the ships to get inside Southwest Pass. They have had a problem of stalling, and I think they just finished completing dredging. It has been a problem. Now they have filled up that dredge material in the anchorage, so we have no anchorage at all.

Mrs. BOGGS. You mentioned the need to provide additional funds for environmental impact statements on ocean dumping sites. Is this a local or a national problem? Would indirect benefits, such as minimizing litigation, result for early completion of these studies?

Mr. HAAR. This is a national problem. We also have part of this problem in Louisiana, but I am also serving on the American Association of Port Authorities, the chairman of the Ad Hoc Dredging Task Force, and I work closely with the National Wildlife Federation, with EPA, and Office, Chief of Engineers on this particular requirement. I testified last year on this same item. I have checked back with the Office, Chief of Engineers in preparing this testimony and they indicated to me that nationwide that this sum of money was needed for Fiscal Year 1982 to continue this on, and I think that with this sum of money that the National Wildlife Federation and EPA would feel that a good-faith effort is continuing to be made to move forward in a timely manner on these environmental impact statements nationwide, and it would reduce the potential litigation if these studies were not funded.

Mrs. BOGGS. Thank you so much.

Mr. Chairman, I thank you, and Mr. Meyers and all of you, and I am very proud you have come up with your views and present your usual fine presentations. We are grateful for the work you do year in and year out.

Mr. HAAR. We are thankful to you and the chairman and Mr. Meyers and the staff of the subcommittee who have always been very cooperative and helpful to us. I think we have a splendid dialog and receive great courtesy and consideration and we are most appreciative.

Mr. BEVILL. Thank you for your fine presentation.

We will stand adjourned until 10 o'clock tomorrow morning.

[Whereupon, at 4:15 p.m., the subcommittee recessed, to reconvene at 10 a.m., Wednesday, March 25, 1981.]

[The statement of Captain Ducros follows:]

TESTIMONY OF MEMBERS OF CONGRESS AND INTERESTED INDIVIDUALS AND ORGANIZATIONS

WEDNESDAY, MARCH 25, 1981.

ROGUE BASIN PROJECTS

WITNESSES

GERALD T. LATHAM, CHAIRMAN, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION, MEDFORD, OREG.

DENNIS N. HOFFBUHR, TREASURER, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION, MEDFORD, OREG.

ANNE G. BASKER, DIRECTOR, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION, GRANTS PASS, OREG.

LENN L. HANNON, STATE SENATOR, DISTRICT 26, JACKSON/KLAMATH COUNTIES, ASHLAND, OREG.

Mr. BEVILL. The committee will come to order.

Rogue Basin Flood Control and Water Resources. You may submit your formal statement and proceed as you wish.

STATEMENT OF ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION

STATEMENT OF GERALD T. LATHAM

Mr. LATHAM. Thank you, Mr. Chairman. It is nice to be here.

We support the projects outlined. I have Senator Hannon who wants to speak on part of my time.

We also have Dennis Hoffbuhr and Anne Basker with the Rogue Basin Association.

We have the Corps of Engineers Project, Fiscal Year 1982 projection for $3,500,000, and this is a completion of the project. The water impoundment was started last December. The reservoir is about 62 percent complete now. We are going to have a dedication May 27 and we extend a cordial invitation to any of the committee who can make it. Senator Hatfield will be our speaker. It will be a pleasure to have you.

Mr. BEVILL. That is most kind of you. The Senator is a fine speaker. We thank you.

Mr. LATHAM. The Water and Power Resources Services has two items they want. One is the Grants Pass Irrigation District and Savage Rapids Dam and Fish Screen for $100,000.

This will eliminate loss of migratory fish. The irrigation district under study and reevaluation should be completed in this budget.

The Medford Division, $65,000, is involved with work in the Sun Valley Irrigation District and we hope to have that resolved within the next year or so.

Under the unauthorized projects we have our request for $4.5 million for Elk Creek. In 1975, the Elk Creek Project was withdrawn from construction. At that time they had $8,964,000 into the project. They had acquired all the land and built the road around the dam site and they had stockpiled a sufficient amount of gravel for the impoundment of the dam.

The problem was with water turbidity. The Corps of Engineers was involved with the study but it hadn't been completed. That has now been resolved and we now hope this will be changed.

The State Water Policy Review Board is meeting April 3 on Grants Pass, a public hearing, and on April 4 they will render a decision. We feel confident they are going to support the basin and we will get the Elk Creek Project back on line.

In 1955, we had major flood and the Rogue River Basin organization was created and from that we got the authorization for the three water basin projects in 1962.

We have been visiting you every year since then. We are about 70 percent finished now. So we now look forward to terminating our visit in a few years.

I would like Senator Hannon to comment.

STATEMENT OF STATE SENATOR LENN HANNON OF OREGON

Mr. HANNON. Mr. Chairman, members of the committee, for the record I am State Senator Lenn Hannon, District 26, in the State of Oregon.

I appear today on behalf of the Rogue Basin Flood Control Water Association in requesting the funds for the completion of the Elk Creek Project.

I have also been asked to relate to you, the members of the committee and you, Mr. Chairman, the best wishes of the Governor of the State of Montana, The Honorable Victor Atiyeh, and indicate his very strong support for this project.

The State of Oregon is extremely concerned, as you might expect, and you are probably well aware of our agricultural needs.

This project, we feel, would very well complete the agricultural needs of our Rogue Valley historically known worldwide for its pear production.

I would like to share something with the members of the committee if I might. Recently a person who is the soil scientist for the Soil and Water Conservation District, indicated that he believed that the $93,000 in annual irrigation benefits officially estimated for the Elk Creek Project is misleading.

He indicated that the Corps' statement that up to 88,000 acre-feet of storage for irrigation would be provided by the combination of the current Lost Creek Lake Project and the Elk Creek Reservoir.

Mr. Weber indicated that the water would provide a $33.75 million economic base to Jackson County.

The Federal Water Power Resources Service indicates Elk Creek Lake alone would provide 38 percent of the total combined storage, an economic base of $12.8 million for Jackson County from Elk Creek Lake from the stored water irrigation.

This would provide 2½ acre-feet of stored water that would produce $2,000 worth of pears per acre. Also, one acre-foot of water used for frost protection will prevent a crop loss of $500 per acre and eliminate the need for 1,200 gallons of diesel heating fuel for frost protection.

Mr. Chairman, and members of the committee, as you can see, this has substantial economic impact. We would ask and respectfully submit our request to you for your consideration.

[Formal statement follows:]

Rogue Basin Flood Control & Water Resources Association
200 ERIE STREET
MEDFORD, OREGON 97501

TESTIMONY SUBMITTED TO:

ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
BEFORE THE
UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES

MARCH 25, 1981

BY:

G. T. (JERRY) LATHAM: CHAIRMAN, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION MEDFORD, OREGON

DENNIS N. HOFFBUHR: TREASURER, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION MEDFORD, OREGON

ANNE BASKER: DIRECTOR, ROGUE BASIN FLOOD CONTROL AND WATER RESOURCES ASSOCIATION GRANTS PASS, OREGON

LENN L. HANNON: STATE SENATOR, DISTRICT 26 JACKSON / KLAMATH COUNTIES ASHLAND, OREGON

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE:

We thank you for the opportunity to appear before this committee in support of funds for the Rogue River Basin Projects in Oregon for fiscal year 1982.

BUDGETED:

Corps of Engineers:	F.Y. 82
Applegate Project	$3,500,000
Water and Power Resources Service:	
Grants Pass Irrigation District and Savage Rapids Dam and Fish Screen Project Completion	100,000
Medford Division Study	65,000

UNBUDGETED:

Corps of Engineers:	
Elk Creek Project	4,500,000

The Congressional authorization in 1962 under PL 87-874 provided three multi-purpose flood control dams.

LOST CREEK on the main stem of the Rogue River was put into operation in February, 1977. Water quality, streamflow enhancement and hydro-electric production have substantially exceeded the benefit objectives.

APPLEGATE Reservoir started filling in December, 1980, and because of a low snow pack this winter, there will be a major improvement in the stream-flow this summer caused by water which has been stored in Applegate Reservoir.

The Rogue Basin Association, in cooperation with the Corps of Engineers, has scheduled a dedication of the project May 27, 1981. We extend a most cordial invitation to each of you, should you find it possible to attend.

ELK CREEK funding to date has been $8,964,000 which includes all land purchased, road re-location around the dam, some gravel stockpiled for the dam and prior call for bids on the dam.

The Oregon Water Policy Review Board withdrew support from the Elk Creek Project largely because of concern about its effect on clarity of the Rogue River. The State of Oregon expressed the opinion that Elk Creek should be deferred until Lost Creek, which was nearing completion, had an operating record in the area of water clarity. Lost Creek is now in its fifth year of operation, and the quality of the water has been excellent.

The Elk Creek Lake supplemental No. 1 Environmental Impact Statement was issued by the Corps in December, 1980. The State Water Policy Review Board has scheduled a public hearing on the project at Grants Pass, April 3, 1981, which should lay to rest the turbidity and water quality problems as set forth in the statement.

The Water Policy Review Board will convene on April 4, 1981 for a decision on the project.

Governor Victor Atiyeh, since taking office in 1979, in letters to our organization and our Congressional delegation, has strongly supported the Rogue Basin Project.

As the result of the destructive flood in December, 1955, the control of major floods in the Rogue Basin has been the primary objective of our association.

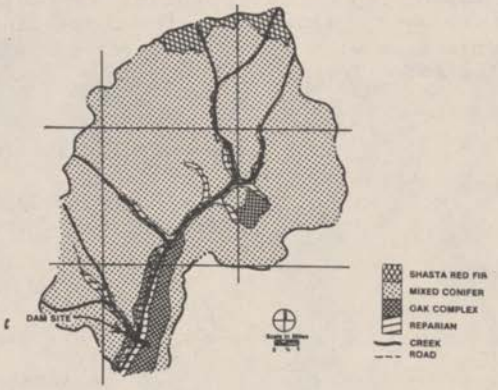
We have appeared annually before the Appropriation Subcommittee since 1962 for funding of the approved multi-purpose project. The Basin Project is approximately 70% complete, and with your favorable consideration for completing the Elk Creek Project, our objective will be achieved for maximizing the water resources in the Rogue Basin.

Respectfully submitted,

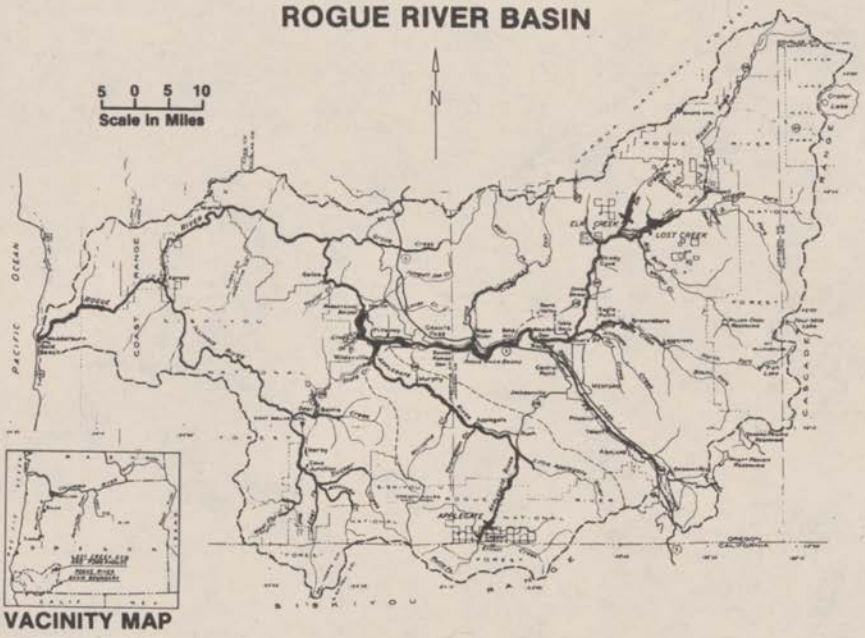
ROGUE BASIN FLOOD CONTROL &
WATER RESOURCES ASSOCIATION

By: G. J. Jerry Latham
G. J. (Jerry) Latham
Chairman

RECONNAISSANCE VEGETATIVE MAP OF ELK CREEK WATERSHED



ROGUE RIVER BASIN



VACINITY MAP

Rogue River Project Pertinent Data

Feature	Unit	Lost Creek	Elk Creek	Applegate
Stream		Rogue River	Elk Creek	Applegate River
County, State		Jackson, Oregon	Jackson, Oregon	Jackson, Oregon
Dam location		Sec 26, 27 & 34 T33S, R1E, WM	Sec 19, 20, 29 & 30 T33S, R1E, WM	Sec 25 T40S, R4W, WM
River mile above mouth	mile	153.6	1.7	45.7
Drainage area	sq mi	674	132	223
Airline distance from Medford	mile	26 north	26.5 north	23.0 southwest
Airline distance from Portland	mile	205 south	205 south	255 south
Usable storage	acre-feet	315,000	95,000	75,000
Inactive storage	acre-feet	120,000	5,750	6,990
Dead storage	acre-feet	30,000	250	10
Total storage	acre-feet	465,000	101,000	82,000
Elevation-maximum (full) pool	feet, msl	1,872	1,726	1,987
Elevation-minimum flood control pool	feet, msl	1,812	1,665	1,889
Elevation-minimum conservation pool	feet, msl	1,751	1,581	1,854
Area - maximum pool	acre	3,430	1,290	988
Area - maximum flood control pool	acre	2,580	710	360
Area - minimum conservation pool	acre	1,820	200	205
Length - reservoir	mile	10	6.2	4.6
Elevation - top of dam	feet, msl	1,882	1,733	1,994
Length of dam	feet	3,750	2,685	1,300
Maximum height-riverbed to top of dam	feet	327	233	242
Embankment volume	cu yds	10,800,000	4,300,000	3,000,000
Concrete volume	cu yds	110,000	63,000	86,000
Spillway control gates (Tainter)	number	3	2	2
Spillway design discharge	c.f.s.	158,000	57,900	93,800
Outlet works		Multiple-use Intake Tower, Outlet Tunnel, Flip Bucket	Multiple-use Intake Tower, Cut & Cover Outlet Conduit. Flip Bucket	Multiple-use Intake Tower, Cut & Cover Outlet Conduit, Flip Bucket
Outlet capacity at maximum & full pool	c.f.s.	11,500	6,000	6,100
Outlet slide gates (oper & emerg) number	(sets)	2	2	2
Outlet temperature control (various elevations)		Multiple level intake	Multiple level intake	Multiple level intake
Power	kW	49,000	None	None
Project cost (estimate)		$157,000,000	$108,000,000	$95,500,000
Cost to Date (30 Sep. 1980)		$134,493,000	$8,964,000	$81,778,000

Mr. BEVILL. Thank you for a very fine presentation. We hope to work with you on it.

WEDNESDAY, MARCH 25, 1981.

TENNESSEE VALLEY AUTHORITY

WITNESS

HON. HAROLD E. FORD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. BEVILL. I see our good friend and colleague Harold Ford has come in.

Congressman Ford, we will recognize you at this time. You may produce such witnesses as you please.

STATEMENT OF HON. HAROLD E. FORD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mr. FORD. Thank you very much, Mr. Chairman, and members of the committee.

Mr. Chairman, members of the subcommittee. I would like to thank you for providing me with this opportunity to appear before you, and to present a statement on the Tennessee Valley Authority to this subcommittee.

As most of you already know, the continued rising cost of energy has become one of the major issues in the country today, including the Tennessee Valley region which includes Tennessee, and portions of North Carolina, Virginia, Mississipppi, Alabama, Georgia and Kentucky.

In the Tennessee Valley region in which the TVA operates, we have seen sharp increases in electric rates over the last decade. For example, in August, 1967, the rate per 500 kilowatt-hour was $7.43 in the TVA region.

With the new rate increase of 9.3 percent in April, this figure will be at $21.07 per 500 kilowatt-hour—a whopping 283 percent increase.

Today, TVA ratepayers pay about three cents per kilowatt-hour compared to a national average of four cents. TVA rates are still considerably lower than the national average, but the difference has fallen from about 50 percent lower in 1970 to about 25 percent lower today.

In the City of Memphis, citizens, whom I represent, are outraged over the continued increase in their utility rates. I receive approximately 25 letters or telephone calls a day from constituents who are concerned about the rates, and who, in many cases, just cannot afford to pay their utility bill.

I am especially troubled with the impact that rising utility rates in the TVA region has had on the poor and the elderly.

The poor already spend 30 percent of their disposable income on energy costs, and our senior citizens on fixed incomes must often suffer in hot or cold weather because they cannot afford to pay their utility bills.

In yesterday's March 24, Washington Star, the Administration was cited as saying that nearly one-fifth of the 3.8 million families on welfare would be ineligible or would have benefits cut as a result of budget proposals before the Congress.

It should be noted that the TVA region is still one of the poorest in the Nation today. Thus, in the future, the problems of the poor and the elderly in relationship to utility costs will magnify.

In view of this major concern, not only for the poor and the elderly, but for all ratepayers throughout the Valley, both residential and commercial, I must raise several issues to TVA officials which should be considered as the TVA plots its future course—a course that will affect the entire region.

How long will taxpayers be asked to pay for the future? Currently, TVA pays approximately $1 billion a year in interest expenses. For each dollar that ratepayers pay toward their utility bill, approximately 33 cents goes to paying the interest on borrowed money. Without care, this $1 billion figure could rise to $2 billion in the next five to ten years. Do TVA officials believe that ratepayers can absorb the subsequent increase in utility costs?

In 1966, TVA affirmed its commitment to nuclear power. That decision is one of the primary reasons that we have had an astronomical increase in utility rates. The original cost to build 17 nuclear power plants was $6.8 billion. Now the cost of those units is projected at $32.5 billion, and the cost continues to rise.

Consumers of today are being asked to pay for something from which they will not reap benefits until the 21st century in some cases.

It is uncertain whether the TVA will need all of the power to be generated by these plants. TVA must realize that it will do no good to have all of that power in the future, if people cannot afford it. One thing is for certain, the price will not decrease in the future. It can only go up.

Furthermore, I caution the TVA to consider the health and safety dangers associated with nuclear power plants and nuclear waste. The taxpayers in the region are uncertain as to whether they want nuclear power plants in the future.

If the price of utilities continues to rise and the dangers are not mitigated, then what advantage is it for the public to support TVA's nuclear plant program?

I would also hope that the TVA will continue its economic and community development activities with which it has done so well in the past. We often forget that when TVA was implemented in 1933, it was not only charged with the responsibility of energy development in the region, but with economic and community development responsibilities as well.

In Memphis, the Tennessee Valley Center for Minority Economic Development was created with assistance from the TVA, and in less than two years, it has become a model economic development organization.

This organization has leveraged by a rate of 10 to 1 the funds that it received from the agency, and businesses throughout the region have benefited from this partnership which I believe will continue to develop in the future.

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Finally, the TVA has a budget of approximately $3.5 billion, most of which comes from the ratepayers, although a small portion is appropriated annually from the Congress.

I hope that the TVA will take a good look at itself and ask if the agency is managing its vast resources as effectively and efficiently as possible.

Many taxpayers are irked that they are funding a $497,000 incentive-bonus program by TVA when at the same time they are being socked with a 9.3 percent increase in rates on April 1.

Was this bonus to upper echelon executives at TVA necessary? I think that is a question, Mr. Chairman, that should be placed before the TVA officials.

In recent testimony given by Bob Clement, one of three members on the TVA Board of Directors, at a hearing by the Senate's Committee on Environment and Public Works, several recommendations were made for improving the agency in the future.

I am in support of some of the recommendations made by Mr. Clement. Among them are the following:

1. Organize TVA into two basic accountability areas: TVA power organization and TVA non-power organization.

2. Reduce the General Manager's expenditure authority from $2 million to $100,000.

3. Establish an executive cost-cutting committee reporting to the TVA Board with a one year life and a goal of cutting power costs and capital borrowing by five percent.

4. Reduce overhead expenses by cutting back on new space requirements, new office buildings, office remodeling, office furniture expenditures, training classes and out-of-town employee and management meetings.

5. Be prepared to sell TVA's excess power to other utilities at a price advantage to the Valley ratepayers.

6. Explore a change in TVA's bond resolution and the TVA Act which would allow flexibility in the amount of interest which TVA is required to pay out of current year revenues.

I have raised the following issues because TVA is now at the "fork in the road," and the decisions relative to which road the agency will take in the future will certainly impact all in the region, and to a certain degree, the country.

TVA will have to demonstrate to the region and the country that the model started in 1933 will continue to work in the future. Now is the time for the agency to examine itself, its ability to plan and its ability to manage. For, indeed, the agency cannot exist without the public support it has enjoyed in the past.

With that, Mr. Chairman and members of the committee, I conclude my statement and would be open for any questions.

Mr. BEVILL. It is a very fine statement. You have mentioned TVA Valley Center for Minority Economic Development. I am glad to get your good report on that because, as you know, through your efforts this committee, working with you, funded that program.

Mr. FORD. Yes, sir; Mr. Chairman, and let me say I would like to thank you for your very able support in making sure that the $500,000 stayed intact in the last year's fiscal budget for the Center.

Mr. BEVILL. It is pleasing to get a report like that and particularly on a Center of that size. Certainly you deserve the credit because you were the prime mover on it.

Mr. FORD. Thank you, but it was because of you and the members of the committee that kept it intact and I am very grateful on behalf of the people in the Valley.

Mr. BEVILL. Of course, we have no jurisdiction on the rate part of it, as you realize, but we do indirectly have some bearing.

The Nuclear Regulatory Commission was here before us and they are now sitting downtown paralyzed, shuffling papers. Thirteen nuclear plants in this country are ready to be licensed and they are sitting there shuffling papers.

Who is suffering? It is the poor people of the country, the consumers of this country, while those plants are sitting there and not operating.

They could be producing the next to the least expensive fuel, electricity.

These people are not only being deprived of this inexpensive electricity but they are also paying, as you mentioned in your statement, the interest rates; and it is costing the consumers in this country in these 13 areas $3 billion per year while the Nuclear Regulatory Commission shuffles papers.

We made it clear to them we are aware of what they are doing. They are making people suffer more. This is the thing this committee is interested in.

I have talked to the Vice President about it. I have talked to many key people, and I told Dave Stockman, for good heaven's sake, have the President appoint a good person for that vacant seat there.

This is a problem. This is part of what you are talking about. That wouldn't be all of it, of course.

Thank you very much for a very fine statement.

Mr. Myers.

Mr. MYERS. No questions.

Mr. BEVILL. Mr. Rudd.

Mr. RUDD. No questions, Mr. Chairman.

NEHALEM BAY PROJECT

WITNESSES

HON. LES AuCOIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

STANLEY A. JUD, SECRETARY, PORT OF NEHALEM, OREGON

F. E. KNIGHT, MEMBER, BOARD OF COUNTY COMMISSIONERS, TILLAMOOK COUNTY, OREG.

Mr. BEVILL. Congressman AuCoin, our good friend and colleague. Please, if you will, come forward, we will hear you next.

We are all pleased to have our distinguished colleagues appear before this committee. We always try to give them what they ask for.

STATEMENT OF HON. LES AUCOIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. AUCOIN. It is always a pleasure to come before your committee. The people of my District and the people of the State of Oregon are very appreciative of the cooperation this committee has given our State and its interests over the years.

You have recognized our priorities and for that we are very grateful, Mr. Chairman.

Mr. BEVILL. We are delighted to work with you.

Mr. AUCOIN. Mr. Chairman, this morning I would like to introduce to you the two gentlemen who are with me at the table, Mr. F. E. Knight, Vice Chairman of the Board of County Commissioners of Tillamook County, on my right; and Mr. Stanley Jud, Secretary of the Port of Nehalem, who sits on my left.

The three of us represent a sizeable share of my constituency in the First Congressional District of Oregon.

These two gentlemen who I have known for many years, have travelled across the country to express their views and to thank you and your colleagues on the committee and the Congress for appropriating $5.2 million in fiscal 1981 to begin restoration of the long neglected Federal jetties at the mouth of the Nehalem River.

They have a prepared statement which I ask to be included in the record, if possible.

Mr. BEVILL. It will be included in the record.

[The information follows:]

STATEMENT OF STANLEY JUD AND F. E. KNIGHT

Mr. Chairman, this is a point statement by Stanley Jud, Secretary of the Port of Nehalem, and F.E. Knight, a member of the Board of County Commissioners of Tillamook County, co-sponsors in this presentation to support the Administration's recommended $7,100,000 to complete funding required for the rehabiliation of the deteriorated jetties at the entrance of the Nehalem River.

Our purpose in being here is to say, "Thank you."

Thank you for listening to our plea for the past two years to appropriate funding for the restoration of the Nehalem River entrance jetties that had been left by the Corps of Engineers to deteriorate for over 40 years.

The Corps of Engineers' advance notice to advertise to prospective bidders for the rehabilitation of this project was mailed from the Portland District Office of the Corps of Engineers last Thursday, March 19th.

We respectfully request that you recommend appropriation of the $7,100,000 now included in the President's fiscal 1982 budget recommendation to Congress to complete this estimated total funding for rehabilitation of this project.

Thank you.

Mr. AUCOIN. Thank you for that, Mr. Chairman.

I would state we will take no more of your time other than to thank you again for your consideration and your assistance in the past.

I think the statement in support of this item speaks for itself. We ask you for your further support in continuing the already budgeted appropriations necessary to complete this very worthy Federal navigation project.

Mr. BEVILL. Very good.

As you know, we will work with you. I know these gentlemen have travelled 6,000 miles round trip to attend this hearing. I mentioned that so the record will show it.

We are delighted to have you with us. We appreciate the opportunity to work with your fine delegation. We know you have one of the best.

Mr. KNIGHT. We think so.

SIUSLAW RIVER PROJECT

WITNESSES

WILBUR E. TERNYIK, COMMISSIONER, PORT OF SIUSLAW, OREG.
NOLAND J. HUNTINGTON, PRESIDENT, PORT OF SIUSLAW, OREG.

Mr. BEVILL. Mr. Wilbur Ternyik, we are pleased to have you with us and we will put in the record your formal statement and you may proceed as you wish.

[The information follows:]

STATEMENT OF WILBUR E. TERNYIK, COMMISSIONER, PORT OF SIUSLAW, OREG.

Mr. Chairman, my name is Wilbur Ternyik. I am a commissioner of the Port of Siuslaw. I have been a member of the Siuslaw Port Commission for fourteen years. Much of the Port Commission's effort since its inception has been spent in trying to secure completion of a properly functioning jetty system at the mouth of the Siuslaw River. We are getting close to the Port's goal now that the advance engineering and design of the authorized jetty extension project is well underway by the Corps of Engineers.

I am here first of all to extend our special thanks to this Committee for its generous assistance in the past in our behalf, and to ask you to support the $100,000 included in the budget recommendations before you which will permit the Corps of Engineers to complete planning of the authorized modification of the Siuslaw River navigation project.

Recognizing the severe restrictions placed on the Federal budget, and on your port authority's budget, we are asking this Committee to consider adding to the fiscal 1982 budget $231,000 in Operations and Maintenance funds, and 7.9 million dollars to initiate construction of the authorized modification of this project.

The $231,000 requested will be used for additional dredging to bring the needed dimensions to project depth. This is necessary to reduce hazards to navigation that now exist for all vessels using the waterway.

The skyrocketing annual Federal appropriations for maintenance of this channel project are reflected in the following figures obtained from the Corps of Engineers:

Fiscal (appropriated):	
1977	
1978	$325,000
1979	563,000
1980	397,000
1981	973,000
Budgeted for fiscal 1982	885,000
Corps capability for fiscal 1982	1,180,000
	2,161,000

In testimony before Congress in early 1979, the North Pacific Division Engineer admitted the Siuslaw River entrance channel can be dredged to an average depth of only 14 to 15 feet, and that depth is maintained for only about 2½ months during the summer season. The authorized project depth of this river entrance is 18 feet at mean lower low water, but the Corps of Engineers has never been able to maintain the 18-foot depth because of the lack of hopper dredging capability. Last year, after the Corps' hopper dredging was completed for the year, the 13th Coast Guard District issued its attached "Local Notice To Mariners No. 36" stating: "Siuslaw River Bar is experiencing heavy shifts of sand which are causing low water depths of 4 feet on the bar entrance range at low tide. . . . Mariners are urged to use extreme caution and to contact Coast Guard Siuslaw River * * * prior to crossing the bar.

The hazardous entrance conditions resulting from the lack of adequate and effective annual maintenance dredging leads to our request for the addition of 7.9 million dollars to the fiscal 1982 budget to start construction of the authorized jetty extensions that will reduce the entrance shoaling, the fast-growing annual cost of maintenance dredging, and ever-increasing total cost of the jetty extensions.

The Corps of Engineers' estimated cost for fiscal 1982 of the Siuslaw River modification project is 26.4 million dollars, or, over a 53 percent increase in the cost estimate of 17.2 million dollars as reported in the June, 1976, feasibility study by the Corps of Engineers. Delaying construction for even one year would mean an additional 10 percent, or more, in escalation in cost to this 26.4 million dollar project, or an additional 2.6 million dollars.

The authorized modification provides for an extension of 2,000 feet on the north jetty and 2,500 feet on the south jetty to provide jetties of even lengths. One of the larger economic benefits in justifying the improvements is the reduction in the maintenance dredging that will result.

We recognize the need for the budgetary restraints at all levels of government, however, in this case, we feel that accelerating construction of a capital improvement project that will reduce increasing maintenance costs is a wise and practical expenditure of public funds.

We appreciate the opportunity of appearing here before you. Thank you.

Wilbur E. Ternyik,

Commissioner, Port of Siuslaw.

Attachment: U.S. Coast Guard Notice To Mariners No. 36.

COMMANDER, 13TH COAST GUARD DISTRICT, LOCAL NOTICE TO MARINERS NO. 36

Note:

Mariners are cautioned that portions of destroyed structures may remain.

Legend:

TRLB—Temporarily replaced by lighted buoy showing same characteristic.
TRUB—Temporarily replaced by unlighted buoy.
TLt—Temporary light.

DISCREPANCIES CORRECTED SINCE LAST NOTICE

LL or page number	Name of aid	Status	Charts affected	Reference
1192	Chetco River entrance, Light 5,	Repaired	18602	LNM 33/80.
	Columbia River dredging, Lighted bell buoy B	Discontinued	18521	LNM 27/80.
p. 114	Lake Celilo buoy 32	Reset	18553	LNM 35/80.
p. 132	Columbia River north, Channel buoy 10	Reset	18521	LNM 28/80.

General

Oregon—Rogue River—Shoaling information

Conditions on Rogue River Bar continue to deteriorate due to shoaling. Depths of 4.5 feet on the north side and 5.5 feet on the south side of the channel have been reported. The situation is being aggravated by current weather conditions. Mariners are urged to use extreme caution when navigating in this area.

Chart 18601.

LMN C. G. Seattle 25, 32, 33, and 35 of 1980.

Oregon—Siuslaw River—Shoaling—Information

Siuslaw River Bar is experiencing heavy shifts of sand which are causing low water depths of 4 feet on the bar entrance range at low tide. The predominant part of the shoal is in approximately position 44°01′07″ N. 124°08′30″ W. and shifting in a southerly direction. Mariners are used to use extreme caution and to contact Coast Guard Station Siuslaw River on VHF-FM Channel 16 prior to crossing the bar.

Chart 18583.

LNM C. G. Seattle 34 and 35 of 1980.

Oregon and Washington—Columbia River—Entrance to Harrington Point—Secondary channel—Baker Bay—Shoaling information

Depth of 7 feet have been reported in Baker Bay West Channel Entrance between Baker Bay West Channel Entrance Jetty Light 1 (L.L. No. 2016.10) and Baker Bay

West Channel Entrance Jetty Light 2 (L.L. No. 2016.11). Mariners are urged to exercise extreme caution when transiting this area.
Chart 18521.
LMN C. G. Seattle 31, 32, 33, 35 of 1980.

Washington—Lake Washington Ship Canal—Montlake Bridge—Information

Permission has been granted to the City of Seattle Department of Engineering for temporary closure of the drawspan of the Montlake Bridge across Lake Washington Ship Canal. The drawspan will not open for the passage of vessels between the hours of 12:00 noon and 1:30 p.m. and from 4:00 p.m. to 6:00 p.m. on 20 September 1980 in order to accommodate highway traffic in conjunction with athletic event at the University of Washington.
Chart 18447.

Mr. BEVILL. As you know, you have five minutes.

Mr. TERNYIK. Mr. Chairman and members of the committee:

In the interests of time I would ask permission to summarize the statement and have the full statement entered in the record.

Mr. BEVILL. Permission is granted.

Mr. TERNYIK. On my right is our economist, Mr. Jed Huntington, from Florence, Oregon.

I am here, first of all, to extend our special thanks to this committee for its generous assistance in the past in our behalf, and to ask you to support the $100,000 included in the budget recommendations before you which will permit the Corps of Engineers to complete planning of the authorized modification of the Siuslaw River navigation project.

Recognizing the severe restrictions placed on the Federal budget, and on our port authority's budget, we are asking this committee to consider adding to the fiscal 1982 budget $231,000 in Operations and Maintenance Funds, and $7.9 million to initiate construction of the authorized modification of this project.

The $231,000 requested will be used for additional dredging to bring the needed dimensions to project depth. This is necessary to reduce hazards to navigation that now exist for all vessels using the waterway.

In testimony before Congress in early 1979, the North Pacific Division Engineer admitted the Siuslaw River entrance channel can be dredged to an average depth of only 14 to 15 feet, and that depth is maintained for only about 2½ months during the summer season.

The authorized project depth of this river entrance is 18 feet at mean low water, but the Corps of Engineers has never been able to maintain the 18-foot depth because of the lack of hopper dredging capability.

The hazardous entrance conditions resulting from the lack of adequate and effective annual maintenance dredging leads to our request for the addition of $7.9 million to the fiscal 1982 budget to start construction of the authorized jetty extensions that will reduce the entrance shoaling, the fast-growing annual cost of maintenance dredging, and ever-increasing total cost of the jetty extensions.

We recognize the need for budgetary restraints at all levels of government, however, in this case, we feel that accelerating construction of a capital improvement project that will reduce increasing maintenance costs is a wise and practical expenditure of public funds.

We appreciate the opportunity of appearing here before you. Thank you.

I have to say we have come a long way, too. The people who live in our port district are very hard-working people. We have always contributed to the economy of the Nation. We intend to do that now.

We are faced with upwards of 20 percent unemployment because what has happened to the timber industry. We really need some help in our water transportation for this particular time.

We are flexible. A lot of our people went to Alaska to work, rather than draw unemployment. I am going to Mobile, Alabama to work for the Corps of Engineers, a place I have never been before.

Mr. BEVILL. You couldn't be in a better place.

Mr. TERNYIK. In any event, we would like to have your cooperation on this because we are in dire straits.

This is Mobile in September, and they tell me that is the right time.

Mr. BEVILL. That is right. Anytime is the right time.

Thank you very much.

ROGUE RIVER PROJECT

PORT OF UMPQUA, OREG.

PORT OF BROOKINGS, OREG.

PORT OF GOLD BEACH, OREG.

WITNESS

THOMAS MURRAY, CONSULTANT, OREGON COASTAL PORTS

Mr. BEVILL. Mr. Thomas Murray. We are pleased to have you, Mr. Murray. You may proceed as you wish.

STATEMENT OF THOMAS MURRAY

Mr. MURRAY. My comments will be brief. I came a long way, too.

In the interest of economy and due to the shortage of travel funds by some port authorities, I am appearing here as the representative of three ports on the Oregon coast: The Port of Brookings, the Port of Gold Beach, and the Port of Umpqua.

The Chetco River Navigation Project is located in Brookings, the Rogue River in the Port of Gold Beach, and the Umpqua in the Umpqua District.

All three of these ports are requesting budget additions for maintenance dredging.

In the past, the Corps didn't have the necessary dredging equipment for the Oregon coast. Now that it does, it doesn't have the funds to do the job effectively.

The three additions that are being requested are $158,000 for the Chetco Project, 92 for the Rogue; 330 for the Umpqua; and the Port of

Gold Beach is something for an additional $100,000 to complete a general investigation study that has been underway off and on for the past 14 years.

That concludes the summary. The statements are more detailed. Thank you, Mr. Chairman.

Mr. BEVILL. Thank you very much. If there are no questions, thank you for your testimony.

[Statement of Messrs. Rice, Giottonini III, and Thompson follow:]

Statement of
Elmer C. Rice, Commissioner
Port of Brookings, Oregon
before
Senate Appropriations Subcommittee on Public Works, March 25, 1981
House Appropriations Subcommittee on Public Works, March 25, 1981
requesting
$158,000 Addition to Corps of Engineers Civil Works Budget for Fiscal 1982 for
Additional Operations and Maintenance Dredging of the
Chetco River, Oregon, Navigation Project

Mr. Chairman:

My name is Elmer C. Rice. I am the member of the Brookings Port Commission who is responsible for overseeing the Federal navigation project on the Chetco River.

The Port of Brookings requests this Committee to consider adding $158,000 to the $422,000 included in the fiscal 1982 budget recommendations now before you.

The Corps of Engineers indicates this additional funding capability, if appropriated, will, with weather permitting, provide an additional 12 days of dredging time on the Chetco River navigation project.

The additional dredging will restore project dimensions, thereby removing shoals in the navigation channel that result from the short and uneven jetties at the mouth of the river.

The Chief of Engineers' favorable report approving a 750-foot extension of the north jetty and a 1,250-foot extension of the south jetty is now before the Congress for authorization.

The modification of this navigation project is designed to extend the jetties to an even length and to a deeper depth in the ocean, thereby eliminating some of the annual maintenance dredging requirements.

The exceptionally high rate of unemployment in the port's tributary area resulting from months of closure of the major manufacturing forest products complex; the distressed state of the large commercial fishing fleet operating from the port; and the dire financial condition of the Port itself, makes it imperative that the Corps of Engineers' maximum capability for maintenance dredging be accomplished to relieve any vessel delays causing further economic distress to those using the port facilities.

We urge your favorable consideration of the additional $158,000 requested here.

Thank you.

Elmer C. Rice,
Commissioner
Port of Brookings

Statement of
Lou Giottonini III, President
Port of Gold Beach, Oregon
before
Senate Appropriations Subcommittee on Public Works, March 25, 1981
House Appropriations Subcommittee on Public Works, March 25, 1981
requesting
$100,000 Addition to Corps of Engineers Civil Works Budget for Fiscal 1982
to complete
Hydraulic Model Investigation and General Investigation Report on
Rogue River, Oregon, Navigation Project, and
$492,000 Addition for Operations and Maintenance Dredging of River Entrance

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Mr. Chairman:

My name is Lou Giottonini. I am President of the Port of Gold Beach, Oregon.

We are asking this Committee to consider our request for two additions to the Corps of Engineers' budget for fiscal 1982.

The first is for $100,000 required by the Corps to complete a model investigation of the Rogue River navigation project now underway at the Waterways Experiment Station at Vicksburg, Mississippi, and to complete the Corps' overall General Investigation report which will cost an estimated $792,000. This General Investigation was started 14 years ago in 1966.

We also ask that the Corps' capability of $492,000 for additional maintenance dredging be added to the $804,000 already budgeted for Operations and Maintenance, making a total appropriation of $1,296,000.

The port at Gold Beach, located just inside the mouth of the Rogue River, is landlocked again this spring as it has been for almost one-half of each year for the past three years.

The jetty system at the mouth of the river does not function properly. The alignment, length, and spacing of the entrance jetties permit sand to infill the navigation channel causing shoals which restrict safe vessel use this channel.

The sand shoaling, which restricts the use of port facilities, has devastated the financial condition of the port authority which is now operating at a deficit.

The economic hardships suffered by those in the communities and the port served by this federal navigation project is detailed in an attached letter of November 5, 1980, from the Gold Beach-Wedderburn Chamber of Commerce addressed to Senator Mark O. Hatfield.

The critical nature of the hazards to navigation, life, and property is illustrated in two attached letters from the U.S.Coast Guard to the Port of Gold Beach. The letter of 28 Aug 1980 referring to the summer Coast Guard Search and Rescue Patrol at Gold Beach states:

> "Continuation of silting conditions on the bar, to the point that our Motor Lifeboats could be prevented from transiting on a low tide, may necessitate an earlier termination."

In a letter a week later, dated 5 Sep 1980 the Coast Guard stated:

> "The Rogue River bar has been confirmed to be deteriorating rapidly due to sand deposits and lack of water flow from the Rogue River. This has made the channel extremely dangerous to transit with as little as 4 feet of water at low tide in the uncertain channel next to the south jetty. Recommend that all mariners avoid traning this area."

Structural correction to the improperly functioning jetty system at the mouth of the Rogue River is the obvious solution to reducing the excessive shoaling of the navigation channels.

The best engineering answer to such a correction, hopefully, will be forthcoming from the hydraulic model study now underway the Corps of Engineers Waterways Experiment Station.

We urge your favorable consideration of the two budget additions requested here in order to expedite completion of the Corps' General Investigation, and to alleviate the persistent shoaling problem by additional dredging. Thank you.

Lou Giottonini III, President
Port of Gold Beach, Oregon

Attachments: Letter to Senator Hatfield
Letters from U.S. Coast Guard

Gold Beach-Wedderburn Chamber of Commerce
AT THE MOUTH OF THE ROGUE RIVER
Gold Beach, Oregon 97444

November 5, 1980

Honorable Mark O. Hatfield
463 Russell
Senate Office Building
Washington, D. C. 20510

Dear Senator,

The Gold Beach area is very dependent on the fishing and tourist industries, but due to severe bar conditions the community of Gold Beach, the Port of Gold Beach, and all those that depend on these industries for a living, are suffering an economical hardship as never before experienced in this area.

The Corps of Engineers put effort into trying to keep the "bar" open, but due to the lack of the right equipment and money, the bar remained closed except at high tides. It was closed at all times for boats 16 feet and under, and sometimes for boats 18 feet in length. As a result many of our tourists took their boats and left for other places.

The Rogue River Coast Guard Patrol broadcast to mariners to avoid crossing the Rogue River "bar". This resulted in a reduction of half the number of "transient" vessels, which amounted to over $8,000.00 in lost moorage fees to the Port of Gold Beach and an unknown amount which would be spent for groceries, etc.

Fish product poundage was down two-thirds to that of previous years, which resulted in thousands of dollars in lost revenue to the fish processing plants.

Lack of vessels being able to get into the Port of Gold Beach was responsible for the loss of approximately $50,000.00 in fuel sales and approximately $30,000.00 in lost ice sales.

To experience another season such as this season will be disastrous.

It is very evident the Corps of Engineers cannot keep a safe and sufficient bar under the present situation, so we plead with you for help in speeding up a solution to our problem, a jetty system which will work.

We thank you and look forward to your reply.

Sincerely,

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS
Commander
Coast Guard Group
2000 Connecticut Ave.
North Bend, OR 97459

3120
28 AUG 1980

President, Port Commission
Port of Gold Beach
Box 1126
Gold Beach, Oregon 97444

Dear Sir:

This is to advise you that I intend to terminate our summer Search and Rescue Patrol at Gold Beach as scheduled on 1 October 1980. Continuation of silting conditions on the bar, to the point that our Motor lifeboats could be prevented from transiting on a low tide, may necessitate an earlier termination.

For your information, as of 20 August 1980, our Gold Beach unit has responded to 30 requests for assistance and 3 precautionary escorts across the bar this summer patrol season. The members of the summer patrol have expressed to me their appreciation of the cooperation they've experienced this year with the port and the boating public.

If I may be of any assistance to you or if you have any questions concerning this matter please call me.

Sincerely,

F. W. Olson

F. W. OLSON
Captain, U. S. Coast Guard
Group Commander

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

Commander
Coast Guard Group
2000 Connecticut Ave.
North Bend, OR 97459
Phone: (503) 756-4141

16704
5 SEP 1980

Dick Turnow
Port of Gold Beach
Box 1126
Gold Beach, OR 97444

Dear Mr. Turnow

Enclosed is a copy of our Marine Safety Broadcast on the Rogue River you requested:

"The Rogue River bar has been confirmed to be deteriorating rapidly due to sand deposits and lack of water flow from the Rogue River. This has made the channel extremely dangerous to transit with as little as 4 feet of water at low tide in the uncertain channel next to the south jetty. Recommend that all mariners avoid transitting this area." This broadcast is scheduled to be broadcast at 0800, 1200 and 1600 (4 pm) until the Thirteenth Coast Guard District issues a local notice to mariners.

If you have any other requests, don't hesitate to contact our Group office at the above number.

Sincerely,

F. W. OLSON
Captain, U. S. Coast Guard
Group Commander

Statement of
Lester W. Thompson
President, Port of Umpqua, Oregon
before
Senate Appropriations Subcommittee on Public Works, March 25, 1981
House Appropriations Subcommittee on Public Works, March 25, 1981
requesting

$330,000 be Added to the $1,001,000 Budgeted for U.S. Army Corps of Engineers' Civil Works in Fiscal 1982 for Additional Operation and Maintenance Dredging of Umpqua River, Oregon, Navigation Project

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Mr. Chairman:

My name is Lester Thompson. I am President of the Port of Umpqua. I want to thank this committee for its generosity in the past in voting appropriations for the Corps of Engineers' rehabilitation of the north jetty and the expansion of a training jetty at the mouth of the Umpqua River.

The extended training jetty, which was completed last October, has resulted in a substantial scouring of a narrow river channel immediately alongside the extended jetty and seaward from the end. This natural scouring and deepening in one winter season indicates that the training jetty is beginning to serve the function for which it was designed.

There is a need now to widen the naturally-scoured narrow channel alongside the extended training jetty to remove a shoaled area, referred to as the "middle grounds", between the widely spaced jetties. Waves hitting this shoaled area causes breakers which carry across the newly- scoured narrow channel and strike the extended training jetty, reflecting back into the navigation channel and interacting with incoming waves. This wave action restricts some boats and contributes to a hazard to navigation that could be lessened by removing the shoaled area by dredging, allowing a channel to the 200-foot project width.

The Port of Umpqua requests this Committee to add $330,000 to the $1,001,000 already included in the fiscal 1982 budget for Operations and Maintenance to permit the additional dredging the Corps of Engineers is now capable of providing with the addition of its new hopper dredge YAQUINA coming into service on the Oregon coast in June 1981.

The need for a safer and more useable entrance for greater port activity was accentuated a few weeks ago, on March 6th, when the International Paper Company lumber and plywood plant closed temporarily due to the distressed market for forest products putting over 400 men out or work.

Thank you again for your assistance in our behalf.

Lester W. Thompson
President

FRUITLAND MESA PROJECT

WITNESS

CARTON MEEK, PRESIDENT, FRUITLAND MESA WATER CONSERVANCY DISTRICT

Mr. BEVILL. Next we have Mr. Carton Meek. We are pleased to have you, Mr. Meek. You may proceed as you wish.

STATEMENT OF CARTON MEEK

Mr. MEEK. I am Carton Meek, President of the Fruitland Mesa Water Conservancy District.

As you know, our project has been authorized for construction. We have signed our repayment plan, have completed all environmental demands, have agreed to, and sold all irrigation requirements, have had construction started with two syphons, have been studied from A to Z, and started back at A and are probably halfway to Z again. We are ready for water, we either use it or lose it.

I would like to go on to the local area and impact development of coal, oil shale, and gas. We are close to coal in our area, which includes the towns of Paonia, Hotchkiss, Crawford, and Cedaredge. Every place has put in new domestic water pipelines, all springs and normal flow water are decreed and used.

Yet, a new proposed 34-acre housing development was planned at Crawford but was lost because of poor planning and inadequate water supply.

In Paonia, a 24-acre housing and commercial development site seems to have been passed by the Town Council. Nearly every mesa in Hotchkiss has a housing program, and likewise for every plot of ground in the whole country.

U.S. Steel has an old established coal mine in Paonia. Colorado Westmoreland has a new coal mine which is producing one million ton of coal a year in Paonia. Atlantic Richfield is developing a one million ton per year coal mine in Paonia. There are several other mines and a strip mine at Cedaredge. The list goes on and on.

Oh yes, four new high schools all needing water and sewage units, are being built, but all the water in the area except a portion of flood water is decreed.

Our project has agreed to supply 2,500 acre-feet to domestic, industrial and electric power. Enough power could be generated for Crawford, and could be used for power again in Paonia or Hotchkiss. This water would still be available for city, country, domestic or industrial use.

All the above-mentioned towns have asked for water from us. At 325,000 gallons per acre-foot, multiplied by 2,500 acre-feet, equals approximately 812,500,000 gallons of water available for domestic use. This would supply in excess of 20,000 people with water per year. This is at a usage of 100 gallons per person, per day—more than four times the present population of Paonia, Hotchkiss, Crawford and many outlaying areas. There is no other water available unless by the purchase of farms and water decrees. We could

supply this needed water probably within five years after construction has started.

I feel that in Colorado every water storage development should be constructed to supply food, energy and housing. There are billions upon billions of dollars for oil shale, coal, gas, et cetera, going to be spent. These billions will exert a hard, overpowering pressure on agriculture. Our water will go to oil shale.

Our local men and women will go to labor, and thousands will come in causing untold hardships on themselves and us.

Agriculture cannot compete for our own sons and daughters now. We need to maintain our ranches and farms for food production, and to help balance the national budget.

We cannot eat oil shale, coal or gas.

I personally have a son on a drilling rig, and a son driving a tanker truck [18 wheeler]. Both men are needed at home desperately, I am 67. We can't pay our own labor one-half of what they are getting. The local labor is fairly well used up, but thousands will come to our area, and they probably couldn't bridle a horse or pull a calf.

There is more than one-half a billion dollars needed on proposed water projects in Colorado. Nearly all these projects are ready, or can be ready for construction at the drop of a statement from Congress and the President. This would cause much more food and local stability in agriculture, save farm ground for food production and keep families on the farm.

Help us to get good men, or gentlemen, shall we just say, "Let's go oil shale, let's go coal, let's go gas; agriculture just go."

My last point is to emphasize the Fruitland Mesa Project needs water and this is our last way to get it. We are trying other ways and means but again we need assistance.

Our project was feasible before inflation, it should be even more so now. We have a feasibility report on dam enlargement on Gould Reservoir which will fit in the overall project very good.

We need $3 million for the dam enlargement, and $100,000 for feasibility planning. We could use this money now.

One point I would like to bring up here. If we could get the $100 million for our project, which would help the entire community a great deal, then the $3 million for dam could be postponed.

Mr. BEVILL. Thank you very much.

HUMBOLDT RIVER FLOOD CONTROL PROJECT

WITNESSES

HON. JIM SANTINI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

DAN BILBAO, JR., ELKO COUNTY RECREATON BOARD

J. WILLIAM McDONALD, DIRECTOR, COLORADO WATER CONSERVATION BOARD

Mr. BEVILL. I see Congressman Santini has come in and we recognize you at this time.

Congressman Santini, we are pleased to have you with us. You may proceed as you wish.

STATEMENT OF HON. JIM SANTINI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. SANTINI. Thank you, Mr. Chairman and members of the committee.

I appreciate this opportunity to again speak to you on a very important and critical water project for northern Elko County. Here to speak on behalf of and in support of that project is Mr. Dan Bilbao. He represents the Elko County Recreation Board.

This is a project of very modest expectations in terms of $500,000 but a project of very critical impact and importance to the water-short area of northern Nevada.

STATEMENT OF DR. DAN BILBAO.

Mr. BILBAO. My name is Dan Bilbao, Jr. I represent the Elko County Recreation Board. This Board is the official sponsor of the Humboldt River Flood Control Project, and will provide the requirements of local cooperation for the project.

We have with us today a representative group from the Humboldt River Basin who, by their presence, wish to impress on you the importance of this project. Their names and occupations are: Paul Sawyer, Motorized Equipment Leasing Agent; L. L. "Dutch" Stenovich, garage owner and automobile dealer; Mark Chilton, engineer, and Amlio Gomex, our engineering consultant.

Mr. MEYERS. Will they stand up.

Mr. BILBAO. This project was authorized by Congress for construction in 1950. It consisted of three small dams with a combined storage capacity of 250,000 acre-feet.

The project had no official sponsor until 1969 when the Board we represent agreed to pay the local costs. Ever since 1969 we have been trying to get the project built by the Corps of Engineers.

Needless to say, we have been confronted with numerous delays. However, the Corps has been updating the project for several years and a report entitled Phase I, General Design Memorandum and Environmental Impact Statement, is due in draft form late this year, and in final form in 1982.

Due to the effect of economic conditions on the feasibility of two of the dams, the Corps has decided to concentrate its efforts on building only one of the dams, the Hylton Dam on the South Fork of the Humboldt River, for the present.

Work on the other two dams will be deferred until such time as the economy makes them more feasible. The Hylton Reservoir capacity will be 120,000 acre-feet. The latest estimate of cost is about $32,300,000. The project will provide flood control, irrigation, recreation and fish and wildlife enhancement.

The Corps of Engineers tells us that their capability for fiscal year 1982 is $550,000, a small part of which will be used to wind up the Phase I report already described, and the balance will be used on Phase II of the General Design Memorandum which is heavily oriented toward the general design of the project, including more detailed geologic explorations and laboratory testing.

If the project is not funded for fiscal year 1982, initiation of contruction will be postponed one more year with a resultant increase in the final cost due to inflation of approximately $3 million.

Our engineering consultant, Mr. Amalio Gomez, has worked with the Corps of Engineers in develoing a realistic schedule for completion of this project and if work can proceed in the coming year as requested, the Corps estimates that actual construction can get underway in 1984 and the project can be completed in 1988.

As authorized, the local share of this project for irrigation is $2,762,000 and the local first cost for recreation facilities is in the order of $2,200,000. The Federal net cost is then about $5 million less than shown in the estimate previously stated.

I might state just briefly that Nevada is an arid State where water has a very high value and where water resources must be utilized to the fullest extent possible in order to meet the needs of the State, flood control and water storage on the Humboldt River, northern Nevada's principal source of water, will help to bring about utilization of this valuable resource to the fullest.

Due to the rapid growth of our State, particularly in the rural areas, there is a rapidly growing demand for use of water in all ways which it is traditionally used.

During the 1979–1980 irrigation season it is estimated that 110,000 acre-feet of water were wasted due to flood stages which carried the surplus waters on downstream into the Humboldt sink, an arid salt fault.

This year, stream flow in the Humboldt is estimated at only 34 percent of normal. If the Hylton dam were in place now we could have stored 100,000 acre-feet of water to assist in offsetting this serious water shortage.

We know that the project is not funded in the President's budget but we ask that you add on an item to the budget so that the planning process is not interrupted and the work already done does not become obsolete and we can maintain our schedule without the danger of being thwarted eventually by increased inflationary costs.

Thank you for allowing me to make this presentation.

Mr. BEVILL. Very good.

Mr. SANTINI. That concludes our statement. I will stress and emphasize that we have good faith. The local citizens have because they previously extended an offer to the Corps of Engineers to underwrite $550,000 themselves. The Corps suggested under existing law that was not a feasible plan but in any event, they feel that strongly and that supportive of this particular proposal.

Thank you, Mr. Chairman and members of the committee, for this opportunity.

Mr. BEVILL. Very good.

STATEMENT OF DAN BILBAO, THE HUMBOLDT RIVER FLOOD CONTROL PROJECT IN NORTHERN NEVADA

My name is Dan Bilbao, Jr. I represent the Elko County Recreation board. This board is the official sponsor of the Humboldt River Flood Control Project, and will provide the requirements of local cooperation for the project.

We have with us today a representative group from the Humboldt River Basin who, by their presence, wish to impress on you the importance of this project. Their names and occupations are: Paul Sawyer, Motorized Equipment Leasing Agent; L. L. "Dutch" Stenovich, garage owner and automobile dealer; Mark Chilton, engineer, and Amalio Gomez, our engineering consultant.

This project was authorized by Congress for construction in 1950. It consisted of three small dams with a combined storage capacity of 250,000 acre feet. The project had no official sponsor until 1969 when the board we represent agreed to pay the

local costs. Ever since 1969 we have been trying to get the project built by the Corps of Engineers.

Needless to say we have been confronted with numerous delays. However, the Corps has been updating the project for several years and a report entitled Phase I, General Design Memorandum and Environmental Impact Statement, is due in draft form late this year, and in final form in 1982.

Due to the effect of economic conditions on the feasibility of two of the dams, the Corps has decided to concentrate its efforts on building only one of the dams, the Hylton dam on the South Fork of the Humboldt River, for the present. Work on the other two dams will be deferred until such time as the economy makes them more feasible. The Hylton reservoir capacity will be 120,000 acre feet. The latest estimate of cost is about $32,300,000. The project will provide flood control, irrigation, recreation and fish and wildlife enhancement.

The Corps of Engineers tells us that their capability for fiscal year 1982 is $550,000, a small part of which will be used to wind up the Phase I report already described and the balance will be used on Phase II of the General Design Memorandum which is heavily oriented toward the general design of the project, including more detailed geologic explorations and laboratory testing. If the project is not funded for fiscal year 1982, initiation of construction will be postponed one more year with a resultant increase in the final cost due to inflation of approximately $3,000,000.

Our engineering consultant, Mr. Amalio Gomez, has worked with the Corps of Engineers in developing a realistic schedule for completion of this project and if work can proceed in the coming year as requested, the Corps estimates that actual construction can get underway in 1984 and the project can be completed in 1988.

As authorized, the local share of this project for irrigation is $2,762,000 and the local first cost for recreation facilities is in the order of $2,200,000. The federal net cost is then about $5,000,000 less than shown in the estimate previously stated.

I might state just briefly that Nevada is an arid state where water has a very high value and where water resources must be utilized to the fullest extent possible in order to meet the needs of the state. Flood control and water storage on the Humboldt river, northern Nevada's principal source of water, will help to bring about utilization of this valuable resource to the fullest. Due to the rapid growth of our state, particularly in the rural areas, there is a rapidly growing demand for use of water in all ways which it is traditionally used. During the 1979-80 irrigation season it is estimated that 110,000 acre feet of water were wasted due to flood stages which carried the surplus waters on down stream into the Humboldt sink, an arid salt flat. This year stream flow in the Humboldt is estimated at only 34 percent of normal. If the Hylton dam were in place now we could have stored 100,000 acre feet of water to assist in offsetting this serious water shortage.

We know that the project is not funded in the President's Budget but we ask that you add on an item to the budget so that the planning process is not interrupted and the work already done does not become obsolete and we can maintain our schedule without the danger of being thwarted eventually by increased inflationary costs.

Thank you for allowing me to make this presentation.

COLORADO RIVER STORAGE PROJECTS AND PARTICIPATING PROJECTS

WITNESSES

HON. HANK BROWN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

PAUL L. BILLHYMER, EXECUTIVE DIRECTOR, UPPER COLORADO RIVER COMMISSION

Mr. BEVILL. I see our colleague and friend, Congressman Hank Brown, has come in. We will be glad to hear you and your delegation now.

We are pleased to have you. You may proceed as you wish.

STATEMENT OF CONGRESSMAN BROWN OF COLORADO

Mr. BROWN. Thank you, Mr. Chairman, and members of the committee. I really appreciate the opportunity to appear before you. Over the years you have been very kind to the previous Members who have held my particular seat in Congress, Members from both parties, Jim Johnson and Wayne Aspinall, and you have been, I think, most understanding of the kinds of needs that the western area has, as well as the State of Colorado, in the way of water.

There are others here this morning who will be able to present the more factual detail on the programs that we are talking about today that you will be looking at.

I would want to share a thought with you on the Narrows Project. The Narrows Project is one that was previously authorized and was previously under construction. I believe it started construction in 1973.

As I am sure you are more aware than I, the funding for that was halted, I hope temporarily. So the project is left somewhat in a state of suspension in that there have been funds expended and there are properties and farms acquired in the area of the dam site.

My suggestion this morning, understanding our budget constraints, is that a token amount of money be made available in this budget that would allow for some purchase of farms. Frankly, what I am thinking of is, while I can understand and appreciate there is not the money to move ahead as I would like, and I hope many of you would like, my hope is this token amount would make it possible to acquire those farms from folks in that area that maybe because of a death in the family or a desire to move, would want to sell their property, so it would make some funds available to move in those areas where people want to sell because they know the area is in the area for the dam site, it would probably be that they want to sell to the Federal Government rather than to another farmer in the area.

Mr. MEYERS. Do you know how many farms there are in that situation?

Mr. BROWN. Yes. I understand there are several. This is second-hand only. I think that information is available and that I think provides an accommodation to people who are really under a great constraint and a real personal problem and I think it helps the Federal Government in buying at the best price possible and helps the individuals involved.

With that introduction and my thanks for your consideration on this, I want to let you know I appreciate your time.

[The statement of Mr. Brown follows:]

STATEMENT OF HON. HANK BROWN

Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you in support of funding water reclamation projects in my congressional district. My predecessors in this office, Jim Johnson and Wayne Aspinall, have both told me of the understanding this Committee has always shown toward the water resource development needs of the State of Colorado.

Budget restraints will necessarily prevent the resumption of a full-scale construction program, but I join with many others in welcoming the new Administration's positive attitude toward water resource development. I share the added hope that

there will be some flexibility in the water and power budget to accommodate some modest additions to the program.

I refer specifically to the Narrows Project on the South Platte River in northeast Colorado. This Committee is well aware of the long legislative history that has been written on this project through both the authorizing and appropriation process. It has often been called one of the most over-studied projects in the nation. I, myself, have contributed to that history of study as both a candidate for office and as a new Member of Congress. Consequently, I support the project and join with the State of Colorado and the project sponsors in asking for an appropriation of $400,000 for fiscal 1982. While there may be a capability for expending a greater sum, this amount will permit a limited resumption of land acquisition and will get some Water and Power Resources Services people back into the field.

Both the opponents and the supporters of the project have been put through a long and agonizing process, one marked by indecision and conflicting signals going all the way back to 1940, but especially since reauthorization took place in 1970. It is time to let the good people of the affected area know what congressional intent is.

Mr. Chairman, the only other request for funding of water projects in the Fourth Congressional District involves the Dominguez Project in Mesa and Delta Counties and the continuation of salinity control work in the Grand Valley area. While the rapid growth in population on the western slope of Colorado would tempt one to seek accelerated consideration of several proposed projects such as the Dominguez, I want to express my full support for the minimum funding requested by the current Administration. In addition, it would be most useful if this Committee would direct Water and Power Resources Service to finish the planning process on these projects as rapidly as possible.

I also wish to go on record in support of the funding requests from the balance of the State of Colorado. This will be presented in other testimony before this Committee.

Mr. Chairman, thank you for your courtesy.

CCWCD

central colorado water conservancy district

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Suite 2 Greeley, Colorado 80631 Phone: 330-4540
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STATEMENT OF THE CENTRAL COLORADO WATER CONSERVANCY DISTRICT PRESENTED BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS OF THE HOUSE OF REPRESENTATIVES OF THE CONGRESS OF THE UNITED STATES IN SUPPORT OF THE NARROWS UNIT, COLORADO

MARCH 25, 1981

It is a great privilege for the Central Colorado Water Conservancy District to submit this written statement in support of the Narrows Unit of the Pick - Sloan Missouri Basin Program, South Platte Division, Colorado. Additionally, on this date oral testimony summerizing the needs of the local people, whom we represent, and the State's position have been presented to the Subcommittee.

The Narrows Project remains an essential factor in meeting the water needs of the South Platte River Basin. Our request of this committee for fiscal year 1982 is an appropriation of $400,000.00. The purpose of these funds would be to reinitiate activities concerning the project.

We submit today that the project is needed much more now than it ever has been. In submitting this statement, we respectfully implore each committee member to consider the regional differences between the needs of semi-arid Colorado and other areas of our country.

The Narrows Project becomes more important to our area daily because the needs of the region are changing so quickly. Narrows is now a project for all the people of the eastern slope; farmer and urbanite alike.

How can the Narrows Improve Regional Agriculture? Besides the many and varied benefits of a large multi-use project, Narrows will contribute greatly to existing agriculture. But, according to the study Agricultural Land Conversion in Colorado, published by the Colorado Department of Agriculture, "Renewable irrigated acreage served by renewable water supplies is no higher now than it was in 1959." And, "2/3 the value of all Colorado crops is based upon irrigation." The Narrows project would provide 'security through storage' to existing producers while opening new lands to production.

Also mentioned in the study, "Eighteen percent of Colorado's current irrigated acreage (503,000 acres) depends upon nonrenewable groundwater. Most of this acreage (406,000 acres) is located in the eastern high plains above the Ogallala aquifer." It should come as no surprise that falling water tables are endangering the production of this area.

We submit that recharge of the Ogallala or surface water deliveries is possible with South Platte River water, but impossible without large scale storage (Narrows).

How can Narrows Aid in Orderly Population Growth? Our current population of 2.7 million is growing at an annual rate of 2.75 percent --- nearly three times the national rate. According to a recent study by the Department of Housing and Urban Development, "Front range population is expected to increase by one million residents by the year 2000. This growth will require an additional 200,000 housing units between 1985 and 2000."

Clearly, these new residents will need water. Rather than the present practice of cities acquiring senior agricultural water rights for human consumption, new and dynamic practices of sharing our water resources will come forth, if there is storage!

The Narrows Project, over time, will develop a tremendous volume of water which can be shared by urban and rural water users, through orderly and accepted exchange procedures.

Today, we ask for the help of the Federal Government to fund this incredibly important project.

Local financial support is a part of the Narrows Project financing. Local front-end money has been a part of Narrows planning and design studies since the formation of this District in 1965. The taxpayers of the area have been financially supporting this project through their taxes. They have demonstrated further support through the willingness to contract with the United States for repayment of the project's costs as prescribed in the acts of this Congress. The District has a contract to pay the United States Treasury almost $91,000.00 per year for our apportioned share.

Greater payments will be made to the United States as the values of the agricultural commodities change. The water service contract meets the administration's objectives in the area of repayment also. The repayment escalator clause assures that the United States will receive a fair payment on their wise investment.

Colorado strongly supports the Narrows Project. The Narrows again became the number one priority for construction of the Colorado Water Conservation Board. The Governor and the State Legislature have recognized the increasing importance of the development of the water resources in meeting the demands placed on Colorado by the energy crises, food production, foreign exchange of agricultural commodities, and others, such as gasohol proposals. To meet these demands of Colorado State Legislature is in the process of establishing a fund to meet the financial requirements for the development of Colorado's water resources. Monies would be available from this fund to meet the state's share of the construction costs for future federal projects and other purposes.

Over the past years we have enjoyed the opportunities to present to this committee, myriads of facts and information outlining the need for the Narrows. Now, new efforts designed to develop and receive mutually beneficial use from Colorado resources enter into the picture. For example, a program designed to take agricultural water, place it in municipal use, then treat that water and return it to agricultural systems, is facing public opposition. You may ask why such a farsighted program would be opposed. We submit that the lack of storage facility such as the Narrows makes this type of program almost impossible. Agricultural water users must be assured of storage facilities.

At this point we raise the question of the contract as it represents the honor and word of the United States Government. As earlier mentioned, this sponsoring District executed a repayment contract with the Secretary of the Interior, on July 27, 1976. Since the initiation of the most recent activities on the Narrows in 1958, the people of the South Platte Valley have held this engagement with the Department of Interior to be one of honor and good faith. The contract representing the good faith of the United States to pursue the completion of the Narrows Unit. Throughout the intervening 23 years we have complied with the laws of this honorable Congress and every mandate of successive Presidents from John F. Kennedy. We have consented to demands for changes by federal agencies. Many of which did not benefit the water user but which increased the project cost for the water users. There have been no major

changes in reclamation law to date. Yet, we are kept from achieving this valid goal. The people have spent years of time, hundreds of thousands of dollars, and have made the contractual commitments. We submit that the actions of the current administration suggests that this contract, the word of the United States, is meaningless.

Our appeal to this committee for funding includes an appeal that the contract and the word of the United States be restored to an elevation of honor and meaningfullness.

Energy is the most critical issue in this country today, Denver, Colorado is being looked upon as the energy capital of the country. The United States must take progressive and immediate action to eliminate our dependency upon foreign energy. This means development of goal and oil shale. Denver will be the hub of this essential development. The increase in population is going to have a major impact on the "normal" or "base" water supply of our area. This places further importance on the ability to capture the more unusual flows of large volume.

In summary, we appeal to Congress to:

a) Appropriate $400,000.00 for the reinitiation of construction activities on the Narrows Project for FY-1982.

The attention of the members of this committee is greatly appreciated.

Thank you.

Mr. BEVILL. It is a very good presentation and we will certainly take all that into consideration.

Do both of you want to make statements? Go right ahead.

STATEMENT OF PAUL L. BILLHYMER

Mr. BILLHYMER. Mr. Chairman, I am Paul L. Billhymer, Executive Director of the Upper Colorado River Commssion, Salt Lake City, Utah.

We have submitted a written statement. I will not take time for that. We have also submitted a statement on the part of the State of New Mexico. I request that would be included in the record.

Mr. BEVILL. It will.

[The statement of Mr. Billhymer follows:]

I am Paul L. Billhymer, Executive Director of the Upper Colorado River Commission, Salt Lake City, Utah.

Mr. Chairman, the four States of the Upper Colorado River Commission, Colorado, New Mexico, Utah, and Wyoming, are united in their support of a constructive and progressive water resources development program in the Upper Colorado River Basin for fiscal year 1982. Our interested water people appreciate the privilege of appearing before this subcommittee in support of appropriations of funds to continue the construction and operation of the Colorado River Storage Project and participating projects.

Summary of Specific Action Requested

Appropriations of funds recommended by the representatives of the States of Colorado, New Mexico, Utah, and Wyoming for the Colorado River Storage Project and participating projects.

Representatives of each of our member States will be presenting testimony to this subcommittee in support of those appropriation requests that reflect the official position of each State with respect to water resource projects and programs involving the Colorado River Storage Project and participating projects. Such specific requests will not be repeated here. The Commission supports the appropriation requests submitted by representatives of the member States with respect to water resource projects and programs involving the Colorado River Storage Project and participating projects. We urge the funding of a viable water resources development program in the Upper Colorado River Basin inasmuch as such projects are capital improvements which have national benefits.

Mr. Chairman, on behalf of the Upper Colorado River Commission, thank you for this opportunity to present this statement for the Committee's consideration.

STATEMENT OF
BRUCE KING, GOVERNOR OF THE STATE OF NEW MEXICO,
TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE
COMMITTEE ON APPROPRIATIONS-HOUSE OF REPRESENTATIVES

March 25, 1981

SUMMARY

This statement is submitted in support of appropriations for the construction of water resource projects authorized to be built by the Water and Power Resources Service and the Corps of Engineers, for project operation and maintenance by these agencies and for project investigations by these agencies.

In general, I support the President's fiscal year (FY) 1982 budget proposals for water resources. I support appropriations in addition to the amounts proposed by the President for the Animas-La Plata Project-Colorado and New Mexico. The President's FY '82 budget does not include any money for this project. It is requested that $2.9 million be included in the FY '82 budget to initiate construction activities on this project. The Water and Power Resources Service has, in consultation with Colorado and New Mexico and with local entities who would be the immediate beneficiaries of the project, selected a plan to regulate and deliver the project water supply to the areas of use, and all work on the final environmental impact statement and the definite plan report has been completed. The project is ready for construction in all respects and there is a great need for additional water in this area of the states where oil, gas, uranium and coal development for energy is underway.

STATEMENT

WATER AND POWER RESOURCES SERVICE

Colorado River Storage Project And Participating Projects

The Colorado River Storage Project Act which became law in 1956 authorized a carefully planned and farsighted program for the development and use of waters of the Upper Colorado River Basin. To carry this program forward the President has recommended that $154,452,000 be appropriated to the Water and Power Resources Service. This proposal includes $208,000 for New Mexico's San Juan-Chama Participating Project. Construction on this project was begun in 1964 and is continuing. The FY '82 program provides for minor modifications to the waterflow control system and the outlet works at Nambe Dam.

The President's FY '81 budget does not include funds for the Animas-La Plata Project in New Mexico and Colorado which was authorized in 1968 by P.L. 90-537. The Water and Power Resources Service has, in consultation

with Colorado and New Mexico and with local entities who would be the immediate beneficiaries of the project, selected a plan to regulate and deliver the project water supply to the areas of use, and all work on the final environmental impact statement and the definite plan report has been completed. The project is ready for construction in all respects and there is a great need for the additional water supply which will be made available by the project in this area of the states where oil, gas, uranium and coal development for energy is underway. It is urged that at least $2.9 million be appropriated in FY '82 in order that construction can be initiated and proceed in an orderly and economic manner.

I also urge that appropriations for other units in the Upper Basin states be adequate for orderly project development at an economic rate.

Carlsbad Irrigation Project

The sum of $350,000 is proposed in the President's FY '82 budget to continue the program of rehabilitation work on the laterals and sublaterals in the Carlsbad Irrigation Project distribution system. The work, which will be done by the Carlsbad Irrigation District under the Rehabilitation and Betterment Act, will conserve water in the District. I support this proposal.

Brantley Dam and Reservoir

The President's FY '82 budget includes $1.0 million for preconstruction activities on the Brantley Project in the Pecos River Basin. The Brantley Dam and Reservoir Project was authorized for construction by the Water and Power Resources Service by P.L. 93-914 in 1972. The basic purpose of the project is the protection of life and property in the vicinity of the City of Carlsbad. The dam would replace the unsafe McMillan Dam which was reconstructed by the U.S. Reclamation Service in 1908 and would provide additional capacity for the storage of flood waters. One percent of the project cost is allocated to irrigation, five percent of the cost is allocated to recreation, fish and wildlife purposes and two percent of the cost is allocated to highway relocation; the balance of the cost is allocated to safety of structures and flood and sediment control. I support the President's budget for this urgently needed project.

Central Arizona Project

The Colorado River Basin Project Act P.L. 90-537, enacted in 1968, authorized construction of the Central Arizona Project in Arizona and New Mexico. The President's FY '82 budget proposes $186,500,000 for this project. I support this request for funding for the Central Arizona Project. The Hooker Dam and Reservoir or suitable alternative in southwestern New Mexico is authorized for construction as a part of the Central Arizona Project. The President's proposal includes $600,000 to continue preliminary studies on Hooker Dam and Reservoir or suitable alternative. I fully support the President's budget proposal for study of New Mexico's portion of this important project.

Colorado River Basin Salinity Control Project - P.L. 93-320, Title I

The President's FY '82 budget includes a total of $21,700,000 for continued construction on the Yuma-Desalting Plant and related facilities. I fully support the budget proposal for this program.

Colorado River Basin Salinity Control Project - P.L. 93-320, Title II

The President's FY '82 budget includes $9,251,000 for continued construction and advance planning of three authorized salinity control units of the project, Grand Valley Unit ($7,713,000), Paradox Valley Unit ($1,448,000) and Las Vegas Wash Unit ($90,000). I fully support the budget proposal for this program.

Closed Basin Division, San Luis Valley Project, Colorado

The President's FY '82 budget includes $2,538,000 to be used for continued drilling and development of deep wells for Stage 1-2. The program also includes award of a contract for drilling and developing deep wells for Stage 3. Design work will continue on Stage 1-2 canals, laterals, transmission lines and substations. Archeology survey, testing and mitigation will also continue. The project will facilitate Colorado's deliveries of Rio Grande water to downstream states in compliance with the Rio Grande Compact. I fully support the budget for this project.

General Investigations

The proposed Water and Power Resources Service program also includes general investigations of interest to New Mexico. These include:

(1) $175,000 to continue a feasibility study authorized by P.L. 95-578 for rehabilitation and possible raising of Santa Cruz Dam;

(2) $4,125,000 for continuing investigations under the Colorado River Water Quality Improvement Program;

(3) $240,000 for Environmental and Interagency Coordination Activities in New Mexico;

(4) $33,000 to continue the Llano Estacado Total Water Management Study, a special investigation of the water resources problems of the High Plains region of west Texas and eastern New Mexico;

(5) $275,000 to study the hydropower potential at existing facilities in New Mexico;

(6) $87,000 for minor work in connection with completed project investigations in New Mexico;

(7) $80,000 to provide technical assistance to the state in the form of expertise in hydrology, engineering or other disciplines to aid the state in water resources planning;

(8) $250,000 to continue an appraisal investigation of the water and mineral resources of the Tularosa Basin.

I support funding for a total of $5,265,000 for the general investigations described above.

CORPS OF ENGINEERS

Santa Rosa Dam and Reservoir

The Santa Rosa Dam and Reservoir, formerly known as Los Esteros Dam and Reservoir, located on the Pecos River about seven miles upstream from the Town of Santa Rosa, was completed in 1979. The President's FY '82 budget proposes $3,300,000 to continue with the spillway modifications necessitated by the revised spillway design flood. I fully support the President's budget for this project.

Rio Grande and Tributaries Rio Puerco, Rio Salado, N.M.

The President's FY '82 budget includes $140,000 to complete Phase 1 preconstruction planning of the authorized Rio Puerco-Rio Salado Project which will provide much needed flood and sediment control in the Rio Grande Basin. I fully support the President's budget for this program.

Santa Fe River and Arroyo Mascaras

The President's FY '82 budget includes $50,000 to continue preconstruction planning of this authorized project which will provide flood protection for the City of Santa Fe. I fully support the President's budget for this project.

Rio Grande Floodway, Truth or Consequences Unit

The President's FY '82 budget includes $120,000 to continue preconstruction planning of the Rio Grande Floodway, Truth or Consequences Unit. The authorized project will provide flood protection for the Town of Truth or Consequences. I fully support the President's budget for this project.

Authorized Surveys

The President's FY '82 budget includes $750,000 for the Corps of Engineers to proceed with the authorized survey - Rio Grande and Tributaries, New Mexico and Colorado. Four hundred and sixty-five thousand dollars of the total is budgeted to continue a review survey to determine flood control, drainage, and related problems and the feasibility of providing improvements for solution of these problems along the Rio Grande above El Paso, Texas. The budgeted amount also includes funds for study of hydroelectric power potential at Cochiti Reservoir, flood control at Grants, New Mexico and Alamosa, Monte Vista and Del Norte, Colorado and study of Abiquiu Reservoir and Rio Chama downstream to its confluence with Rio Grande. The latter study is urgently needed to determine what measures can be taken to modify the Abiquiu Dam and Reservoir project to allow storage of water for conservation and to increase the capacity of Rio Chama below Abiquiu Dam from 1,700 cfs to 4,000 cfs, to improve river regulation and protect adjacent property.

The President's FY '82 budget includes $200,000 for the Corps of Engineers to continue its investigation - Gila River and Tributaries upstream from Camelsback Dam Site, Arizona and New Mexico. The investigation is to survey the feasibility of providing solutions to the flood control problems in the area.

The President's FY '82 budget proposes $500,000 to continue the investigation - Colorado River and Tributaries above Lee Ferry, Arizona, which includes $440,000 for the investigation of the San Juan River and Tributaries. This investigation is being conducted to determine the feasibility of constructing improvements for flood control and related resource purposes within the San Juan River Subbasin of the Colorado River Basin above Lee Ferry, Arizona.

I fully support the President's budget for these authorized surveys.

CONCLUSION

The excellent water resources planning and development work being done by the Water and Power Resources Service and the Corps of Engineers in New Mexico and adjacent states is essential to the welfare of the State and the Nation. I sincerely appreciate the opportunity to present this statement in support of appropriations for the work of these agencies.

Mr. BILLHYMER. Mr. J. William McDonald from the Colorado Water Conservation Board is going to use the rest of the Commission's time to explain Colorado's position.

STATEMENT OF J. WILLIAM MCDONALD

Mr. MCDONALD. Mr. Chairman and members of the subcommittee:

My name is Bill McDonald. I am Director and Secretary of the Colorado Water Conservation Board.

It is my privilege to testify today on behalf of the Honorable Richard D. Lamm, Governor of Colorado; and Mr. Monte Pascoe Executive Director of the Colorado Department of Natural Resources; as well as on behalf of the Board itself, which is the State agency charged with the protection, conservation, and management of the water resources of the State of Colorado.

With two exceptions, the President's recommended budget for the U.S. Water and Power Resources Service adequately funds the activities necessary for the timely execution and continuation of reclamation programs in the State of Colorado. The items to which we take exception are:

[1] the failure to include construction funds for the authorized Narrows and Animas-La Plata projects; and

[2] the failure to include funds for further planning on four additional authorized projects.

While the State believes that the President's budget requests are, with the exceptions noted above, adequate. We would caution that any reduction in the budget requests, particularly for construction activities would be detrimental to the water users of the State of Colorado and, in the instance of the Closed Basin project, to the interests of the States of New Mexico and Texas as well.

I would like to specifically mention two projects in the President's budget request: the Grand Valley and Paradox Valley units, both of which are components of the Colorado River Basin Salinity Control program.

The seven States of the Colorado River Basin have, acting through the auspices of the Salinity Control Forum, endorsed a basin-wide, coordinated approach to the management of salinity in the Colorado River.

The construction of the two units in Colorado is an integral component of that basin-wide effort. We endorse the funding requested for those projects.

With respect to the Narrows Project, we respectfully urge that Congress include $400,000 in the fiscal year 1982 budget to continue construction on this project.

The Narrows was authorized by Congress in 1970 and was actually under construction in 1977 when it was included on the Carter Administration's infamous hit list. At that time, construction activities were suspended, even though property acquisition and final engineering and design work were well underway.

The $400,000 requests which we are making would reactivate construction on this important project, which would provide irrigation water to supplement existing supplies, thereby strengthening the agricultural economy of northeast Colorado.

With respect to the Animas-La Plata project, we respectfully urge Congress to include $2.87 million in the fiscal year 1982 budget in order that construction on this project can be initiated.

This is a joint Colorado-New Mexico project designed, among other things, to address many of the problems which confront the Indian reservations in the project area.

Other components of the project would serve non-Indian populations in Colorado and New Mexico with municipal water.

Finally, project water would significantly strengthen the irrigated agricultural economy of southwestern Colorado.

The definite plan report and final environmental impact statement for the Animas-La Plata project have been completed and have received final approval.

In addition, the local court has just created the expanded water conservancy district which will serve as the local sponsor and repayment entity for the project. Thus, all is ready for construction.

I would note that section 501[b], the Colorado Basin Project Act of 1968 specifies that:

> The Secretary [of the Interior] is directed to proceed as nearly as practicable with the construction of the Animas-La Plata, Dolores, Dallas Creek, West Divide, and San Miguel participating Federal reclamation projects concurrently with the construction of the Central Arizona Project, to the end that such projects shall be completed not later than the date of the first delivery of water from said Central Arizona Project * * *.

The Central Arizona Project is scheduled to deliver water commencing in 1985. Obviously, the Congress is obligated to proceed in a timely manner since there will be a four to five-year construction period for the project.

Failure to appropriate funds for the limitation of construction would be unfortunate since legal problems concerning the first delivery of water from the Central Arizona Project might then arise.

The third component of our request relates to the need to provide funding in the fiscal year 1982 budget for continuing planning on and reformulation of the previously authorized San Miguel, West Divide, Fruitland Mesa, and Savery Pot-Hook projects, the first two of these being among the five participating projects of the Colorado River Storage Project which are to be constructed concurrently with the Central Arizona Project.

The Carter Administration declared these four projects economically unjustified based upon the planning and evaluation criteria employed by that Administration.

We could not disagree more with the criteria which have been applied in recent years. The traditional cost-benefit ratio measures neither all of the benefits nor all of the costs of a project, particularly as applied by the Carter Administration. Thus, to reject valuable water resource development projects on this sole criterion seems to us inappropriate.

In addition, we would note again that Congress is obligated to proceed in a timely manner with the San Miguel and West Divide water projects since the law provides that they are to be constructed concurrently with the construction of the Central Arizona Project.

The Board specifically requests Congress to provide $1 million for the continuation of planning on these projects in order that they may be reformulated and brought to fruition.

The final program which I would like to mention is the Atmospheric Water Resources Management Program of the W&PRS. Colorado supports the request for $600,000 in fiscal year 1982 to continue that portion of this research and development program which applies to the Colorado River Basin.

The increase in recent years of winter cloud seeding projects in Colorado has heightened interests in and awareness of the possibilities afforded. Along with these projects there has been concern over remaining scientific uncertainties, over the fact that programs benefit some at the expense of others, and over conflict of legal, interstate, and governmental responsibilities.

Because Colorado will bear a major portion of weather modification operations to augment the water of the Colorado River Basin, the State has a particular interest in research, not only in the development of the technology but in procedures for mitigating impacts on affected communities.

If seeding does result in economic disruption, the extent of the damage must be assessed and compensation procedures addressed.

We emphasize that it is research and demonstration which the State, for the moment, supports. We believe that many questions remain to be answered before operational programs can be routinely implemented.

I appreciate the opportunity you have afforded me to impose upon your busy schedule today. The fact that Colorado and other States have had the opportunity to present a case before you should remind us all that the legislative processes of our Government are still the best that have yet to be devised.

We thank you.

[The statement of Mr. McDonald follows:]

STATEMENT OF J. WILLIAM MCDONALD, DIRECTOR COLORADO WATER CONSERVATION BOARD

Mr. Chairman and Members of the Subcommittee:

I am J. William McDonald, Director and Secretary of the Colorado Water Conservation Board. I am testifying today on behalf of the Honorable Richard D. Lamm, Governor of Colorado; Mr. D. Monte Pascoe, Executive Director of the Colorado Department of Natural Resources; and the Board itself, which is the State agency charged with the protection, conservation, and management of the water resources of the State of Colorado.

Summary of request

With but two exceptions, the President's recommended budget for the U.S. Water and Power Resources Service adequately funds the activities necessary for the timely execution and continuation of reclamation programs in the State of Colorado. The items to which we take exception are as follows:

(1) the failure to include construction funds for the authorized Narrows and Animas-La Plata projects, and

(2) the failure to include funds for further planning on four additional authorized projects.

We urge that $400,000 be included in the fiscal year 1982 budget for continuing construction on the Narrows Project, that $2.87 million dollars be included for the initiation of construction on the Animas-La Plata project, and that funds be included in the fiscal year 1982 budget for continuing planning on the Savery-Pot Hook, Fruitland Mesa, West Divide, and San Miguel projects.

Details of request

The President's recommended budget contains $103,842,000 for construction, nothing for advance planning, and about $2,500,000 for feasibility investigations on projects in Colorado. The State believes that these sums are, with the exceptions noted above, adequate for the timely execution and continuation of reclamation programs in Colorado. We would caution, however, that any reduction in these budget requests, particularly for construction activities, would be detrimental to the water users of the State of Colorado and, in the instance of the Closed Basin project, to the interests of the states of New Mexico and Texas as well.

I would like to specifically mention the Grand Valley and Paradox Valley units, both of which are components of the Colorado River Basin Salinity Control program. The seven states of the Colorado River Basin have, acting through the auspices of the Salinity Control Forum, endorsed a basinwide, coordinated approach to the management of salinity. The construction of the two units in Colorado is an integral component of that basinwide effort. We endorse the funding for those projects which is contained in the President's recommended budget.

With respect to the Narrows Project, we respectfully urge that Congress include $400,000 in the fiscal year 1982 budget to continue construction on this project. The Narrows was authorized by Congress in 1970 and was actually under construction in 1977 when it was included on the Carter Administration's infamous hit list. At that time, construction activities were suspended, even though property acquisition and final engineering and design work were well under way. The $400,000 request which we are making would serve to reactivate construction on this important project.

With respect to the Animas-La Plata project, we respectfully urge Congress to include $2.87 million dollars in the fiscal year 1982 budget in order that construction on this project can be initiated. This is a joint Colorado-New Mexico project designed, among other things, to address many of the problems which confront the Indian reservations in the project area. For example, in Colorado, both the Southern Ute and Ute Mountain Ute Tribes have substantial amounts of lands which could be irrigated by the project. In addition, both reservations contain significant coal deposits which could be converted into other forms of energy if water supplies can be made available. Other components of the project would serve non-Indian populations in Colorado and New Mexico with municipal water. Finally, project water would significantly strenghten the irrigated agricultural economy of southwestern Colorado.

The construction of this project has been caught up in continuing and long-standing delays. When authorized in 1968, it was represented to Congress that all preconstrution planning could be completed in three years. Thirteen years have now elapsed. However, at long last, the definite plan report and final environmental impact statement have been completed and have received final approval. In addition, the local court has just created the expanded water conservancy district which will serve as the local sponsor and repayment entity for the project. Thus, all is ready for construction.

The genesis of this project is the Colorado River Storage Project Act of 1956. By that act, the Animas-La Plata project was designated as a potential participating reclamation project, was designated as a potential participating reclamation project, subject to a finding of feasibility and specific authorization by the Congress. Both of these latter events have occurred. Forty-six percent of the power revenues derived from the Colorado River Storage Project are specifically and exclusively dedicated to Colorado to assist in the repayment of those project features attributable to irrigation. The necessary revenues will accrue to both Colorado and New Mexico during the repayment period for the project. If the law is to be followed, these revenues cannot be used for any purpose other than to assist in the repayment of designated Colorado and New Mexico reclamation projects. We simply ask that a portion of these revenues be dedicated to the construction of the Animas-La Plata project as Congress has already specifically directed.

I would also note that the Colorado River Basin Project Act of 1968 specifies that:

The Secretary of the Interior is directed to proceed as nearly as practible with the construction of the Animas-La Plata, Dolores, Dallas Creek, West Divide, and San Miguel participating Federal reclamation projects concurrently with the construction of the Central Arizona Project, to the end that such projects shall be completed not later than the date of the first delivery of water from said Central Arizona Project.

Sec. 501(b), Public Law 90-537; 82 Stat. 885.

The Central Arizona Project is scheduled to deliver water commencing in 1985. Obviously, the Congress is obligated to proceed in a timely manner since there will be a four to five year construction period for the project. Failure to appropriate funds for the initiation of construction would be unfortunate since legal problems

concerning the first delivery of water from the Central Arizona Project might then arise.

The third component of our request relates to the need to provide funding in the fiscal year 1982 budget for continuing planning on and reformulation of the previously authorized San Miguel, West Divide, Fruitland Mesa, and Savery Pot-Hook projects, the first two of these being among the five participating projects of the Colorado River Storage Project which are to be constructed concurrently with the Central Arizona Project. The Carter Administration declared these four projects economically unjustified based upon the planning and evaluation criteria employed by the administration.

We could not disagree more with the criteria which have been applied in recent years. The traditional cost-benefit ratio measures neither all of the benefits nor all of the costs of a project, particularly as applied by the Carter Administration. Thus, to reject valuable water resource development projects on this sole criterion seems to us inappropriate. In addition, we would note again that Congress is obligated to proceed in a timely manner with the San Miguel and West Divide water projects since the law provides that they are to be constructed concurrently with the construction of the Central Arizona Project. The Board specifically requests Congress to provide $1 million dollars for the continuation of planning on these projects in order that they may be reformulated and brought to fruitation.

The final program which I would like to mention is the Atmospheric Water Resources Management Program. Colorado supports the request for $600,000 in fiscal year 1982 to continue that portion of this research and development program which applies to the Colorado River Basin.

The increase in recent years of winter cloud seeding projects in Colordo has heightened interest in and awarenes of the possibilities afforded. Along with these projects there has been concern over remaining scientific uncertainties, over the fact that programs benefit some at the expense of others, and over conflict of legal and governmental responsibilities.

Because Colorado will bear the major burden of weather modification operations to augment the water of the Colorado River Basin, The State has a particular interest in research, not only in the development of the technology but in procedures for mitigating impact on affected communities. If seeding does result in economic disruption, the extent of the damage must be assessed and compensation procedures addressed.

We emphasize that it is research and demonstration which the State, for the moment, supports. We believe that many questions remain to be answered before operational programs can be routinely implemented.

I appreciate the opportunity you have afforded me to impose upon your busy schedule today. The fact that Colorado and other states have had the opportunity to present a case before you should remind us all that the legislative processes of our government are still the best that have yet to be devised. We thank you.

NARROWS UNIT, COLORADO

WITNESSES

GARY R. FRIEHAUF, SECRETARY-MANAGER, LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT

BOARD MEMBERS FOR THE CENTRAL COLORADO WATER CONSERVANCY DISTRICT: EVERETT KISSLER, LAWRENCE GERKIN, AND NEELAND SIEBRING

STATEMENT OF GREGORY LLAFET, EXECUTIVE DIRECTOR, CENTRAL COLORADO WATER CONSERVANCY DISTRICT

Mr. FRIEHAUF. Mr. Chairman and members of the subcommittee: I am Gary Friehauf, Secretary-Manager for the Lower South Platte Water Conservancy District.

Our delegation includes: representatives of Central Colorado Water Conservancy District, Mr. Lawrence Gerkin, Mr. Everett Kissler, Mr. Neeland Siebring, Board Members, and Mr. Gregory Llafet, Executive Director.

The Lower South Platte Water Conservancy District appreciates this opportunity to appear before this committee on behalf of the Narrows Unit of the Missouri River Basin Project.

We have come today to request this committee to include an appropriation of a modest $400,000 in their recommendation for 1982 Energy and Water appropriations.

Project Support:

Colorado—State Delegation: All officials support except for one and she refused to respond.

State Legislature: Of 22 elected in 1980 election, only two indicated disfavor—most bills will pass with a 10 to 1 ratio.

Governor of Colorado, Colorado Department of Natural Resources, Colorado Water Conservation Board, Lower South Platte Water Conservancy District, Central Colorado Water Conservancy District, Water for Colorado, Colorado Water Congress, Trans-County Water, Inc.; Beef Growers Association, numerous irrigation entities; 172 subscribing water, one of those is an irrigation district of 40,000 acres and about 150 property owners approved project water purchase by election.

Nebraska—State Legislature: Nebraska Water Resources Association, Central Nebraska Public Power Irrigation District, Central Nebraska Public Power Irrigation District, Nebraska Association Natural Resources District, Twin Platte Natural Resources District.

National—Water Resources Congress.

Good Faith—Since 1958, local people have been doing everything possible, preceding on faith. We have followed all the laws, rules and regulations.

Since 1973, Narrows has been under construction, the project was progressing.

In mid-1976, both the Lower South Platte and Central Colorado Water Conservancy Districts signed repayment contracts with the United States, a contract.

Honor—I remember my grandather telling me, "Son, if you give your word, you give your honor." This is not just the word, but the written contract of the United States. We thought that was an honorable commitment.

The Carter "hit list" did more than stop construction of the Narrows, it placed a cloud over the honor of our government it its dealings with her citizens.

Need—In Lower South Platte Water Conservancy District we have on three separate occasions solicited resolutions of intent to purchase Narrows water. Each time the requests have been greater than the previous.

Future—Gentlemen, we feel the last four years are past, let us put that behind and begin again. We are ready.

You made the good effort in 1978 to override the presidential veto. We appreciate that painful effort.

We are here to reaffirm our word and commitment, Narrows Reservoir is badly needed. We have greater support than ever before. No. 1 priority in Colorado.

Virtually unanimous support from the Platte Valley interests in Nebraska. 31-2 majority vote of the Nebraska Legislature.

Members of the committee, we appeal to you to again reaffirm the honor of our country, give us the signal—the signal that our faithful efforts were not wasted and in vain.

The President has appealed to every citizen to "give his best effort". He called the farmer "heroes" who produce food to feed us all.

Compliance with that presidential appeal requires water. The heroes of Colorado and Nebraska cannot comply when fields are flooded as they were last May or when the fields were dried up as they did last August.

Thank you for your time, we believe this is the year to hit the hit list mentally and Narrows is the project ready to proceed.

Thank you.

For the record, Mr. Chairman, I have a copy of the Resolution passed by the Eighty-Seventh Legislature of Nebraska and we also have a booklet which we would like to submit to the record for the committee staff on the Narrows Project which goes over the most recent history.

Mr. BEVILL. It will certainly be made available to the members of the committee. Because of its size we may not make it a part of the record but it will be available for the committee.

Mr. FRIEHAUF. Thank you very much.

[The resolution follows:]

LEGISLATURE OF NEBRASKA
EIGHTY-SEVENTH LEGISLATURE
FIRST SESSION

LEGISLATIVE RESOLUTION 26

Introduced by Public Works Committee, Kremer, 34th, Chpn.; Beutler, 28th; Wesely, 26th; Clark, 47th; Koch, 12th; Lamb, 43rd; Hoagland, 6th; DeCamp, 40th

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WHEREAS, the Narrows Project on the South Platte River in Colorado is currently being considered for supplemental appropriations by Congress; and

WHEREAS, the Narrows Project on the South Platte River near Ft. Morgan, Colorado is authorized for construction by the Water and Power Resources Service; and

WHEREAS, this project is designed with a flood control capacity of 475,000 acre feet with an operating criteria of a maximum release of 5,000 cubic feet per second when storage is in the flood pool; and

WHEREAS, this project will provide supplemental water for several users along the South Platte River in Colorado thus increasing return flows to the river in Colorado and into Nebraska benefiting downstream Nebraska interests; and

WHEREAS, there are several other alternative projects proposed in Colorado which provide no Nebraska benefits since they would not offer flood control and could reduce rather than increase return flows into Nebraska.

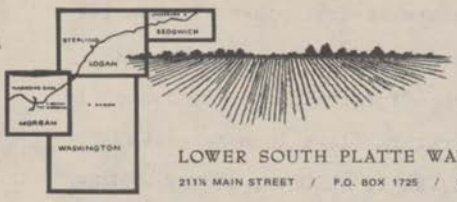
NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE EIGHTY-SEVENTH LEGISLATURE OF NEBRASKA, FIRST SESSION:

That this legislative body urge the Appropriation Committees of the United States Senate and House of Representatives to provide the funds necessary to begin this long delayed, but Congressionally approved project.

PRESIDENT OF THE LEGISLATURE

I, Patrick J. O'Donnell, hereby certify that the foregoing is a true and correct copy of Legislative Resolution 26, which was passed by the Legislature of Nebraska in Eighty-seventh Legislature, First Session, on the eighteenth day of March, 1981.

CLERK OF THE LEGISLATURE



LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT
211½ MAIN STREET / P.O. BOX 1725 / STERLING, COLORADO 80751 / PHONE 522-1378

STATEMENT OF THE LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT PRESENTED BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS OF THE HOUSE OF REPRESENTATIVES OF THE CONGRESS OF THE UNITED STATES IN SUPPORT OF THE NARROWS UNIT, COLORADO

March 25, 1981

The Lower South Platte Water Conservancy District is honored to have this opportunity once again to submit written testimony in support of construction of the Narrows Unit of the Missouri River Basin Project. Oral testimony summarizing our needs and support has also been presented to this committee today.

Today we are requesting $400,000. for the resumption of construction of the Narrows Project for fiscal year 1982. We have included restatements of our continued support, reasons and evidence of need, and examples of ever increasing values to be derived from this project.

The Narrows Project remains an essential factor in meeting the water needs of the South Platte Basin. The purpose of these funds would be to resume construction activities of the Narrows Project, by the Water and Power Resources Service. More specifically the monies would be used to establish a field office and staff, to reinitiate land acquisition activities, to let contracts for engineering design of railroad relocation, and other necessary activities of the Water and Power Resources Service.

We realize the requested amount is a nominal figure. However, it is essential that the Narrows Unit receive an appropriation for 1982. This one act will provide a signal that the days of the hit list are gone, it will signal to the people of the South Platte Valley that they have not been forgotten, it will restore the word and contract of the United States Government to a level of honor, and will signal that Narrows is to be constructed thus protecting water storage rights in the Colorado state courts.

The Water and Power Resources Service has indicated to us that they would have the capability of utilizing $400 to $600 thousand dollars in FY-1982. The budget tightening efforts of the Congress and the administraion have our attention. We agree with the general concept of controlling the expenditures, but the wise development of our water resources is an investment in the long term welfare of our nation. Investments in water resources today return benefits of many fold tomorrow. An economically sound tomorrow is also a concern of today. These overall national concerns contribute to our decision to request a modest $400,000.

One year ago our testimony stated that the Carter Administration position of not favoring funding for immediate construction of the Narrows Project had not provided positive solutions of the problems facing the South Platte River Valley. We submitted figures on the lost water resource, and the damages caused by the 1979 spring flood. Little did we know then, beginning in late April and continuing through June of 1980 the South Platte River would go on another rampage. State and county roads and bridges were destroyed or severely damaged. In Morgan county there were six bridges requiring replacement or extensive repair. Several highways were closed to traffic for thirty or so days. State and county road crews worked around the clock to keep from totally loosing bridges in Logan county. The town of Crook was threatened by flood flows for several weeks.

Damages to irrigation facilities were also extensive. Colorado state officials reported $900,000 in damages to irrigation facilities. Damages in Morgan, Logan, Washington, and Sedgwick counties could have been virtually eliminated if the Narrows dam and reservoir had been place.

We usually talk only of Narrows Project benefits in Colorado, but the citizens of Nebraska suffered needless destruction as well. We do not have specific figures on the cost of protective measures or the damages caused, but various sites were visited and damages similar to those in Colorado were witnessed.

The nearly sixty days of flooding was a trying time, but to the people of the arid west, loss of vast quantities of water was the true tragedy. 1,300,000 acre feet of water was lost during water year 1980, 630,000 in May alone. The average annual yield of the South Platte Basin or watershed in Colorado is only a little over 1,000,000 acre feet. One year's average supply lost to any beneficial use.

The flooded fields in May were even a greater disaster in July when the river flows were gone. Several irrigation systems were without water becuase their diversion dam had been damaged and repairs were difficult to make. Others could not get water because the flows were so low that the priority system had to be put into effect. The tragedy is watching a year's supply flow by knowing that thirty days later there will be a short supply. Narrows, an on-channel reservoir is the only way to capture the water when it is available for use when it is needed!

The Narrows Unit has been authorized twice by the Congress of the United States. Twice in recent history the Congress has reviewed the problems, water supply, flood control, wildlife enhancement, and recreation, and twice has decided the Narrows Unit is an important, necessary integral component in the wise overall development of the water resource of the country, region, and state. The reauthorization of August 1970 was a direct product of the tireless efforts and support of the local people, who, began the long road in 1958. The initial investigation money came from state and local sources. Studies were not site specific, but were aimed at an evaluation of the broad needs and problems. Numerous storage sites were reviewed and evaluated. The evaluations were not emotional, but were founded upon sound principles for project evaluation.

The federal studies were reviewed and in instances independent professional studies were commissioned to substantiate or refute studies of the federal governmental agencies. On May 28, 1968 legislation proposing authorization of Narrows was introduced in the House and Senate of the U.S. Congress. Since that time Narrows has been the subject of study after study. In 1973 Congress passed an appropriation of $1.5 million to initiate construction. More studies have been done since, but the local sponsors have continued to support and push for construction of Narrows.

Congressional appropriations for construction were continuous over the years beginning with the $1.5 million for FY-1974; $6 million for FY-1975; about $3 million for FY-1976; over $3.9 million for FY-1977; and $9.7 million was requested for FY-1978 by the Ford Administration.

The local sponsors have continued to express support, argue the needs throughout the recent difficulties.

We dislike using the overly used term "Hit List". It portrays a cruel act committed without reason, concern, or understanding. One totally void of any consideration for the impact of the action of future needs or concern for the humane efforts

and lives involved. However, having experienced the last four years it seems the "Hit List" is the only proper term. The Narrows Unit was subject to the Carter "Hit List" and veto of 1978.

The congress and this committee fought valiantly to override the Presidential veto, that effort was sincerely appreciated. We trust that time is past. Now is a time of new hope, renewed trust, and renewed efforts.

The past four years were not a total waste. Additional studies were conducted. Following is a summary of the results of those studies.

Safety of the proposed earthfilled Narrows dam has been addressed by three independent efforts. The result of these safety studies has been unanimous, a safe dam can be built and the Bureau (Water and Power Resources Service) assumptions are highly conservative in favor of safety.

Flood control benefits have been verified by the Corps of Engineers, water quality of the reservoir will not preclude water contact sports. The Narrows impoundment will have no impact on the quality of habitat in the Central Nebraska Flyway.

Groundwater recharge programs are not a reasonable alternative to on-channel storage.

In addition to the problems addressed over the past years the rapidly expanding energy development is creating ever increasing demands on the regional water supplies. A 1979 report cites a study conducted by the U.S. Department of Housing and Urban Development. The report says that the current east slope population in Colorado is 2.3 million, or 80% of the total state population. The report projects an increase of 1,000,000 by the year 2000. This growth will require 200,000 additional housing units to be available between 1985 and 2000 for habitation along the front range. 200,000 acre feet of additional water will have to be developed in the South Platte Basin over the next 10 to 15 years to meet this demand.

In addition to population growth thermal electric generation plants are placing direct and immediate demands on our useable supply. There is a 500 megawatt fossil fuel thermal generation plant located in the heart of the project service area, near Brush. The first unit is projected to go on line in October 1981, and to consume 7,000 acre feet of water per year. There is great probability that a second stage will be added soon.

Where will this water supply come from? The increases represent 20% of the annual water supply of the South Platte Basin in Colorado. How can we increase the useable supply to that extent?

The Hud report predicts; given agricultures high dependency on irrigation and the competitive demand for water from the additional population, it appears certain that Colorado agricultural productivity cannot keep up. Water will be taken from agriculture!

Water supplies limit the agricultural productivity of Northeastern Colorado and Western Nebraska. President Reagan, in his inaugural speech appealed to us all to make, "our best efforts", work hard to be productive. He referred to the farmer as those "heroes" who produce "food to feed all of us".

Without dependable water supplies and protection from flood the "heroes" farming 287,000 acres to be served by the Narrows Unit cannot do their best, cannot produce to help with the national balance of payments, cannot make most efficient use of the petroleum fuels and petro-chemicals essential to their business.

The Narrows Unit is not an expenditure but an investment. The future welfare of Colorado, and Nebraska depends on manageable water supplies. Energy resource development, alternate fuels, population growth, and a sound productive agricultural economic base all rely on water. An investment in the water resources, construction of the Narrows Unit is essential in meeting these other demands.

Construction for Narrows was begin in 1976. About 2,300 acres of land has been purchased under negotiated sales contracts. Other land holders are anxious to resume negotiations. The final Environmental Statement was completed in May 1976. Repayment contracts with the local sponsors were signed in July 1976.

The Narrows Unit is ready and waiting for an appropriation for the resumption of construction.

In conclusion the Narrows Unit, Colorado is a water project essential to the welfare of the people of our district, our state, and of our country. The advantage of tremendous benefits this country has received through reclamation projects is a matter of record. The Narrows project can further exemplify the value of water resource utilization. Therefore, we respectfully request this committee to include $400,000 for the Narrows Unit, Colorado in its recommendation for appropriations for fiscal year 1982.

Thank you for your time and for your consideration.

COLORADO PROJECTS

WITNESSES

HON. RAY P. KOGOVSEK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO
FREDERICK V. KROEGER, CHAIRMAN, COLORADO WATER CONSERVATION BOARD; CHAIRMAN, SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO
CHRIS A. BAKER, VICE-CHAIRMAN, SOUTHERN UTE INDIAN TRIBE
ERNEST HOUSE, TRIBAL COUNCIL MEMBER, UTE MOUNTAIN UTE INDIAN TRIBE
SHELDON SLADE, MEMBER OF THE BOARD, LA PLATA WATER CONSERVANCY DISTRICT OF COLORADO
R. T. SCOTT, COUNTY COMMISSIONER, LA PLATA COUNTY, COLORADO
ALLEN J. MURDOCK, CHAIRMAN, DURANGO CITY WATER COMMISSION
BRICE LEE, MEMBER OF THE BOARD, SOUTH DURANGO WATER DISTRICT
DAVID D. HERRICK, MEMBER OF THE BOARD, DOLORES WATER CONSERVANCY DISTRICT
BILL CHATHAM, EXECUTIVE DIRECTOR, UTE MOUNTAIN UTE TRIBE
F. F. MONTOYA, CHAIRMAN, LA PLATA CONSERVANCY DISTRICT, NEW MEXICO

STATEMENT OF CONGRESSMAN KOGOVSEK OF COLORADO

Mr. KOGOVSEK. I have some gentlemen with me, Mr. Chairman.

Mr. Chairman, we have prepared statements that I will submit for the record.

[The statements are included in the record:]

STATEMENT OF R. T. SCOTT, COUNTY COMMISSIONER
LA PLATA COUNTY, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Committee Members:

I am R. T. Scott from La Plata County, Colorado. I serve as County Commissioner for La Plata County, Colorado, and I am here to present our County's request that 2.87 million dollars for initial construction funds be appropriated for the Animas-La Plata Project.

For many years the residents of La Plata County have worked hard to see the Animas-La Plata Project constructed. Citizens' committees made up of people with varied backgrounds and interests have seen the Project as a solution to the inadequate, unstable water supplies upon which our communities' futures depend.

As a part of Western Colorado, we recognize the need to prepare for future impacts from energy development in our region. We have always felt that a viable agriculture economy is necessary to preserve the stability of our area. The Animas-La Plata Project is the only water conservation project which is capable of meeting the ever-increasing demands placed upon our part of the country.

Within our county, the Animas-La Plata Project will store 8,200 acre feet for the City of Durango. An additional 1,000 acre feet of water has been allocated for rural domestic use in La Plata County. Over 60,000 acres of Indian and non-Indian lands within Southwestern Colorado will be irrigated by this project. The Southern Ute Indian Tribe has been allocated 26,000 acre feet for municipal and industrial use which will give the Southern Ute Indian Tribe the option to develop their coal resources and significantly contribute to our region's economy.

In past years, the County Commissioners for La Plata County presented this Committee with resolutions expressing the County's commitment to the Project's construction. Once again, the La Plata County Commissioners are delivering a resolution supporting our request for initial construction funds in the amount of 2.87 million dollars for the Animas-La Plata Project. Not only our dreams, but the very future of Southwestern Colorado turns in large part upon the construction of the Animas-La Plata Project.

RESOLUTION NO. 1981-11

WHEREAS, the Board of La Plata County Commissioners was elected to safeguard the health and welfare of all residents of La Plata County, Colorado; and,

WHEREAS, the population of La Plata County has increased almost 50% in the last ten (10) years; and,

WHEREAS, population growth pressure is rapidly increasing in all areas of the County; and,

WHEREAS, agriculture production is the only aspect of La Plata County's economic base which guarantees self-sufficiency; and,

WHEREAS, the Animas-La Plata Project would supply water, which would otherwise be lost, for both domestic and agricultural use; and,

WHEREAS, storage of water and use of the Animas watershed in the La Plata drainage has been a dream of our forebears in order to preserve the future of generations to come; and,

WHEREAS, the Animas-La Plata Project was certified in 1968 as a part of the Colorado River Project.

NOW, THEREFORE, BE IT RESOLVED that the La Plata County Commissioners find as follows:

1. That construction of the Animas-La Plata Project is imperative to the health and welfare of all residents of La Plata County, including our Indian neighbors;

2. That delay of construction of the Animas-La Plata Project has been devastating and expensive and further delay will only exacerbate the problem;

3. That initial construction funds of 2.87 million dollars be released for this most worthwhile project.

DONE AND ADOPTED in Durango, Colorado, this 18th day of March, 1981.

BOARD OF COUNTY COMMISSIONERS
LA PLATA COUNTY, COLORADO

(SEAL)

R.T. Scott, Chairman

Sara Duncan, Vice-Chairman

Don Michael, Commissioner

Page - 2
Resolution No. 1981-11

ATTEST:

Deputy Clerk to the Board

APPROVED:

David Dickinson, County Attorney

SD:cl

STATEMENT OF SHELDON SLADE
LA PLATA WATER CONSERVANCY DISTRICT
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am Sheldon Slade, a farmer in La Plata County, Colorado. I am also a member of the La Plata Water Conservancy District Board of Directors. I am here to request funding in the amount of 2.87 million dollars for initial construction of the Animas-La Plata Project. As a farmer on the dryside of La Plata County, I understand the importance of water. We have some of the best soil in the country, but the success of our crops is totally dependent upon our unstable water supply. During a dry year, a farmer can lose almost everything he puts into a dry farm. The bottom line is that farmers in the La Plata River drainage have for years recognized the need to store water in order to provide a water supply sufficient for effective irrigation.

Several conditions threaten the stability of our water in the La Plata Water Conservancy District. The most obvious factor is that of weather. In a March 1st report from the Soil Conservation Service of the U.S. Department of Agriculture, the following projections were made:

> Precipitation in Southwestern Colorado is projected to be 46% of the seasonal average.
>
> The La Plata River stream flow forecast is only 34% of the April-September average computed for years of 1963 through 1977.

The seriousness of this year's water problem is reflected by the Soil Conservation Service's conclusion that "a moderate to severe water shortage is anticipated for all streams." For farmers with no significant storage supplies, this year looks extremely bleak. In contrast, the Soil Conservation Service report states "Water users with stored water rights will be minimally impacted due to the above normal storage in reservoirs in both Colorado and New Mexico." The construction of the Animas-La Plata Project will eliminate the sporadic productivity of our lands, and increase crop yields by approximately 15 million dollars per year.

Without the project, farmers along the La Plata River face the threat of increased competitions for the water in our streams. Increased demands for water in New Mexico and the lower basin states of the Colorado River

are a constant threat to the unstored waters of Colorado. If the Southern Ute Indian Tribe is successful in establishing the number one priority on the Animas and the La Plata Rivers, and if the Tribe is forced to exercise those rights, there will be little if any available water for agriculture in the La Plata County area. The requirements for domestic water supplies in Southwestern Colorado as well as increased interest in energy development requires the storage and equitable distribution of our most limited resource.

The Animas-La Plata Project will allow agriculture to remain an integral part of Southwestern Colorado, and the Project will fulfill the demands of others in Colorado and Northern New Mexico. I certainly hope that this Committee will recommend appropriations in the amount of 2.87 million dollars for the initial construction of the Animas-La Plata Project.

STATEMENT OF DAVID D. HERRICK
DOLORES WATER CONSERVANCY DISTRICT
CORTEZ, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am David Herrick from Cortez, Colorado. I am a member of the Dolores Water Conservancy District Board of Directors. The Dolores Water Conservancy District requests that you support the administration's recommendation that the Dolores Project receive continued funding for construction in the amount of $43,586,000.00.

The completion of the Dolores Project is vital to the future of Southwestern Colorado. It will irrigate approximately 60,000 acres of farmland, and it will provide reliable domestic water supplies for the communities of Cortez, Dolores, and Towaoc. Initial construction of the project has progressed smoothly, in fact, we are presently several months ahead of schedule. Only through continued funding can we maintain the progress which we have made.

We are all aware that the federal budget needs trimming. The administration's request which you are now considering for the Dolores Project is significantly less than that recommended by the Water and Power Resources Service. Although we would certainly be pleased if the appropriation for the Dolores Project was larger than we have requested, we are not unmindful of the need for all of us to tighten our belts. We would merely ask that budget cuts be done even-handedly and that worthwhile projects continue to receive congressional support.

Western water projects have been a sound national investment, and we must hope that the appropriations needed for reclamation continue. The Dolores Project cannot solve all the problems associated with water shortages in the Four Corners region, and we would urge that initial construction funds for the Animas-La Plata Project also be appropriated. In addition to providing water for the irrigation of an additional 70,000 acres, the Animas-La Plata Project would provide water for the emerging population centers of Durango, Colorado, and Farmington, New Mexico.

In the Dolores area we have had an opportunity to combine the interests of many groups, including our Ute Mountain Ute neighbors. While people all over the country enjoy the benefits of Mesa Verde National Park, which was at one time part of the Ute reservation, few people take the chance to evaluate the present needs of the Indian people in our region. We sincerely hope that the Dolores Project will someday be a monument to our foresight and cooperative efforts.

In conclusion, I would request that this committee recommend the appropriation of $43,586,000.00 for the continued construction of the Dolores Project.

ENERGY & WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS

U.S. HOUSE OF REPRESENTIVES
WASHINGTON D.C.

MARCH 25, 1981

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE. MY NAME IS F.F. MONTOYA FROM LA PLATA, NEW MEXICO AND I SERVE AS CHAIRMAN FOR THE LA PLATA CONCERVANCY DISTRICT IN NEW MEXICO.

THE ANIMAS-LA PLATA PROJECT WOULD REGULATE FLOWS OF THE ANIMAS AND LA PLATA RIVERS FOR IRRIGATION AND MUNICIPAL AND INDUSTRIAL USE. WE WOULD NO LONGER HAVE THE COSTLY JOB OF REPLACING OUR DIVERSION DAMS AND IRRIGATION DITCHES THAT PERIODICALLY WASH OUT BY FLASH FLOODS FROM SUDDEN STORMS AND OCCASIONAL FLOOD FROM SPRING RUN OFF. IT WOULD ALSO PROVIDE FISH AND WILDLIFE MEASURES, RECREATION FACILITIES, A CULTURAL RESOURCES PROGRAM, AND AREA REDEVELOPMENT. SERVICES WOULD BE PROVIDED TO THE LA PLATA WATER CONCERVANCY DISTRICT IN COLORADO AND THE DISTRICT IN NEW MEXICO, PLUS MUNICIPAL AND INDUSTRIAL WATER FOR THE CITIES OF AZTEC, BLOOMFIELD AND FARMINGTON IN NEW MEXICO, AND THE UTE MOUNTAIN TRIBE IN COLORADO. INSTEAD OF PEOPLE LEAVING THE LAND TO LOOK FOR WORK IN OVER-POPULATED CITIES WITH UNEMPLOYMENT ON THE RISE, THE PROJECT WOULD ALSO CREATE JOBS.

WE COULD SUBSTANTIALLY INCREASE FARM INCOME BY PARTICIPATING IN INTENSIFIED FARMING AND PRODUCE SEVERAL TIMES AS MUCH GROSS INCOME AS WE DO TODAY.

WE HAVE LOOKED FORWARD TO THE ADDITIONAL IRRITATION WATER WHICH WOULD BE SUPPLIED BY THE ANIMAS-LA PLATA PROJECT TO

8,630 ACRES OF LAND IN NEW MEXICO. WATER WOULD BE AVAILABLE FOR THE CONVERSION OF OUR COAL SUPPLY INTO ELECTRICAL POWER.

I AM NOT JUST SPEAKING FOR MYSELF OR THE FARMERS IN MY CONSERVANCY DISTRICT WHEN I ASK FOR THE SUPPORT OF THE APPROPRIATION OF 2.87 MILLION TO START CONSTRUCTION OF THE ANIMAS-LA PLATA PROJECT. BUT FOR THE INITIATION OF A PROJECT THAT WILL BENEFIT THIS NATION.

I HOPE WE HAVE REACHED THE END OF NUMEROUS DELAYS WE HAVE FACED IN SECURING FUNDING FOR THIS PROJECT WHICH WOULD ENHANCE THE ECONOMY OF OUR GREAT COUNTRY.

MR. CHAIRMAN THANK YOU FOR ALLOWING ME TO BE HERE TODAY TO PRESENT THIS STATEMENT ON BEHALF OF THE ANIMAS-LA PLATA PROJECT.

R. E. KARLIN
Chairman
ROBERT L. BATLEY, JR.
Member
LINN R. BLANCETT
Member

DAVID A. VARGAS
Manager
505-334-9481

San Juan County
112 South Mesa Verde
AZTEC, NEW MEXICO 87410

STATEMENT OF SAN JUAN COUNTY, NEW MEXICO
Presented by Robert E. Karlin, Chairman
Board of County Commissioners

TO: Members of the Energy and Water Development Subcommittee on Appropriations of the House of Representatives.

San Juan County, New Mexico, again appreciates an opportunity to express support for appropriation of funds to start construction of the Animas-La Plata Project. Testimony has been presented many times over the last two and a half decades outlining our needs for additional water which this project would supply to our arid region.

We support the statement given by F. F. Montoya, Chairman of the La Plata Water Conservancy District in New Mexico. The additional 16,000 acre feet provided by the project to assure a stable irrigation supply to 8,360 acres of land in our county would be a great benefit to the local economy.

The rapid increase of exploitation of energy resources; oil, gas, coal and uranium, has led to unexpected population growth which makes necessary additional supplies of municipal and industrial water. In addition to the four municipal growth centers of Aztec, Bloomfield, Farmington, and Shiprock, we have nine rural water systems which can barely keep up with accelerated demands. If the Animas-La Plata Project should begin construction tomorrow, the 38,400 acre feet of municipal and industrial water which it would make available to us could be put to beneficial use.

Respectfully Submitted,

R E Karlin

Robert E. Karlin

UTAH | COLO.
ARIZ. | N.M.

CITY OF FARMINGTON, NEW MEXICO
OFFICE OF THE MAYOR
505 / 327-7701
505 / 327-7711

March 23, 1981

The Members
of the Energy and Water
Development Subcommittee
on Appropriations of the
House of Representatives

Gentlemen:

The City Council, which is the governing party of Farmington, have for a number of years enthusiastically supported the funding and construction of the Animas/LaPlata Water Project. As you are aware water is becoming more and more critical in New Mexico. At our present growth rate, the City of Farmington will require additional water rights (or supply) within the next 10 years. We feel that this is the best way to insure adequate water for Farmington's future development. In this instance Farmington's future water needs include the communities of LaPlata, Kirtland, Fruitland, a large part of Shiprock, and the area in between since we provide treated water to those areas.

The City of Farmington is strongly supporting this project. We would appreciate your strong support to alter the proposed Federal Budget to begin construction on the Animas/LaPlata Project. It is the most important project for this area since the Navajo Irrigation Project was begun.

If we can be of any assistance to you in accomplishing this, please do not hesitate to advise us.

Sincerely,

Robert S. Culpepper
Mayor

RSC/cs

P.O. BOX 900, 87401

City of Aztec

WINNER ALL AMERICAN CITY AWARD

201 WEST CHACO
Aztec, New Mexico
87410
PHONE: 505 334-94
505 334-94

MEMORANDUM

TO: SENATE AND HOUSE COMMITTEES ON ENERGY AND WATER DEVELOPMENT

FROM: KATHLEEN A. RAMSEY, MAYOR, CITY OF AZTEC, NEW MEXICO

DATE: MARCH 23, 1981

The City of Aztec has supported the Animas-La Plata Project from its inception. Now that the matter is being considered for appropriation I want to urge favorable consideration by the congress.

It appears that this coming summer will see drought conditions in the San Juan River Basin. The other New Mexico municipalities dependent on this water resource have emergency solutions available to them, but the City of Aztec is totally dependent on the Animas River for its domestic supply. We have only a three day raw water storage capability, and if the run-off is at the predicted level, the city could be in dire straits. The need for the Animas-La Plata storage is urgent for us and we strongly request your support. The long-range implications of this project for this area are of the utmost importance.

KAR:yl

STATEMENT OF ALLEN J. MURDOCK, CHAIRMAN
DURANGO CITY WATER COMMISSION
DURANGO, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Chairman and Members of the Committee:

I am Allen J. Murdock, Chairman of the Durango City Water Commission, and I am here to request 2.87 million dollars in new construction funds for the Animas-La Plata Project. The organization which I represent is a special City commission which examines specific and general water related issues which involve the City of Durango.

The City of Durango's water rights and water storage capacity are inadequate to serve the increased population which our region attracts. The City is obligated to provide treated water to its residents and to the residents of three outlying water districts. We have taken major steps to conserve our water supply by installing water meters, increasing water rates, and scheduling outside lawn irrigation. These efforts can do little to increase a present water storage capacity which is capable of providing domestic water for only six days' use. In the event that we experience an extremely dry year or in the event that our supplies are further depleted by Indian water rights, we will be up a creek without any water.

After studying numerous alternatives, our Commission is convinced that the Animas-La Plata Project will fulfill not only our municipality's needs, but many of the needs of our region. The success of our farmers in La Plata County will continue to be a vital aspect of our city's economy. On behalf of our Commission and the City of Durango, I renew the request we made last year, and I sincerely hope that this Committee will recommend the appropriation of 2.87 million dollars in initial construction funds for the Animas-La Plata Project.

STATEMENT OF BRICE LEE
SOUTH DURANGO WATER DISTRICT
DURANGO, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am Brice Lee and I am a member of the South Durango Water District Board of Directors. I am here to request that this committee recommend initial construction funds in the amount of 2.87 million dollars for the Animas-La Plata Project.

The South Durango Water District is a special district, outside of the City of Durango, which receives treated water from the city. In exchange for receiving treated water from the city we allow the city to utilize several of our early water rights from the Animas River. Two other special water districts also receive treated water from the City of Durango. Because of the layout of our community, the outlying special districts presently absorb and will continue to absorb most of our community's growth. At the present time the City of Durango does not have water storage sufficient to supply individuals who wish to live in our community. The Animas-La Plata Project will provide 8200 acre feet of water annually for municipal use in Durango and its outlying districts. Without that water, Durango will no longer be able to maintain the healthly rate of growth necessary for economic stability.

As a farmer I also understand the importance of the Animas-La Plata Project. Thousands of acres of land will receive the benefit of irrigation which at this time is sporadic or non-existent. The water in our streams next year is projected to range from 14% to 45% of average stream flows. During the history of Colorado, agriculture has served as the backbone of our state economy. Four generations of farmers in La Plata County have waited in line for a reclamation project in our area. The multi-purpose nature of the Animas-La Plata Project makes it a particularly worthwhile investment in the Four Corners region of our country.

In conclusion, I sincerely hope that this committee will recommend 2.87 million dollars in funding for the initial construction of the Animas-La Plata Project.

STATEMENT OF R. T. SCOTT, COUNTY COMMISSIONER
LA PLATA COUNTY, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Committee Members:

I am R. T. Scott from La Plata County, Colorado. I serve as County Commissioner for La Plata County, Colorado, and I am here to present our County's request that 2.87 million dollars for initial construction funds be appropriated for the Animas-La Plata Project.

For many years the residents of La Plata County have worked hard to see the Animas-La Plata Project constructed. Citizens' committees made up of people with varied backgrounds and interests have seen the Project as a solution to the inadequate, unstable water supplies upon which our communities' futures depend.

As a part of Western Colorado, we recognize the need to prepare for future impacts from energy development in our region. We have always felt that a viable agriculture economy is necessary to preserve the stability of our area. The Animas-La Plata Project is the only water conservation project which is capable of meeting the ever-increasing demands placed upon our part of the country.

Within our county, the Animas-La Plata Project will store 8,200 acre feet for the City of Durango. An additional 1,000 acre feet of water has been allocated for rural domestic use in La Plata County. Over 60,000 acres of Indian and non-Indian lands within Southwestern Colorado will be irrigated by this project. The Southern Ute Indian Tribe has been allocated 26,000 acre feet for municipal and industrial use which will give the Southern Ute Indian Tribe the option to develop their coal resources and significantly contribute to our region's economy.

In past years, the County Commissioners for La Plata County presented this Committee with resolutions expressing the County's commitment to the Project's construction. Once again, the La Plata County Commissioners are delivering a resolution supporting our request for initial construction funds in the amount of 2.87 million dollars for the Animas-La Plata Project. Not only our dreams, but the very future of Southwestern Colorado turns in large part upon the construction of the Animas-La Plata Project.

77-001 O - 81 - (Part 9) - 41

RESOLUTION NO. 1981-11

WHEREAS, the Board of La Plata County Commissioners was elected to safeguard the health and welfare of all residents of La Plata County, Colorado; and,

WHEREAS, the population of La Plata County has increased almost 50% in the last ten (10) years; and,

WHEREAS, population growth pressure is rapidly increasing in all areas of the County; and,

WHEREAS, agriculture production is the only aspect of La Plata County's economic base which guarantees self-sufficiency; and,

WHEREAS, the Animas-La Plata Project would supply water, which would otherwise be lost, for both domestic and agricultural use; and,

WHEREAS, storage of water and use of the Animas watershed in the La Plata drainage has been a dream of our forebears in order to preserve the future of generations to come; and,

WHEREAS, the Animas-La Plata Project was certified in 1968 as a part of the Colorado River Project.

NOW, THEREFORE, BE IT RESOLVED that the La Plata County Commissioners find as follows:

1. That construction of the Animas-La Plata Project is imperative to the health and welfare of all residents of La Plata County, including our Indian neighbors;

2. That delay of construction of the Animas-La Plata Project has been devastating and expensive and further delay will only exacerbate the problem;

3. That initial construction funds of 2.87 million dollars be released for this most worthwhile project.

DONE AND ADOPTED in Durango, Colorado, this 18th day of March, 1981.

(SEAL)

BOARD OF COUNTY COMMISSIONERS
LA PLATA COUNTY, COLORADO

R.T. Scott, Chairman

Sara Duncan, Vice-Chairman

Don Michael, Commissioner

Page - 2
Resolution No. 1981-11

ATTEST:

Deputy Clerk to the Board

APPROVED:

David Dickinson, County Attorney

SD:cl

STATEMENT OF SHELDON SLADE
LA PLATA WATER CONSERVANCY DISTRICT
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am Sheldon Slade, a farmer in La Plata County, Colorado. I am also a member of the La Plata Water Conservancy District Board of Directors. I am here to request funding in the amount of 2.87 million dollars for initial construction of the Animas-La Plata Project. As a farmer on the dryside of La Plata County, I understand the importance of water. We have some of the best soil in the country, but the success of our crops is totally dependent upon our unstable water supply. During a dry year, a farmer can lose almost everything he puts into a dry farm. The bottom line is that farmers in the La Plata River drainage have for years recognized the need to store water in order to provide a water supply sufficient for effective irrigation.

Several conditions threaten the stability of our water in the La Plata Water Conservancy District. The most obvious factor is that of weather. In a March 1st report from the Soil Conservation Service of the U.S. Department of Agriculture, the following projections were made:

> Precipitation in Southwestern Colorado is projected to be 46% of the seasonal average.
>
> The La Plata River stream flow forecast is only 34% of the April-September average computed for years of 1963 through 1977.

The seriousness of this year's water problem is reflected by the Soil Conservation Service's conclusion that "a moderate to severe water shortage is anticipated for all streams." For farmers with no significant storage supplies, this year looks extremely bleak. In contrast, the Soil Conservation Service report states "Water users with stored water rights will be minimally impacted due to the above normal storage in reservoirs in both Colorado and New Mexico." The construction of the Animas-La Plata Project will eliminate the sporadic productivity of our lands, and increase crop yields by approximately 15 million dollars per year.

Without the project, farmers along the La Plata River face the threat of increased competitions for the water in our streams. Increased demands for water in New Mexico and the lower basin states of the Colorado River

are a constant threat to the unstored waters of Colorado. If the Southern Ute Indian Tribe is successful in establishing the number one priority on the Animas and the La Plata Rivers, and if the Tribe is forced to exercise those rights, there will be little if any available water for agriculture in the La Plata County area. The requirements for domestic water supplies in Southwestern Colorado as well as increased interest in energy development requires the storage and equitable distribution of our most limited resource.

The Animas-La Plata Project will allow agriculture to remain an integral part of Southwestern Colorado, and the Project will fulfill the demands of others in Colorado and Northern New Mexico. I certainly hope that this Committee will recommend appropriations in the amount of 2.87 million dollars for the initial construction of the Animas-La Plata Project.

STATEMENT OF DAVID D. HERRICK
DOLORES WATER CONSERVANCY DISTRICT
CORTEZ, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am David Herrick from Cortez, Colorado. I am a member of the Dolores Water Conservancy District Board of Directors. The Dolores Water Conservancy District requests that you support the administration's recommendation that the Dolores Project receive continued funding for construction in the amount of $43,586,000.00.

The completion of the Dolores Project is vital to the future of Southwestern Colorado. It will irrigate approximately 60,000 acres of farmland, and it will provide reliable domestic water supplies for the communities of Cortez, Dolores, and Towaoc. Initial construction of the project has progressed smoothly, in fact, we are presently several months ahead of schedule. Only through continued funding can we maintain the progress which we have made.

We are all aware that the federal budget needs trimming. The administration's request which you are now considering for the Dolores Project is significantly less than that recommended by the Water and Power Resources Service. Although we would certainly be pleased if the appropriation for the Dolores Project was larger than we have requested, we are not unmindful of the need for all of us to tighten our belts. We would merely ask that budget cuts be done even-handedly and that worthwhile projects continue to receive congressional support.

Western water projects have been a sound national investment, and we must hope that the appropriations needed for reclamation continue. The Dolores Project cannot solve all the problems associated with water shortages in the Four Corners region, and we would urge that initial construction funds for the Animas-La Plata Project also be appropriated. In addition to providing water for the irrigation of an additional 70,000 acres, the Animas-La Plata Project would provide water for the emerging population centers of Durango, Colorado, and Farmington, New Mexico.

In the Dolores area we have had an opportunity to combine the interests of many groups, including our Ute Mountain Ute neighbors. While people all over the country enjoy the benefits of Mesa Verde National Park, which was at one time part of the Ute reservation, few people take the chance to evaluate the present needs of the Indian people in our region. We sincerely hope that the Dolores Project will someday be a monument to our foresight and cooperative efforts.

In conclusion, I would request that this committee recommend the appropriation of $43,586,000.00 for the continued construction of the Dolores Project.

STATEMENT OF CHRIS A. BAKER, VICE-CHAIRMAN
SOUTHERN UTE INDIAN TRIBE
IGNACIO, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

My name is Chris A. Baker, and I am Vice-Chairman of the Southern Ute Indian Tribe. I am appearing before you on behalf of the Southern Ute Indian people to request the appropriation of 2.87 million dollars in construction funds for the Animas-La Plata Project.

On many occasions the leaders of the Southern Ute Indian Tribe have been before this committee to support the Animas-La Plata Project. Historically the Ute people and the culture have survived despite numerous hardships, including: The gold rush in the San Juan mountains; the homesteading process; the allotment of Indian lands; the division of the Ute tribes; and the threat of termination. One hundred years ago our people agreed to live cooperatively with the people of the United States in exchange for the right to continue our way of life. While others around us have prospered and flourished, the Southern Ute people have higher rates of unemployment, illness, and poverty than do our Indian neighbors.

The Southern Ute Indian Tribe has made great efforts to maintain its existence. Our tribe was one of the first to send our children to public schools because we recognized the need for education in this society. Our land use, social service, and wildlife programs are recognized by our non-Indian neighbors as some of the best in our region. Without a strong economic base; however, the Southern Ute Indian Tribe will never have the advantages needed to keep our community strong.

The nation's need for energy provides us with an opportunity to become economically self-sufficent. Our lands contain an abundance of natural gas and coal which, with an adequate supply of water, can be developed. Tribal members will have the chance to develop skills and get jobs. Sufficient agricultural, domestic, and industrial water needed for our health and economic stability is allocated to the Southern Ute Indian Tribe by the Animas-La Plata Project. In addition, our relatives in the Ute Mountain Ute Indian Tribe will receive waters which they sorely need for municipal and agricultural use.

Competition for water in our arid region is fierce, and for our protection, the Department of Justice has filed a lawsuit to determine our reserved rights. Even if we are legally successful, our use of the waters of the Animas and La Plata Rivers would deprive our non-Indian neighbors of water they need and use for agricultural and municipal use. Furthermore, there would still be a need for our tribe to develop water storage facilities.

By working together through the Animas-La Plata Project we can reduce the expense of separate facilities, and we can eliminate the hostilities and racial

bitterness which have plagued us in the past. As residents of the Four Corners area, we have worked together to find an area-wide solution. The cooperative approach to solving problems, and the Animas-La Plata Project, which is the solution, should be given this committee's endorsement.

In the history of the Indian people agreements with the federal government have not always been honored, especially when we possess lands coveted by non-Indians. With federal assistance now, our future will be bright. Our future and the future of Southwest Colorado depend upon your support.

STATEMENT OF FRED V. KROEGER, CHAIRMAN
SOUTHWESTERN WATER CONSERVATION DISTRICT OF COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

I am Fred Kroeger from Durango, Colorado, and I serve as Chairman of the Southwestern Water Conservation District, which is made up of nine counties in Southwest Colorado. On several occasions during past years I have had the privilege of appearing before this committee, and am pleased to be here once again. I am here to express our appreciation and concurrence with the administration's request of $43,586,000.00 in construction funds for the Dolores Project and to request 2.87 million dollars in initial construction funds for the Animas-La Plata Project. Additionally I am here to support continued funding and study for the San Miguel Water Reclamation Project as requested by the Colorado Water Conservation Board.

The Dolores Project is entering its second year of construction, and upon completion it will provide a vitally needed water supply for the Ute Mountain Ute Indian Tribe, the agricultural community of the Dolores region, and the communities of Cortez, Dolores and Towoac. In addition, the Dolores Project will provide Southwestern Colorado with a recreational lake with a surface area of approximately 4500 acres. The water from the Dolores Project will irrigate 34,000 acres of dryland farms of which nearly one-fourth is owned by the Ute Mountain Ute Indians. 26,000 acres of land presently under irrigation will also be served by the Dolores Project. The administration's recommendation for construction funds is a recognition of the value of the Dolores Project to the Southwestern region of the country and we urge that funding be approved.

Our second request involves the Animas-La Plata Project which will serve an area located in La Plata County, Colorado, and San Juan County, New Mexico. Last week the Colorado District Court for the Sixth Judicial District appointed a board of directors for the Animas-La Plata Water Conservancy District, thus completing the district formation process; and we expect that a repayment contract for the project will be approved by the fall of 1981. The Animas-La Plata Project was initially envisioned by homesteaders some eighty years ago. Within the last year the final project plan and the Environmental Impact Statement have been accepted and the Project is ready for construction. The Project has been designed over the years to fulfill the needs of many interests and entities in Southwestern Colorado and Northern New Mexico and merits funding.

The Animas-La Plata Project will supply domestic water for Durango, Hesperus, three domestic water districts in Colorado, as well as Aztec, Bloomfield, Shiprock and Farmington, New Mexico. Existing domestic water supplies are inadequate to meet the projected growth in population which will occur in this area over the next forty years. The project will provide water to the Ute Mountain Ute Indian Tribe and the Southern Ute Indian Tribe. Through a process

of cooperation we have negotiated allocations for each of the Indian tribes mentioned, and they continue to support this project because it will benefit all residents of the region. If the Animas-La Plata Project is not constructed, however, Indian water claims could conceivably impair senior water rights along the Animas River and use the entire flow of the La Plata River. Both our Indian neighbors and non-Indian land owners feel it gravely important that our friendship continue through the construction of the Animas-La Plata Project.

After completion of the project approximately 70,000 acres of fertile lands, 61,000 acres in Colorado and 9,000 in New Mexico, will receive the benefit of agricultural irrigation. The anticipated benefit of the Project to the local economy is estimated to be an additional 26 million dollars a year.

During the process of requesting funds for the Animas-La Plata Project this committee has over the years received the continuous endorsement of almost every governmental and civic organization in the Four Corners Region. This committee would be hard pressed to find a more worthwhile project and we request 2.87 million dollars in order to commence construction of the project.

My final request deals with the San Miguel Water Reclamation Project. In 1968 the Congress, in order to coordinate the expectations of water users in the western United States, authorized the construction of several water projects affecting the citizens of Arizona, California, New Mexico, Colorado and Utah. The San Miguel was one of Colorado's water projects to be built concurrently with the Central Arizona Project. At that time, benefits of the project were sufficient to justify its construction. In the intervening period of escalating construction costs, penalty assessments for salinity contribution, and the passage of regulatory impediments, the beneficiaries of the San Miguel Project have seen their expectations dwarfed by inaction. At the present time, although the needs and benefits of the project are the same as in 1968, the congressional compromise of 1968 has not been carried out. In the meantime, however, construction of salinity control projects in the Paradox Valley have progressed. Even though the funds expended for project construction would be repaid from Colorado River Storage Project funds and from repayment contract funds, the construction of the San Miguel Project now appears to be permanently threatened. The Southwestern Water Conservation Board firmly supports the Colorado Water Conservation Board's funding request to make the San Miguel Project viable.

In conclusion, I would reiterate a theme which this committee has undoubtedly heard many times: Without proper conservation, our nation's water supplies will eventually become inadequate. Continued funding for the construction of the Dolores Project, the Animas-La Plata Project and the San Miguel Project would be a long awaited exercise in foresight, foresight which this nation can ill afford to ignore.

STATEMENT OF THE HONORABLE RAY P. (KOGOVSEK)
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

MARCH 25, 1981

Chairman Bevill and members of the Committee:

It is a privilege and an honor to appear before one of the most important committees of Congress. I am very much aware that this Congress has the difficult task of reducing government spending in all categories, and that everyone must be willing to tighten their belts in the best interest of this nation's economy. In doing so, we must closely examine those projects and programs which provide maximum benefits to the people of this nation and also generate strong economic development. The long-term effects of the actions of Congress must be examined carefully in that the best decisions may be made.

Mr. Chairman, it is one thing to request funding for projects that return marginal benefits. However, it is without foresight to not fund requests which can project or demonstrate maximum use and benefits. Furthermore, Congress must begin reviewing the economic impact that delay is having on some very important projects in this nation. We are now finding projects that were cost effective ten, twenty, thirty, years ago to have a benefit/cost ratio of less than one (1) today. One of the basic reasons for this problem is that the rate of inflation and increasing energy prices has raised the total cost necessary to finance our water projects. If we continue in this manner, Congress will soon find, I am afraid, that the federal government cannot afford to finance any projects, regardless of the benefits. This is something that neither this Committee, or I wish to see happen.

I have reviewed all the projects in my Congressional District in order to determine if cutbacks are justified and the impacts will not be detrimental to present or proposed activities. Based on my findings, I feel the State of Colorado can support the amounts recommended by the Administration, with few exceptions. In line with these recommendations, I am supporting the following appropriations requests for Colorado water projects, in specific:

Dallas Creek $6,976,000

Construction on Ridgway Dam Stage II will continue.

Dolores Project 43,586,000

Completion of construction on the Glade Road, Reservoir clearing, replacement of the Dolores Sewage Treatment Plant, and relocation of powerlines.
Construction on McPhee Dam, Dolores landfill and protective dikes and purchase of service facilities equipment will continue. Contracts will be awarded for Dolores Tunnel and Canal, Williams Draw-Ormiston Point Road, Dolores-Norwood Road, Lone Dome Road, Great Cut Pumping Plant, and Anasazi Heritage Center. Preconstruction activities will be underway on other facilities.

Fryingpan-Arkansas Project 21,204,000

Construction will be completed on Fountain Valley conduit and laterals, a garage and shop at Twin Lakes and seeding and reforestation at Mount Elbert Pumped-storage Powerplant and the Mount Elbert Conduit. Construction will continue on the second stage facilities of the Mount Elbert Pumped-storage Powerplant, the Fountain Valley Pumping Plants security lateral of the Municipal water system, recreation and fish and wildlife facilities at Pueblo Dam and Reservoir and the remote control system for the North and South side Collection system. Contracts will be awarded for additional drainage work at the Mount Elbert Forebay Dam and Reservoir, for reshaping and revegetating the Sinclair Quarry, and for electrical service for the Remote Control Syste,.

Uncompahgre Project 1,222,000

Construction will begin on the South Canal. Preconstruction activities will begin on other project features.

San Luis Valley Project, Closed Basin Division	$2,538,000
Continuing drilling and developing deep wells for Stage 1-2. Archeology survey, testing, and mitigation will continue. A contract will be awarded for drilling and developing deep wells for Stage 3. Design work will continue on Stage 1-2 canals, laterals, transmission lines, and substations.	
Dominguez Reservoir Project General Investigations / with direction to the Secretary to expedite preconstruction activities.	50,000
Pueblo Dam Powerplant Special Investigations	10,000
San Miguel Special Investigations	100,000
West Divide Special Investigations	100,000
Fruitland Mesa Construction	100,000,000

Mr. Chairman, even though it means tightening our belts, the State of Colorado is willing to support the Administration's recommendations for water project funding. However, in respect to the San Miguel, West Divide, and Fruitland Mesa projects, we ask that this Committee see fit to provide adequate funding necessary to continue these projects. Furthermore, with respect to the Animas-LaPlata project, I most urgently request an appropriation of $2,870,000 and submit documentation from the Department of Interior justifying this request. The Animas-LaPlata project has consistently complied with preconstruction activities required by the Department of Interior and continues to have a benefit/cost ratio better than one (1.0). To substantially delay this project any longer than it has already been would most certainly increase the cost of the project. The WPRS has the capability of spending $2,870,000 and I think this

Committee would be justified in appropriating such amount.

I would like to thank the Committee for the opportunity to testify in behalf of Colorado water projects and respectfully urge you to appropriate such funding in order to continue the development in our state.

United States Department of the Interior

WATER AND POWER RESOURCES SERVICE
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 737
211.

1ST LB 1980

Honorable Ray Kogovsek
House of Representatives
Washington, DC 20515

Dear Mr. Kogovsek:

Thank you for your January 28, 1980, letter concerning the Animas-La Plata Project, Colorado-New Mexico.

The definite plan report for the project has been prepared and the plan presented in that report has been adopted subject to any changes required in complying with the National Environmental Policy Act. A draft environmental statement was filed on July 25, 1979. The final environmental statement is under review and we expect to file it later this year.

Construction activities during fiscal year 1981 would be contingent on formation of the expanded conservancy district in Colorado and completion of other prerequisites such as contracts for project water service and certification of project lands. We understand that formation of the expanded conservancy district has been delayed.

Under optimum conditions $2,870,000 could be utilized in fiscal year 1981 for acquisition of lands, initiation of construction on the pipeline relocation, collection of data for final designs, initial purchase of equipment to be used during construction and continuation of archeological site evaluation.

We appreciate your interest.

Sincerely yours,

FOR R. Keith Higginson
Commissioner

STATEMENT OF CHRIS A. BAKER, VICE-CHAIRMAN
SOUTHERN UTE INDIAN TRIBE
IGNACIO, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Mr. Chairman and Members of the Committee:

My name is Chris A. Baker, and I am Vice-Chairman of the Southern Ute Indian Tribe. I am appearing before you on behalf of the Southern Ute Indian people to request the appropriation of 2.87 million dollars in construction funds for the Animas-La Plata Project.

On many occasions the leaders of the Southern Ute Indian Tribe have been before this committee to support the Animas-La Plata Project. Historically the Ute people and the culture have survived despite numerous hardships, including: The gold rush in the San Juan mountains; the homesteading process; the allotment of Indian lands; the division of the Ute tribes; and the threat of termination. One hundred years ago our people agreed to live cooperatively with the people of the United States in exchange for the right to continue our way of life. While others around us have prospered and flourished, the Southern Ute people have higher rates of unemployment, illness, and poverty than do our Indian neighbors.

The Southern Ute Indian Tribe has made great efforts to maintain its existence. Our tribe was one of the first to send our children to public schools because we recognized the need for education in this society. Our land use, social service, and wildlife programs are recognized by our non-Indian neighbors as some of the best in our region. Without a strong economic base; however, the Southern Ute Indian Tribe will never have the advantages needed to keep our community strong.

The nation's need for energy provides us with an opportunity to become economically self-sufficent. Our lands contain an abundance of natural gas and coal which, with an adequate supply of water, can be developed. Tribal members will have the chance to develop skills and get jobs. Sufficient agricultural, domestic, and industrial water needed for our health and economic stability is allocated to the Southern Ute Indian Tribe by the Animas-La Plata Project. In addition, our relatives in the Ute Mountain Ute Indian Tribe will receive waters which they sorely need for municipal and agricultural use.

Competition for water in our arid region is fierce, and for our protection, the Department of Justice has filed a lawsuit to determine our reserved rights. Even if we are legally successful, our use of the waters of the Animas and La Plata Rivers would deprive our non-Indian neighbors of water they need and use for agricultural and municipal use. Furthermore, there would still be a need for our tribe to develop water storage facilities.

By working together through the Animas-La Plata Project we can reduce the expense of separate facilities, and we can eliminate the hostilities and racial

bitterness which have plagued us in the past. As residents of the Four Corners area, we have worked together to find an area-wide solution. The cooperative approach to solving problems, and the Animas-La Plata Project, which is the solution, should be given this committee's endorsement.

In the history of the Indian people agreements with the federal government have not always been honored, especially when we possess lands coveted by non-Indians. With federal assistance now, our future will be bright. Our future and the future of Southwest Colorado depend upon your support.

STATEMENT OF ALLEN J. MURDOCK, CHAIRMAN
DURANGO CITY WATER COMMISSION
DURANGO, COLORADO
BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.
MARCH 25, 1981

Chairman and Members of the Committee:

I am Allen J. Murdock, Chairman of the Durango City Water Commission, and I am here to request 2.87 million dollars in new construction funds for the Animas-La Plata Project. The organization which I represent is a special City commission which examines specific and general water related issues which involve the City of Durango.

The City of Durango's water rights and water storage capacity are inadequate to serve the increased population which our region attracts. The City is obligated to provide treated water to its residents and to the residents of three outlying water districts. We have taken major steps to conserve our water supply by installing water meters, increasing water rates, and scheduling outside lawn irrigation. These efforts can do little to increase a present water storage capacity which is capable of providing domestic water for only six days' use. In the event that we experience an extremely dry year or in the event that our supplies are further depleted by Indian water rights, we will be up a creek without any water.

After studying numerous alternatives, our Commission is convinced that the Animas-La Plata Project will fulfill not only our municipality's needs, but many of the needs of our region. The success of our farmers in La Plata County will continue to be a vital aspect of our city's economy. On behalf of our Commission and the City of Durango, I renew the request we made last year, and I sincerely hope that this Committee will recommend the appropriation of 2.87 million dollars in initial construction funds for the Animas-La Plata Project.

STATEMENT OF THE HONORABLE RAY P. KOGOVSEK
BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

MARCH 25, 1981

Chairman Bevill and members of the Committee:

It is a privilege and an honor to appear before one of the most important committees of Congress. I am very much aware that this Congress has the difficult task of reducing government spending in all categories, and that everyone must be willing to tighten their belts in the best interest of this nation's economy. In doing so, we must closely examine those projects and programs which provide maximum benefits to the people of this nation and also generate strong economic development. The long-term effects of the actions of Congress must be examined carefully in that the best decisions may be made.

Mr. Chairman, it is one thing to request funding for projects that return marginal benefits. However, it is without foresight to not fund requests which can project or demonstrate maximum use and benefits. Furthermore, Congress must begin reviewing the economic impact that delay is having on some very important projects in this nation. We are now finding projects that were cost effective ten, twenty, thirty, years ago to have a benefit/cost ratio of less than one (1) today. One of the basic reasons for this problem is that the rate of inflation and increasing energy prices has raised the total cost necessary to finance our water projects. If we continue in this manner, Congress will soon find, I am afraid, that the federal government cannot afford to finance any projects, regardless of the benefits. This is something that neither this Committee, or I wish to see happen.

I have reviewed all the projects in my Congressional District in order to determine if cutbacks are justified and the impacts will not be detrimental to present or proposed activities. Based on my findings, I feel the State of Colorado can support the amounts recommended by the Administration, with few exceptions. In line with these recommendations, I am supporting the following appropriations requests for Colorado water projects, in specific:

Dallas Creek $6,976,000

Construction on Ridgway Dam Stage II will continue.

Dolores Project 43,586,000

Completion of construction on the Glade Road, Reservoir clearing, replacement of the Dolores Sewage Treatment Plant, and relocation of powerlines.
Construction on McPhee Dam, Dolores landfill and protective dikes and purchase of service facilities equipment will continue. Contracts will be awarded for Dolores Tunnel and Canal, Williams Draw-Ormiston Point Road, Dolores-Norwood Road, Lone Dome Road, Great Cut Pumping Plant, and Anasazi Heritage Center. Preconstruction activities will be underway on other facilities.

Fryingpan-Arkansas Project 21,204,000

Construction will be completed on Fountain Valley conduit and laterals, a garage and shop at Twin Lakes and seeding and reforestation at Mount Elbert Pumped-storage Powerplant and the Mount Elbert Conduit. Construction will continue on the second stage facilities of the Mount Elbert Pumped-storage Powerplant, the Fountain Valley Pumping Plants security lateral of the Municipal water system, recreation and fish and wildlife facilities at Pueblo Dam and Reservoir and the remote control system for the North and South side Collection system. Contracts will be awarded for additional drainage work at the Mount Elbert Forebay Dam and Reservoir, for reshaping and revegetating the Sinclair Quarry, and for electrical service for the Remote Control Syste,.

Uncompahgre Project 1,222,000

Construction will begin on the South Canal. Preconstruction activities will begin on other project features.

San Luis Valley Project, Closed Basin Division	$2,538,000

Continuing drilling and developing deep wells for Stage 1-2. Archeology survey, testing, and mitigation will continue. A contract will be awarded for drilling and developing deep wells for Stage 3. Design work will continue on Stage 1-2 canals, laterals, transmission lines, and substations.

Dominguez Reservoir Project General Investigations / with direction to the Secretary to expedite preconstruction activities.	50,000
Pueblo Dam Powerplant Special Investigations	10,000
San Miguel Special Investigations	100,000
West Divide Special Investigations	100,000
Fruitland Mesa Construction	100,000,000

Mr. Chairman, even though it means tightening our belts, the State of Colorado is willing to support the Administration's recommendations for water project funding. However, in respect to the San Miguel, West Divide, and Fruitland Mesa projects, we ask that this Committee see fit to provide adequate funding necessary to continue these projects. Furthermore, with respect to the Animas-LaPlata project, I most urgently request an appropriation of $2,870,000 and submit documentation from the Department of Interior justifying this request. The Animas-LaPlata project has consistently complied with preconstruction activities required by the Department of Interior and continues to have a benefit/cost ratio better than one (1.0). To substantially delay this project any longer than it has already been would most certainly increase the cost of the project. The WPRS has the capability of spending $2,870,000 and I think this

Committee would be justified in appropriating such amount.

I would like to thank the Committee for the opportunity to testify in behalf of Colorado water projects and respectfully urge you to appropriate such funding in order to continue the development in our state.

United States Department of the Interior

WATER AND POWER RESOURCES SERVICE
WASHINGTON, D.C. 20240

IN REPLY
REFER TO: 737
211.

18 FEB 1980

Honorable Ray Kogovsek
House of Representatives
Washington, DC 20515

Dear Mr. Kogovsek:

Thank you for your January 28, 1980, letter concerning the Animas-La Plata Project, Colorado-New Mexico.

The definite plan report for the project has been prepared and the plan presented in that report has been adopted subject to any changes required in complying with the National Environmental Policy Act. A draft environmental statement was filed on July 25, 1979. The final environmental statement is under review and we expect to file it later this year.

Construction activities during fiscal year 1981 would be contingent on formation of the expanded conservancy district in Colorado and completion of other prerequisites such as contracts for project water service and certification of project lands. We understand that formation of the expanded conservancy district has been delayed.

Under optimum conditions $2,870,000 could be utilized in fiscal year 1981 for acquisition of lands, initiation of construction on the pipeline relocation, collection of data for final designs, initial purchase of equipment to be used during construction and continuation of archeological site evaluation.

We appreciate your interest.

Sincerely yours,

FOR R. Keith Higginson
Commissioner

Mr. KOGOVSEK. Mr. Chairman and members of the committee, here we are, again, in another year. Let me say, Mr. Chairman, that I appreciate the time that you are giving us to talk about the water projects that are so very important to my district in southern Colorado, southwestern Colorado especially. I think it goes without saying everyone knows this administration and this Congress is in a budget-cutting mood. There were those people, and I was one of them, who was very upset with the past administration's outlook on water projects, in the West especially, the hit list, and so on.

I have a feeling that there is a possibility that this administration might not be much of an improvement, although we as a Democratic Party and Republican Party both are going to do our best to convince this administration that the building of water projects is more critical now than it has been at any time in the past.

Mr. BEVILL. John Myers says this administration is going to take care of those water projects.

Mr. MYERS. It couldn't be any worse.

Mr. KOGOVSEK. Congressman, you are right, and we hope we will do a lot better under the present administration.

You will see in my testimony a list of the projects that are important to Colorado, and I would quickly summarize the Dallas Creek Project—$6,976,000 the Dolores Project—$43,586,000. This project, if I can mention very quickly, is in a unique situation.

The Dolores Project in southwestern Colorado is ahead of schedule right now. That causes us a financial problem, Mr. Chairman. We are going to have to ask for a supplemental appropriation. The project at this point is supposed to be 14 percent complete. Unfortunately for the team in that area, we are about 24 percent complete and consequently the contracter down there is indicating he might have to shut down for a while.

Mr. BEVILL. Your good work with this committee is paying off, isn't it?

Mr. KOGOVSEK. I think it is. We may have to ask for a supplemental to prevent their shutting down for six months.

The Fryingpan, Arkansas Project is a project you are well acquainted with, Mr. Chairman. It is a project of utmost importance. We request a minimum of $21 million. We have nearly completed that project and it is extremely important to the people of Colorado and the nation. Again, we are almost complete, and that is the number one priority for funding as far as I am concerned. The Uncompahgre Project—$1,222,000, the San Luis Valley Closed Basin Project—$2,538,000 and the Domingues Project—$50,000, they are all very important.

I would also request at this time that the committee direct the Department of Interior to expedite all present construction activities as far as the Domingues Project is concerned.

Additional requests that I have from the San Miguel—$100,000 the West Divide—$100,000 and the Fruitland Mesa Projects. These were projects started many, many years ago by the Chairman of the Interior Committee, Congresman Wayne Aspinall. My figures are in the request and you will see those.

I guess I would like to take the last minute of my time to testify, Mr. Chairman, and talk about a project that is very close to my heart and close to the heart of a lot of people who will be testifying very briefly, and that is the Animas-La Plata Project in Durango, Colorado. It is an impact not only on southwestern Colorado but also in New Mexico.

We have had some good news as far as the Animas-La Plata project is concerned. We have had a decision by the district judge in La Plata County that a water district should be formed. There will be an election coming up later on this year, to put together a repayment contract, and I feel very good at this time that that repayment contract will be voted in overwhelmingly. You had a couple of people testify, Mr. Chairman, yesterday or the day before concerning the Animas-La Plata Project, and their testimony was against the project.

I would like to clear up a couple misconceptions that may have you concerned with the project. It has been indicated that water could be taken from the Florida River and could serve as part of an alternative. You can't go to an empty bucket and draw water. The Florida River has no water available for the purposes of the Animas-La Plata Project. There is also concern about a tailings pile that might cause some seepage problems, some environmental damage as far as the river is concerned.

Mr. BEVILL. There was testimony this week about that.

Mr. KOGOVSEK. I would like to have Mr. Fred Kroeger speak to that just briefly after I finish, but evidently I think you will see from his testimony that that really isn't the problem that has been indicated.

With that, Mr. Chairman, I would like to end my testimony by saying that I appreciate the work that you have always done, you as the chairman and your committee, on these water projects that are so important to us n the West.

There is no doubt in my mind and I am sure there is no doubt in your mind that unless we are able to build the water projects to keep them ongoing, immediately, that we are not going to be able to develop the energy that the whole nation expects us to develop. We are not going to be able to maintain the agriculture economy that is so important to the West. We are not going to be able to enhance the economic situation as far as the Indian tribes in my district are concerned.

The Animas-La Plata Project, once again, is very important to the Indians as far as income development is concerned. You will hear testimony in just a few moments in that regard.

With that I would like to leave whatever time I have to the gentlemen who have accompanied me, if that is possible.

Mr. BEVILL. You may proceed.

STATEMENT OF FREDERICK V. KROEGER

Mr. KROEGER. Mr. Chairman and members of the committee, my name is Fred Kroeger and I live in Durango, Colorado. We have with us this morning several people I would like to briefly introduce. Mr. Chris Baker, Vice Chairman of the Southern Ute Indian Tribe. Mr. Ernest House, a member of the Ute Tribe, is here at the table with me. We have Mr. Sheldon Slade, a farmer in the La

Plata area and a member of the La Plata Board and also the newly formed La Plata and Animas-La Plata Conservancy District. Mr. R. T. Scott is here, Chairman of the La Plata County Commissioners. And Mr. Murdock of the Durango Water Commission. David D. Herrick, Vice Chairman of the Dolores Conservancy District. Bill Chatham, Executive Director of the Ute Mountain Tribe, and Mr. Montoya, Chairman of the La Plata, New Mexico Conservancy District. Mr. House, the Finance Director of the Ute Mountain Ute Tribe.

Our testimony has been presented and we are not going to read it. We will comment on a few items which we would like to stress.

Secretary of the Interior Watts indicated some time ago he was embarrassed there were no new starts available for this nation, and we want to save him that embarrassment and assure you that the Animas-La Plata Project is ready.

The conservancy district, which has been tied up in court for some two years, has been formed and the district board has been appointed. The final plan has been completed and reviewed and the EIS report has been completed and reviewed.

This is truly a multipurpose, unique irrigation, domestic water, industrial water project for southwestern Colordo and northern New Mexico. It involves two Indian Tribes, the Southern Utes and the Ute Mountain Utes, and they participate in agricultural, domestic and industrial waters. It involves two States, Colorado and New Mexico, and within this area some 70,100 acres of the most fertile land in western Colorado exists. It supplies us with municipal water for four cities in New Mexico and supplies municipal water for one city in Colorado, plus four domestic water districts. It also supplies a very viable recreational area.

The issue on which Congressman Kogovsek spoke regarding monitoring the river I think I would like, if possible, to have the county commissioner from La Plata County speak to that.

STATEMENT OF R. T. SCOTT

Mr. SCOTT. My name is R.T. Scott. I am Chairman of the Board, La Plata County Commission. I have been working closely on this uranium tailings pile on which you heard testimony earlier this week. I have been out of touch with the Department of Energy and the Colorado Health Department for a couple of weeks and would have to verify any unknown happenings thereafter taken. Perhaps I would like to back up a little and explain to you the area where this tailings pile is. The Department of Energy is now making a study on removing these tailings. We have a contract to do that.

They were not aware of any information given to you prior to this week the type of information you received.

I talked with Dick Campbell and Al Gonzales, both from the DOE in Albuquerque, who are reading this project up. To check further on water monitoring, I checked with the Colorado State Health Department, and they have been continually monitoring water above and below the tailing pile site and there is no problem, as was stated to you prior to this.

That is basically all we have.

Mr. BEVILL. Thank you very much.

Mr. KROEGER. We have others who might want to make brief statements, but our statements have been filed and they will be in the record.

Mr. BEVILL. Perhaps they could take about 10 minutes.

STATEMENT OF ERNEST HOUSE

Mr. HOUSE. I am a member of the Ute Mountain Council, Mr. Chairman. I am here to support Animas-La Plata and also the Dolores Project because this is an important factor to the reservation. Also with the people collected near Dolores and also Dolores-La Plata.

STATEMENT OF CHRIS A. BAKER

Mr. BAKER. I am Chris Baker, Vice Chairman of the Southern Ute Indian Tribe. I am representing about one thousand and two people back home, which is relatively small compared to some other Indian tribes. We request the appropriation of $2.87 million in construction funds for the Animas-La Plata Project.

Mr. BEVILL. You support that?

Mr. BAKER. We have supported this for many years and we still support it.

STATEMENT OF F. F. MONTOYA

Mr. MONTOYA. I am chairman of the La Plata Conservancy District. Due to the cost of getting back over here, I have turned in testimony for myself and farmers in my area in support of the project.

Mr. KOGOVSEK. I know I am preaching to the choir, but with the inflation rate we have presently, and have had for the past several years and will continue for this year, it is important we fund the projects especially we talked about today. The faster we get them the better.

The problem we have in the West is because of inflation, the effective cost ratio that we had in the past when the projects were first put on line is starting to diminish to the point where they are becoming not cost effective. The projects I have talked about are cost effective. As long as we keep delaying them we will have more of a problem in that area. The price of energy keeps increasing, and that tends to work in a very detrimental manner.

Mr. BEVILL. Thank you very much for a very fine presentation.

CENTRAL UTAH PROJECT

WITNESSES

HONORABLE JAMES V. HANSEN, A U.S. CONGRESSMAN FROM THE STATE OF UTAH

ROSCOE GARRETT, PRESIDENT, CENTRAL UTAH WATER CONSERVANCY DISTRICT

L. Y. SIDDOWAY, MANAGER, UINTAH WATER CONSERVANCY DISTRICT, VERNAL, UTAH

Mr. BEVILL. We are pleased to have our colleague and friend here, Congressman Hansen. The Chair recognizes you and you may bring your group up here and propose as you wish.

Your statements will be made a part of the record.

STATEMENT OF CONGRESSMAN HANSEN OF UTAH

Mr. HANSEN. Today you will hear testimony from my guests on the Central Utah Project. I join Mr. Garrett and his colleagues in their support of the Reagan Administration's proposed 1982 budget for the Central Utah Project.

The Central Utah Project is vitally important to Utah's water needs, and those water needs are growing fast. Water demands from energy and industrial development and from the commercial and population growth are putting tremendous strains on the state's water needs. If the proposed MX system is built in Utah, there will be even greater pressures on Utah's water projects.

Once again, we support the Administration's 1982 budget for the CUP and urge that it be passed in its present form. We hope they will lead to policy changes which will result in a more aggressive and efficient construction program for the Central Utah Project.

If I may, we have with us the Director of the Central Utah Project, and I would like to turn to him.

STATEMENT OF ROSCOE GARRETT

Mr. GARRETT. Mr. Chairman, and committee members, I am Roscoe Garrett, President of the Central Utah Water Conservancy District. This district, which encompasses close to 80 percent of the population in the State of Utah, serves as a legal agency for 12 Utah counties, to develop water resources to meet the water requirements of these counties.

It is my privilege and honor to have this opportunity to appear before this committee in support of funding for the units of the Central Utah Project and to represent the citizens of this multi-county water district.

One of the primary responsibilities that the district has undertaken is to sponsor units of the Central Utah Project. For those of you who are not completely familiar with the Central Utah Project, it consists of a series of dams, pipelines, reservoirs, tunnels, aqueducts, and other facilities which will store, regulate and deliver water supplies to key areas of use within the Central Utah Water Conservancy District. It was planned and is being constructed by the Water and Power Resources Service which was formally the Bureau of Reclamation. Impacts of this project as it is constructed, will be felt by every person and establishment in the State of Utah.

The district by the attached resolution supports the funding as recommended by the President of the United States in his fiscal 1982 budget to the Congress of the United States. Included in his budget were the following funds for the Central Utah Project:

Bonneville Unit, $66 million $700,000 for construction.

Jensen Unit, $8 million, $752,000 for construction.

Upalco Unit, $1 million $246,0000 for construction.

Uintah Unit, $500,000 for advanced planning.

Section 8 funds, $7 million, $554,000 for all of Utah.

The Central Utah Project has for years been considered a vital water project essential to meet the water requirements of the State of Utah. It has been accepted as a segment of the State of Utah Water Plan. Since 1945, investigations conducted by the Bureau of Reclamation on this project have been supported and coordinated with the State of Utah. It was authorized by the Congress of the United States as a participating project of the Colorado River Storage Project Act in 1956.

After 25 years, since 1956, some portions of this project are still being investigated. In the case of the Bonneville unit, it has been under construction for 16 years, and portions of it are still being restudied. If there was ever a case of "Paralysis by Analysis," this is it.

The district, by ever increasing repayment obligations, has become more and more aware of the impact of inflation by delay. In our arid, geographical area it is vital to pursue the development of our water resources. The tempo of the Bonneville unit construction program over the past few years has been retarded by excessive time consuming procedures of preparing, reviewing and developing data to implement construction. In the future the district would like to encourage increased funding levels and an expedited, aggressive construction program.

Several major impacts are facing the citizens within the State of Utah and particularly within our 12 county districts. These impacts are coming in the form of growth through fuel and energy development, military (MX) security, commercial and industrial development and resulting population increases.

In cadence with these developments, the district, in addition to sponsoring a unit of the Central Utah Project, is developing those facilities essential to deliver project water to its citizens. The district has constructed two water treatment facilities and will have the third plant in service this year. It has made investments exceeding $30 million in these facilities, in anticipation of project water.

These facilities are waiting to treat and deliver water to the populated areas within our district. They are presently only partially utilized and will continue to be so until the Central Utah Project is completed and water from this source is available. This point is emphasized to bring to your attention the investment made by the District, contemplating the government's good faith in carrying through with the project which was initiated over 17 years ago.

In addition, the district proposes to invest an additional $70 million between now and 1990 to continue to provide facilities needed to make the project water usable.

Over the past few years, the district has entered into agreements with federal and local agencies to help lessen environmental impacts of the project on their particular areas of concern. The resulting agreements have been satisfactory to all agencies and have concluded in harmony.

In conclusion, the funds being requested for the Central Utah Project in this appropriation bill are necessary to keep the plan-

ning and construction programs moving. This water resource program, the most vital to the State of Utah, must receive sufficient funding and support to complete its construction at the earliest possible date.

Thank you.

[The above statement follows:]

Statement by R. Roscoe Garrett, President
Central Utah Water Conservancy District

Dear Mr. Chairman and Committee Members:

I am, R. Roscoe Garrett, President of the Central Utah Water Conservancy District. This District, which encompasses close to 80 percent of the population in the State of Utah, serves as a Legal Agency for 12 Utah Counties, to develop water resources to meet the water requirements of these counties'.

It is my privilege and honor to have this opportunity to appear before this committee in support of funding for the units of the Central Utah Project and to represent the citizens of this multi-county Water District.

One of the primary responsibilities that the District has undertaken is to sponsor Units of the Central Utah Project. For those of you who are not completely familiar with the Central Utah Project, it consists of a series of dams, pipelines, reservoirs, tunnels, aqueducts, and other facilities which will store, regulate and deliver water supplies to key areas of use within the Central Utah Water Conservancy District. It was planned and is being constructed by the Water & Power Resources Service which was formally the Bureau of Reclamation. Impacts of this project as it is constructed will be felt by every person and establishment in the State of Utah.

The District by the attached resolution supports the funding as recommended by the President of the United States in his Fiscal 1982 Budget to the Congress of the United States. Included in his Budget were the following funds for the Central Utah Project:

Unit	Amount	Purpose
Bonneville Unit	$66,700,000	Construction
Jensen Unit	8,752,000	Construction
Upalco Unit	1,246,000	Construction
Uintah Unit	500,000	Advance Planning
Section 8 Funds (Non-reimbursable)	7,554,000	All of Utah

The Central Utah Project has for years been considered a vital water project essential to meet the water requirements of the State of Utah. It has been accepted as a segment of the State of Utah Water Plan. Since 1945, investigations conducted by the Bureau of Reclamation on this project have been supported and coordinated with the State of Utah. It was authorized by the Congress of the United States as a Participating Project of the Colorado River Storage Project Act in 1956. After 25 years, since 1956, some portions of this project are still being investigated. In the case of the Bonneville Unit, it has been under construction for 16 years and portions of it are still being restudied. If there was ever a case of "Paralysis by Analysis", this is it.

The District, by ever increasing repayment obligations, has become more and more aware of the impact of inflation by delay. In our arrid, geographical area it is vital to pursue the development of our water resources. The tempo of the Bonneville Unit construction program over the past few years has been retarded by excessive time consuming procedures of preparing, reviewing and

developing data to implement construction. In the future the District would like to encourage increased funding levels and an expedited, agressive construction program.

Several major impacts are facing the citizens within the State of Utah and paticularly within our 12 county District. These impacts are coming in the form of growth through fuel and energy development, military (MX) security, commercial and industrial development and resulting population increases. In cadence with these developments, the District, in addition to sponsoring Unit of the Central Utah Project, is developing those facilities essential to deliver project water to its citizens. The District has constructed two water treatment facilities and will have the third plant in service this year. It has made investments exceeding $30 million in these facilities, in anticipation of project water. These facilities are waiting to treat and deliver water to the populated areas within our District. They are presently only partially utilized and will continue to be so until the Central Utah Project is completed and water from this source is available. This point is emphasized to bring to your attention the investment made by the District, contemplating the Government's good faith in carrying through with the project that was initiated over 17 years ago. In addition, the District proposes to invest an additional $70,000,000 between now and 1990 to continue to provide facilities needed to make the project water useable.

Over the past few years, the District has entered into agreements with Federal and Local agencies to help lessen environmental impacts of the project on their particular areas of concern. The resulting agreements have been satisfactory to all agencies and have concluded in harmony.

In conclusion, the funds being requested for the Central Utah Project in this Appropriation Bill are necessary to keep the planning and construction programs moving. This water resource program, the most vital to the State of Utah, must receive sufficient funding and support to complete its construction at the earliest possible date.

Thank you.

RESOLUTION

WHEREAS, the President's Budget for Fiscal Year 1982 recommended to the Congress of the United States that the following funds be appropriated for the Central Utah Project:

Unit	Amount	Purpose
Bonneville Unit	$66,700,000	Construction
Jensen Unit	8,752,000	Construction
Upalco Unit	1,246,000	Construction
Uintah Unit	500,000	Advance Planning
Section 8 Funds,(Non-Reimbursable) and,	7,554,000	All of Utah

WHEREAS, these funds are adequate to proceed with essential planning and construction on the units of the Central Utah Project, a more aggressive construction program is mandatory to meet the increasing District water requirements created by fuel and energy development, military security, commercial and industrial development, and resulting population increases, and

WHEREAS, the delayed construction program on the Central Utah Project has placed an unequal and unfair financial burden on the citizens of the District in meeting their water needs in the construction of the units of the Central Utah Project under the Colorado River Storage Project Act.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Central Utah Water Conservancy District does hereby support the funds as requested in the President's Budget for Fiscal Year 1982, and

BE IT FURTHER RESOLVED, that the Board of Directors feel that with past history of inadequate project funding, cuts are difficult to accept at any point in time, but are aware of the goals of this Administration, and

BE IT FURTHER RESOLVED, that the Board of Directors are looking forward to the President's future budget request and policy changes which will result in a more agressive construction program for the Central Utah Project, and

BE IT FURTHER RESOLVED, that copies of this resolution be transmitted to the President of the United States, Governor of Utah, Members of Utah's Congressional Delegation, the Secretary of the Interior, the Commissioner of the U. S. Water and Power Resources Service, and other interested entities.

CERTIFICATE

I certify that the foregoing is a true and accurate copy of a resolution unanimously adopted by the Board of Directors of the Central Utah Water Conservancy District on March 12, 1981.

Lynn S. Ludlow
Secretary

STATEMENT OF CONGRESSMAN DAN MARRIOTT

Mr. MARRIOTT. Today, you will hear testimony from my guests on the delay-ridden Central Utah Project. I join Mr. Garrett and his colleagues in emphasizing the importance of completing CUP as soon as possible.

Because of persistent delays and high inflation, the projected final cost of the CUP has skyrocketed. The Bonneville Unit of CUP is a good example of these escalating costs. In 1966, with a completion date in 1981, the projected cost for the Bonneville Unit was $308,806,000. But, because of numerous delays in construction, the projected completion date is now 1994 and at the current rate of inflation, the project will cost $1,578,591,000.

We support President Reagan's proposed budget cuts. We also support his goal to relieve the great burden on taxpayers by cutting the fat from government. But, in the case of CUP, the proposed budget cuts will cut muscle and will cause very expensive delays.

If the completion date for CUP is further delayed, inflation and the inefficiencies of stop and go construction, will cost the government much more money than it is saving with the proposed cuts.

The people of Utah and the Federal Government have already committed great sums toward the completion of the CUP. If we truly intend to collect on this substantial investment, we must press forward for swift completion of CUP.

Unfortunately, at the present moment the CUP is losing the race against time and inflation. In order to complete the project in a reasonable time frame, we need consistent levels of funding. In fact, we really need an escalated funding scheme to complete the project economically and efficiently. The last thing the CUP needs are new interruptions in the present spending levels.

STATEMENT OF L. Y. SIDDOWAY

Mr. SIDDOWAY. Mr. Chairman, my name is Mr. L. Y. Siddoway. I will just submit my statement for the record.

I would like to tell you and the committee that living in Vernal, Utah where there are many, many energy developments taking place that the Jensen unit is important. We have a new contract which will help us complete that project and bring the water to use in the city of Vernal.

We appreciate your consideration of the past and are hopeful you will approve these requests.

[The above statement follows:]

STATEMENT BY
L. Y. SIDDOWAY - MANAGER
UINTAH WATER CONSERVANCY DISTRICT, VERNAL, UTAH
MARCH 25, 1981

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE COMMITTEE ON APPROPRIATIONS

UNITED STATES HOUSE OF REPRESENTATIVES

Mr. Chairman:

My name is L. Y. Siddoway. I am Manager of the Uintah Water Conservancy District whose office is located at Vernal, Utah. I am appearing here today at the direction of the Board of Directors of that Conservancy District. I, also, serve on the Board of Directors of the Central Utah Water Conservancy District representing the Uintah County Division.

I am appearing here to support the appropriations of funds for Central Utah Projects as detailed below. These amounts are also the amounts recommended to the Congress in the President's Budget:

Jensen Unit	$ 8,752,000
Uintah Unit - (Advance Planning)	500,000
Upalco Unit	1,246,000
Bonneville Unit	67,700,000
Recreation and Fish and Wildlife (Section 8)	7,554,000
TOTAL	$85,752,000

Jensen Unit - Central Utah Project

In 1980 the Congress appropriated $5,808,000 to begin construction of the Tyzack Pumping Plant and Aqueduct. Plans and specifications for this feature of the Jensen Unit have been issued by the U. S. Water and Power Resources Service. The bid opening will be held on April 28, 1981. The $8,752,000 for fiscal year 1982 will continue the construction of this very important feature.

The Red Fleet Dam has been completed and is operating under a "filling criteria." The reservoir was only partially filled in 1980, reaching 13,000 acre-feet; total capacity is 26,000 acre-feet. Under this "filling criteria" and if water is available in 1981, the reservoir should be filled to capacity. During 1980 the first irrigation water deliveries took place; deliveries were made to most of the irrigation contractors.

The Uintah Water Conservancy District has contracted to repay the repayable costs of the Jensen Unit and they have contracted with Vernal City for the delivery of 12,000 acre-feet of municipal and industrial water. The delivery to Vernal City will commence when the Tyzack Pumping Plant and Aqueduct is in place. The Vernal City system, which supplies water to Vernal City and surrounding areas in Ashley Valley, needs some of these water supplies today and future requirements for water could use the total M & I supply from the Project.

The 1980 census for Uintah County showed a 59.6 percent population increase from 1970 to 1980. Most of this increase in population is in the area of Vernal City and Ashley Valley. The cause of the increase in population is basically energy involved with oil and gas developments and oil and gas service people. The energy developments projected for this area include a new coal-fired power plant and oil shale and tar sand developments. The first unit of the Moon Lake Power Plant Project will start into construction in 1981. This is a coal-fired 400 megawatt unit which will come on line in late 1984. The second 400 megawatt unit would follow in construction in 18 months if the future power demands are present. This project is located 25 miles south of Vernal and Vernal will be the major residential area for the project. The Draft Environmental Statement was issued in January 1981 and the final Draft is expected to be filed by April 1st. The generating construction and the coal supply system will require an estimated peak work force of 1072 people in 1984. Other major developments include oil shale and tar sands. These planned developments are about 35-40 miles south of Vernal and include Paraho, Syntana, White River Oil Shale, Cleveland Cliffs, TOSCO, Magic Circle, Texaco, Exxon, and GeoKinetics. Attached is a map showing the location of these major energy areas of development in the Bonanza and Ouray areas south of Vernal. (This has been submitted by the Uintah Basin Planning and Energy Council.) The Uintah Basin Planning and Energy Council projects work force for power plant, oil shale, and related projects at approximately 10,000 people in 1989.

The Central Utah Water Conservancy District is planning to construct a water purification plant along the Tyzack Aqueduct to treat water supplies from the Jensen Unit; also, water from the Vernal Unit and water from Ashley Springs. Treatment of these water supplies is required by the State of Utah to meet state and federal water quality standards.

Upalco and Uintah Units - Central Utah Project

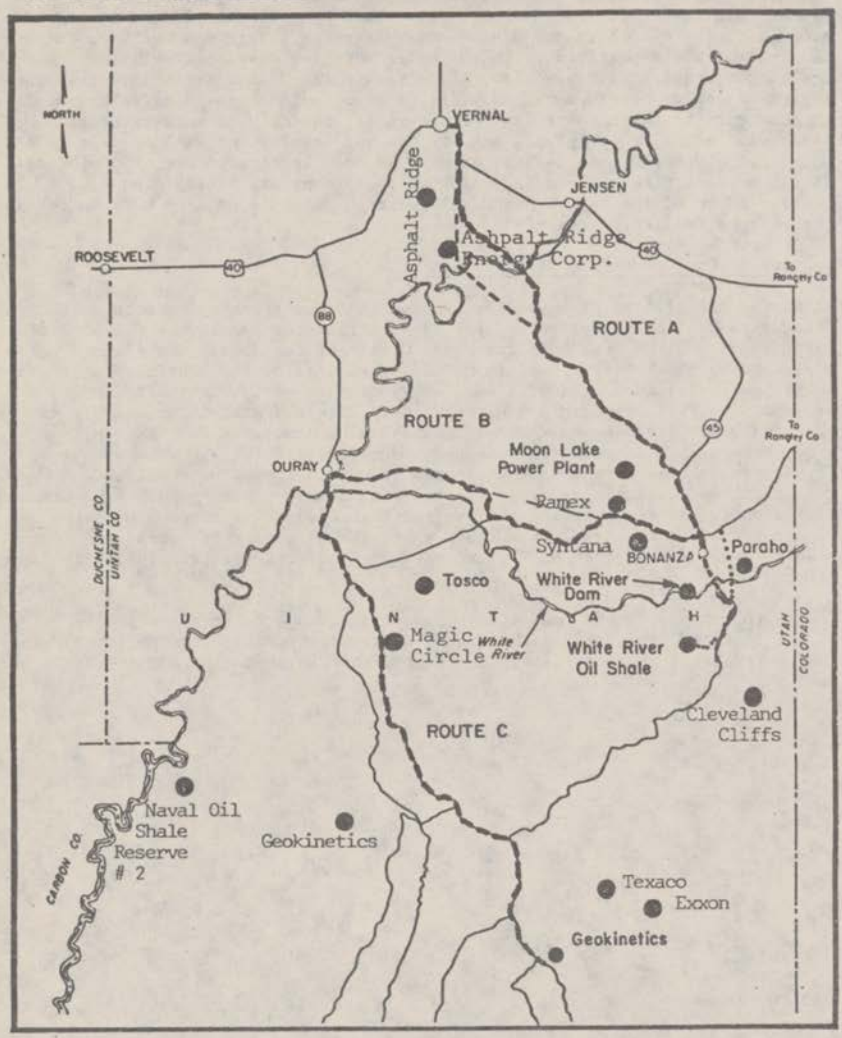
These two projects are extremely important to the people living in the Uintah Basin. Both projects will have benefits to both Indians from the Ute Indian Tribe and non-Indians residing in the same area. Construction funds were provided for the Upalco Unit in 1981 and a repayment contract has been negotiated with the Central Utah Water Conservancy District and should be signed in the immediate future. The Ute Indian Tribe is reviewing all of their options and hopefully they will be in a position to execute a contract allowing this project to proceed.

The 1982 Budget provides for $500,000 to continue investigation of the Uintah Unit of the Central Utah Project. This project was planned to provide storage features on both the Uintah and Whiterocks Rivers and both non-Indians and Indians would participate in the water supplies developed both for irrigation and for culinary use. All areas in the Uintah Basin have felt the impact of energy developments and this is important in providing water supplies to take care of the needs of the people in the basin. The impacts of oil shale, tar sands, power plant, and oil and gas development will be felt in Roosevelt, Duchesne, and Ballard as well as some section of western Colorado. At the present time oil and gas drilling operations are taking place in every section of the Uintah Basin. The Uintah Basin is an area with varied and enormous natural resources.

Bonneville Unit - Central Utah Project

Funds for 1980 fiscal year will be used to continue the construction on the Strawberry Collection System and the Upper Stillwater Dam in the Uintah Basin. Also, funds will be available for construction of the Jordan and Alpine Aqueducts in the Bonneville Basin. Funding will allow for continued investigation of the Jordanelle Dam, a key feature of the Bonneville Unit, a project that will supply M & I water to Salt Lake and Utah Counties. It is essential that planning on the Jordanelle Dam be completed and that this project be placed in construction in an improved time table. This project is planned to take care of the projected growth in these two counties and time dictates that more progress is needed to catch up with growth. Numerous delays on the construction of the Central Utah Project is translated into higher costs for construction, higher costs for necessary features and results are inflated cost of the end product--industrial and municipal-type water.

I wish to express to the committee, my appreciation and the appreciation of the Board of Directors of the Uintah Water Conservancy District for funding these very vital projects in Uintah County, the Uintah Basin, and the State of Utah.



LOCATION OF MAJOR ENERGY DEVELOPMENTS
IN THE BONANZA & OURAY AREAS
WITH PROPOSED NEW ROADS

Source: Uintah Basin Energy Planning and Development Council

O'NEILL UNIT, NEBRASKA

WITNESSES

ROBERT RAMM, RANCHER, FARMER AND IRRIGATOR, STUART, NEBR.
WESLEY SANDALL, PRESIDENT, SAVE THE NIOBRARA RIVER ASSOCIATION

Mr. BEVILL. We have several people here from Mrs. Smith's district. Mrs. Smith will present them to you.

Mrs. SMITH. I would like to introduce Mr. Robert Ramm, who comes from the Third Congressional District.

Mr. RAMM. I came yesterday to present a hypothetical viewpoint.

Mr. BEVILL. We are pleased to have you, Mr. Ramm. You may proceed as you wish.

STATEMENT OF ROBERT A. RAMM

Mr. RAMM. The last time I was in Washington was September 1st, 1944. We picked up our four engine bomber in California and on the way overseas, we decided to take a look at Washington. We flew past at about 2,000 feet and as we approached the capital a voice boomed over the radio "Clear the Washington Corridor or we will blow you out of the sky in 10 seconds." We got the message and I hope today I can get the message across that we, the people of Nebraska do not want the Niobrara Dam.

For many years the people of our area and the Senate and the courts have said we would like to have that alternative to Norden. Today we are releasing to the press and to you our alternative to the Niobrara Watershed project. The project was to be completed in March 1981.

The first dam on Cedar Gulch Creek completed January 1981, cost $90 million. By private capital and government aid.

Goals of Niobrara Watershed project of 500 to 1000 dams, total cost, $50 to $100 million at a per acre cost of around $1,000 per acre, water delivered by center pivots from dams.

Benefits—Drinking water for three homes, water for large hog and cattle operation on same farm and five center pivots for corn and alfalfa.

Benefits includes water for 500 small to medium operators and 20 towns, with 50,000 to 100,000 acres of heavy soil being irrigated.

One hundred miles of small lakes for recreation, wildlife migration resting area, livestock watering, controls erosion and silt into the Main River.

Retains Nebraska's only white water canoeing river. Stabilizes farm and ranch income for 100 mile long area. Raises water table throughout North Nebraska.

With over half of Nebraska Wetlands being drained already for irrigation and Nebraska in the direct path of North and South waterfowl migration, a spread out chain of small lakes in a food area is needed to control cholera which is killing thousands of ducks, geese, et cetera, each year in a crowded area of the few remaining wetlands in the State of Nebraska. If polled, we believe

95 percent of the people in Nebraska would support the New Niobrara Watershed project.

The Niobrara Watershed project will save the taxpayer and Federal Government upwards of $300 million and irrigate double the acres over the proposed Norden Dam Project.

The Norden Dam drawback at the present time cost upwards of $400 million with inflation and subsidized three and a half percent money.

Cost per irrigated acre around $4,000 to $6,000 per acre for marginal land, raising 100 bushel corn at $6.00 to $8.00 per bushel. Present inflated price $3.00 per bushel.

Silt erosion Niobrara River will fill dam in 25 to 50 years rendering 77,000 acres useless as Spencer Dam on the Niobrara River, now filled with silt and useless.

Ranchers on 80 miles of clay lined canal have never had a vote or voice in building this canal through their ranches the past 20 years, and 35,000 acres of good land in the canal right of way will be destroyed and wrecking operations of balanced ranches, in the past of this man canal.

Proposed Norden Dam Lake will be 200 miles from populated area, Omaha, and Lincoln, Nebraska. With the price of gas, people will use their own lakes in their back yards for recreation.

Norden Dam is proposed in an unstable area, where earth shaking, and rumbling has been felt, by pioneers of the area for many years.

Norden Dam will end numerous center pivot operations, pumping for 100 miles downstream for lack of stream flow.

Proposed Norden Dam would end Nebraska's only white water canoeing river, now enjoyed by thousands of people throughout the Middle West, also destroying whooping crane resting area and bunch migration of waterfowl on to one lake. Waterfowl already are infected with cholera for being crowed into small areas for food and rest in Nebraska.

Omaha World Herald poll recently shows that only 17 percent of the people polled in Nebraska favor the proposed Norden Dam.

[The information follows:]

Subcommittee on Energy and Water Development

"Niobrara Watershed Alternative Project Design," completed March, 1981.

First Dam on "Cedar Gulch Creek" completed January 1981 -- cost $90,000.00. By "Private Capital and Government Aid". (Note Under Benefits)

Goal of Niobrara Watershed Project of 500 to 1000 Dams, total cost, 50 to 100 million dollars at a per acre cost of around $1,000 per acre, water delivered by "Center Pivots from Dams.

Benefits -- "Drinking Water for 3 Homes", "Water for Large Hog and Cattle Operation" on Same Farm and "5 Center Pivots for Corn and Alfalfa". Benefits includes water for 500 Small to Medium Operators"and "20 Towns, with 50,000 to 100,000 Acres of Heavy Soil being Irrigated". "100 Miles of Small Lakes for Recreation," "Wildlife Migration, Resting Area", "Livestock Watering," "Controls Erosion and Silt into the Main River". "Retains Nebraska's only White Water Canoeing River". "Stablizes Farm & Ranch Income for 100 mile long area". "Raises Water Table throughout North Nebraska".

With over Half of "Nebraska Wetlands" being drained already for Irrigation (300,000 Acres) and Nebraska in the direct path of "North and South Waterfowl Migration", a "Spread Out Chain of Small Lakes in a Food Area is needed to Control Cholera which is killing thousands of Ducks, Geese etc. each year in a Crowded Area of the few remaining wetlands in the State of Nebraska. If Polled, we believe 95% of the people in Nebraska would support the "New Niobrara Watershed Project".

The "Niobrara Watershed Project" will save the Taxpayer and Federal Government Upwards of 300 Million Dollars and Irrigate Double The Acres, over the Proposed Norden Dam Project.

NORDEN DAM DRAWBACK AT PRESENT TIME

Cost Upwards of $400,000,000. with inflation and subsidized 3% money. Cost per Irrigated Acre around $4,000 to $6,000 per Acre for Marginal Land, raising 100 bushel corn at $6.00 to $8.00 per bushel. Present inflated price $3.00 per bushel.

Silt & Erosion Niobrara River will fill Dam in 25 to 50 years, rendering 77,000 Acres Useless as "Spencer Dam" on the Niobrara River, now filled with silt, is Useless.

Ranchers on 80 miles of "Clay Lined Canal" have never had a vote or voice in building this Canal through their ranches the past 20 years, and 35,000 acres of good land in the "Canal Right Away" will be destroyed, and wrecking operations of balanced ranches, in the path of this "Main Canal".

Proposed Norden Dam Lake will be 200 miles from populated area, Omaha & Lincoln Nebraska. With the price of gas, people will use their own lakes in their backyards for recreation.

Norden Dam is proposed, in an unstable area, where "earth" shaking, and rumbling has been felt, by pioners of the area for many years.

Norden Dam will end, numerous, "Center Pivot Operations", pumping for 100 miles down stream for lack of stream flow.

Proposed Norden Dam would end Nebraskas only "White Water Canoeing River", now enjoyed by thousands of people throughout the Middle West, also destroying, "Whooping Crane Resting Area" and bunch, "Migration of Waterfowl on to one lake. Waterfowl already are infected with Cholera, for being crowded into small areas for food and rest in Nebraska.

Omaha World Herald Poll, recently shows that only 17% of the people polled in Nebraska, favors the "Proposed Norden Dam".

Signed: Bob Ramm

Stuart, Nebraska - 68780
Rancher, Farmer & Irrigator

Mrs. SMITH. We have one other resident of the Third Congressional District here and I want to introduce Mr. Wesley Sandall and I would like to tell you, Mr. Chairman, that early this year I spent a day touring the site of the O'Neill Unit in a four wheel drive vehicle with Mr. Sandall and two or three other friends whose ranches, like Mr. Sandall's, lie right at the spot where the dam and the reservoir are sited.

I appreciate his sincerity and concern and I want to say welcome back.

STATEMENT OF WES SANDALL

Mr. SANDALL. My name is Wes Sandall. I am a rancher at Bassett, Nebraska, and President of Save the Niobrara River Association, a group of ranchers and farmers in the project area.

A legal authorized Norden Dam no longer exists, so Congress should deny the WPRS their budget request for $3.28 million for the 1982 fiscal year. The WPRS has no safe plan for constructing a dam at the present site. A whole new dam design with over a $50 million increase in costs must be brought back to Congress for study and authorization.

SNRA said that there were geological problems at the dam site. A federal judge agreed twice that the Bureau had not provided enough information on geology or dam safety. Sent back to the drawing boards for the third time in 1979, by the judge's ruling, the Bureau suddenly discovered the need to make a major design change that will cost over $50 million. In July of 1980 an official of the Interior Department said, "That if it had not been for the Save the Niobrara River Asssociation, that the Norden Dam more than likely would have been built and washed out by now."

The WPRS has made two mistakes on this project on dam safety already and it also parallels the same mistake as on the Tetion Dam in Idaho. Who pays for the mistakes of the WPRS? The area residents pay.

The WPRS was supposed to study an alternative to the O'Neill project and they went through the motions with figures and charts and said there was no alternative. If an alternative is to be produced it should be done by an outside source that is not paid by the WPRS to come up with the answers that they want from the study. The WPRS goes through the study of any project with piles of materials that would discourage anyone or Congress from studying them. The truth is covered up about the simple facts by pages and pages of printing. The stack of supplements and appendices upon appendices is at least seven feet tall on just the Norden Dam-O'Neill project.

The WPRS has not built a dam yet that will last a 100 years. In Nebraska they do not have a project with a 100 mile long main canal, built through sand and canyons; any sensible person can figure what will happen to the water in those conditions.

In the first EIS they called for 28.2 miles of concrete lined canal and 72 miles of earth lined canal. In the last project data sheet they now call for 63.6 miles of concrete lined canal. This additional concrete lining is not figured in the total cost of the project. It is just figured to be one of the items that makes for a higher cost overrun to have to go back to Congress and ask for more funds to

complete the project after it is so far along Congress can't say no. Several syphons under streambeds are not on the project map. This will also call for more funds.

How can Congress authorize spending for projects when the information is incomplete?

The only ones promoting the Norden Dam-O'Neill project are government entities, a few farmers that want security instead of the free enterprise system, a group of large contractors, and the real estate industry that have grown fat already by speculating on land in the project areas. Other promoters are undertakers, petroleum dealers, bankers and machinery dealers who speculate. Very few farmers, the ones that have to risk all their life's accumulations, are promoting this project with much vigor.

Promoters of the O'Neill project have lost sight of the fact that the government owns absolutely nothing. If it promises to give you something, it must first take it from you. We have sincere and respected public officials and lawmakers in every part of the land who have forgotten a simple truth—they are persuaded themselves that the government is rich and has unlimited resources. The truth is that it is penniless—before it can spend, it must take from the people.

How can the people of Congress be so heartless as to permit some greedy people to take from people that live off the land and not off the government, such as taking our land and water and moving it 100 miles to the most water rich county in the State of Nebraska?

We, living west of the project area, are mostly cattle raisers and are not guaranteed a payment whether we raise a crop or not. The corn producer is guaranteed a loan rate on his crop, a disaster payment if the crop is a failure. We ranchers in Rock County, Nebraska, will have to give up land, thus raising the taxes on the rest of the land. We will have to be taxed more just to maintain county roads for the heavy WPRS construction equipment, have our pastures cut up and even be without water for livestock in some pastures, and have to put up with our fences being removed so livestock cannot be restricted.

This EIS also states that they will take a few thousand acres of land to use as temporary right of way while construction is going on. Now what do the beneficiaries of the project have to give up?

One statement by the WPRS is that they will be raising 191 bushels per acre of corn by the year 2000. It will more than likely be 119 bushels per acre. The Ainsworth project has been in since 1965 and has not achieved that goal yet, and in fact, the last three have lost 16 bushels per acre production. We had two seasons in this area that were above normal rainfall.

The Niobrara River on which the Norden Dam is proposed to be built depends on rainfall for its excess ground water that feeds it. In the dry years, such as last year and this one thus far, an irrigation project would be a failure because there would not be enough flow to supply enough water to irrigate 77,000 acres. In above normal rainfall years there is a possibility that they could get enough, but it is not very often that we have above normal rainfall.

The Holt County Independent paper last week had ads of irrigated land for sale and the prices were quoted at only $900 per acre,

fully developed and ready to go. Now the WPRS plans to just put water to the land at a cost to taxpayers of $4,130 per acre. Any grade school kid can figure better than that.

Nebraska has several WPRS water projects and the biggest share of them are in trouble and deteriorating rapidly. The Miragae Flats has never had enough water to supply its designed needs. This one is on the Niobrara River.

The Enders Reservoir on the Frenchman River is drying up and the WPRS has admitted that by 1992 it will be dry and not usable.

The Harlan County Reservoir is drying up and Senator Curtis tried to get funds to help it out and did, but the money did not increase the water supply, just adding expense to it with no improvement. Most of all, these reservoirs and several others are drying up because the underground water that feeds the streams is being pumped out and drying up the streams.

The same thing is happening on the Niobrara River and in a short time the Norden Dam would be worthless as an irrigation reservoir. There are USGS charts showing the declining flow of the Niobrara River. It has steadily declined during the past 12 years and even faster in the past six years.

I have dealt on the economics of this project before and now I have some more problems solved for you, to save on our valuable time. The interest rate on the O'Neill project is figured at only three and one-fourth percent which is below the cost of even printing money. You keep saying that it is written in the authorization that it is set at three and one-fourth and can't be raised, but just remember that Farm Home Administration, Federal Housing Administration interest rates can be changed any old time. Even the Congress can change and raise their pay rates, and I am quite sure that it would be a lot easier to raise project interest rates than Congressman's pay.

This project is totally unfeasible in any way, shape, or form. The figures used by the WPRS to figure production costs are not even a wholesale price on seed corn, fertilizer, herbicides, machinery costs, and on down the line. The markets change daily and not just once in a decade as they have it figured.

One phase of the project that is ridiculous and would make laughing stock of anyone is that in the H.ID. 378 it states that there are 15,000 acres that will have to have a drainage system installed so they can irrigate those acres. Then a little later a few more thousand acres will need a drainage system to control the water logging in that area. Well, anyone knows that if land is too wet to irrigate, it is foolish to drain it and then put water back on it. A farmer with a little initiative can figure how to make the best use of that land without the services of the WPRS.

There are people living along the Niobrara River that have to haul their drinking water—a rural domestic water line would promote the economy more than anything else in north and northeast Nebraska.

Mr. Chairman, there is another issue of considerable importance to me and many of my neighbors that I am compelled to call to your attention. As you will note, the Reclamation and Irrigation districts executed their repayment contact in 1976. However, the

landowners in those districts never voted their approval or disapproval of these contracts.

A similar situation existed in the North Loup project area and private citizens brought suit. The Nebraska Supreme Court rules that elections were necessary. In 1979 the respective districts held elections and both contracts were approved. Formal validation occurred in 1980. I am a landowner in the immediate area of the project. I, like many of my neighbors, will be adversely affected by the project, yet we were denied the right to vote.

Basically, the lines of the districts were drawn in such a way as to place most of the no vote outside of the district and a distorted majority within the district boundaries. When project proponents appear before you and claim substantial support on the strength of the 1979 voter approval, you should not be fooled by this distortion.

Not only did landowners like myself become aware of this situation, but so did the Bureau's David Wilde—Project Manager, Grand Island, Nebraska—who said he "has never seen another bureau project in which the major dams, reservoirs, and canals were not located within the reclamation district on lands already owned by the government." (Omaha World Herald, May 14, 1979).

In addition to the question of who was permitted to cast a vote, there are a series of issues that relate to the election that I want to bring to your attention.

The election was a special election. The reclamation district contract and the irrigation district contract were not voted on at the same time. They were considered six months apart.

Official notice was published in the local newspaper but at the same time the paper was running stories praising the project.

The contract was reprinted in our paper, but without explanation. It is a complex document and one, I might add, that is not easily understood.

There was no voter information packet or information document explaining the contract and its provisions.

To the best of our knowledge, there was no published voter list.

There were no poll watchers.

Because this was a special election, regular polling places were not always used.

As a result of this situation, this committee, the Congress, the Bureau, and others have been led to believe there is substantial support for this project. It is an illusion. Project support has been steadily slipping and when the landowners who must ultimately pay for part of the project find out the truth about what is contained in the contracts—their real obligation—it will dip even further.

Bear in mind that when the district taxing proposal was presented to the people in the area nearly 18 years ago, it was soundly rejected by an almost 3 to 1 vote. Three years later, the district tried again. This time they were successful by a 72 vote margin of the more than 2200 votes cast. Historically, support has been slim.

I cannot leave this witness table before Congress without firmly saying to you that my fundamental rights, and the rights of many others like me, have been insulted and trampled, all to build a misguided Bureau of Reclamation project.

Mrs. SMITH. Mr. Chairman, I would like permission to file a statement on the O'Neill Unit for the record after I have had an opportunity to study the testimony.

Mr. BEVILL. Permission is granted. That will be made a part of the record.

[The information follows:]

STATEMENT OF CONGRESSWOMAN SMITH OF NEBRASKA IN RESPONSE TO WITNESSES OPPOSING THE PROJECT

Congresswoman SMITH. Mr. Chairman, on March 25, witnesses from the project area in Nebraska appeared before this committee to testify in opposition to the O'Neill Unit of the Pick-Sloan Missouri Basin Program. I take this opportunity, Mr. Chairman, to address some of the points those witnesses made that I disagree with.

There is no question that the O'Neill Unit is an authorized unit of the Pick-Sloan Missouri Basin Program. It is difficult to understand how a witness could contend otherwise when Section 401 of Public Law 92-514 (86 Stat. 968), enacted October 20, 1972, states: "The O'Neill Unit heretofore authorized as an integral part of the Pick-Sloan Missouri Basin Program by the Act of August 24, 1954 (68 Stat. 577), is hereby authorized as a unit of that project * * *." One witness questions whether the Congress intended for power users to share in the cost of the O'Neill Unit. The entire concept of the Pick-Sloan Missouri Basin Project was to use the power revenues from the large dams on the main stream of the Missouri River to help finance the other functions of the project. At the time of authorization of the O'Neill Unit it was projected that power revenues would share in about 78 percent of the irrigation cost of the unit.

Mr. Chairman, another witness spoke of an alternative project design which consists of numerous small impoundments scattered throughout the Niobrara watershed. I would like to point out that those are not alternatives to the O'Neill Unit but rather are individual developments which could be implemented in conjuction with the O'Neill Unit, to the extent that the basic water supplies are available in the watershed and water rights permits can be obtained from the State of Nebraska. The Water and Power Resources Service, in the planning of the O'Neill Unit investigated numerous alternatives. Those alternatives, reported in the Final Environmental Statement on the Unit, include no development of the project, development of ground water for irrigation, and numerous alternative features, purposes, and methods of operation. That Final Environmental Statement has been reviewed by the U.S. District Court which determined that the only other reasonable alternative would be the alternate use of the funds invested for a program of research techniques for improving livestock and crop production without diminishing groundwater reserves by irrigation. The Water and Power Resources Service is supplementing the EIS in this regard.

One witness contended that sedimentation would render the unit useless. There is no dispute that the Norden Dam of the O'Neill Unit will intercept sediment and significant sedimentation desposition would occur in the reservoir. Extensive studies show that in 50 years sedimentation would form a 270-acre delta in the upper reservoir and encroach upon 10,000 acre-feet of the 125,000 acre-foot conservation storage. However, there is no reasonable comparison between the Norden Reservoir and Spencer Dam, as alleged by the witness. Spencer Dam is a low head power dam on the lower reaches of the Niobrara River with a reservoir of only about 2 acres in size which fills with sidiment every few months. The Norden Reservoir is expected to have a long useful life.

Landowners along the canal route from the Norden Dam to the 77,000 acre service area are not members in either the North Central Nabraska Reclamation District or the Niobrara Basin Irrigation District. Both districts, being duly established under Nebraska law, required that members have their lands included in the districts to be eligible to vote. No attempt has been made by the approximately 120 landowners along the canal route and in the reservoir to have their lands included in the districts at or since the time of initial formation in the 1960's. Therefore, as the witnesses contend, those landowners, as a matter of law and personal choice, have no voice in the district nor do they have an obligation for repayment of any portion of the unit's cost and taxes levied by the districts.

However, voters in the Reclamation District, in a referendum held June 1, 1979, ratified the water service contract for the project by a 78 percent majority. Voters in the Irrigation District, in a referendum held December 15, 1979 also ratified the repayment contract for the project by a 78 percent majority. These are the people

who at our hearing have indicated a willingness to increase the amount that they have contracted with the Government to repay by 50 percent.

In regard to the dam safety allegations of the witnesses, the Water and Power Resources Service now has the report of the independent consultants which it commissioned in 1979 to investigate the safety of Norden Dam. Geological features which have potential risks include shearing of the upper Pierre shale formation, ground-water pressure under the dam, possible loss of strength during earthquake shock (liquifaction) of certain zones of the Brule formation, potential erosion from wave action of the Brule formation, piping within the Brule formation, and settlement during and after construction. After this extensive investigation, the Water and Power Resources Service agrees with the consultants that enough information is available to identify all geological risks and that a safe dam can be constructed at the site. Accommodation of the design changes to give due consideration to these risks has increased the cost estimate of the O'Neill Unit to $331 million. This estimate includes all features as presently designed, including the additional concrete canal lining mentioned by one witness.

The current estimate of $331 million is $26 million over the authorized appropriation ceiling of $304.9 million, indexed to 1981 price levels. However, the new estimate included $41 million for contingencies, making the estimate to be within the guidelines presented to the Congress for projects that are at or approaching the indexed authorized appropriation ceiling. These guidelines have been approved by the General Accounting Office and the Water and Power Resources Service has informed the Congress of the current situation regarding the ceiling in accordance with the guidelines.

O'NEILL UNIT, NEBRASKA

WITNESS

RON KLATASKE, WEST CENTRAL REGIONAL REPRESENTATIVE OF THE NATIONAL AUDUBON SOCIETY

Mr. BEVILL. Next is the National Audubon Society.

STATEMENT OF BOB KLATASKE

Mr. KLATASKE. Mr. Chairman, I appreciate the opportunity to appear here this morning.

The National Audubon Society represents approximately 425,000 taxpaying citizens. The society has members and chapters in every state. I work closely with our members in Nebraska and can assure you they are dedicated to the protection of the natural character of the Niobrara River Valley and to the preservation of the family farms and ranches which are a positive part of the cultural heritage of this uniue pastoral area. As a rather new landowner said recently to me about this neighbors, "The people who live along this river are some of the finest people the good Lord ever put out on the land."

The National Audubon Society is opposed to the O'Neill Project and has been on record in opposition to it for more than ten years, even before it received congressional authorization. There are many reasons why we cannot support this federal dam and diversion scheme and why we are compelled to actively oppose it.

Foremost among these is the fact that the project has been advanced with total disregard for the families who have lifestyles and livelihoods tied to the land along the river. Some families have a legacy of five generations associated with a particular piece of property. They love this beautiful country and they have been good to it. Some will lose their homes if this project is built. As many as

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300 may be adversely affected. More than 30,000 acres of private land will be taken by the Water and Power Resources Service.

Yet, these landowners were never given an opportunity to vote in the elections conducted by the reclamation district sponsoring this project. For all practical purposes they were all gerrymandered out by project promoters who have ignored every standard of fairness and justice we have reason to expect in a democratic society.

I was with a delegation of Niobrara Valley family members last July when a farm wife told the Honorable Congresswoman from Nebraska that she felt one of her most precious rights as an American citizen had been denied her on the day of the O'Neill reclamation district vote. The rights and interests of these good people are being sold down the river. You and other members of the US Congress should not allow this to happen. It should not be encouraged with further appropriations or an eventual federal expenditure of $335 million.

The Department of the Interior's Water and Power Resources Service should be asked to establish a good neighbor policy based on the principal that private land should not be condemned without a compelling reason. Since this project does not even make economic sense, there is no compelling reason.

Furthermore, it is too costly and too destructive to merit consideration at a time when far more worthy federal investments are being eliminated. The project will not even contribute in an overall beneficial way to agricultural productivity.

Whereas, the O'Neill Project would destroy the most spectacular stretch of the Niobrara and drastically degrade downstream flows, farmers along the river have offered a positive alternative. They have requested that two sections of the river totaling 62 miles be designated a national scenic river and protected by the Department of the Interior in partnership with them.

A brochure, which gives a newspaper account of the 47 mile landowner proposal announced last May, is provided. This last fall all of the ranch and farm families along an additional 15 mile reach of river downstream joined together in a similar request.

As Representative Douglas Bereuter stated on the House floor last June, "The Niobrara is perhaps the most beautiful and unique river valley in the Great Plains." We urge you to protect it and the integrity of the Congressional appropriations process by halting appropriations for the O'Neill Unit.

[The information follows:]

STATEMENT TO SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, COMMITTEE ON APPROPRIATIONS, U.S. HOUSE OF REPRESENTATIVES AND U.S. SENATE GIVEN BY RON KLATASKE, WEST CENTRAL REGIONAL REPRESENTATIVE OF THE NATIONAL AUDUBON SOCIETY ON THE O'NEILL UNIT IN NEBRASKA.

The National Audubon Society represents approximately 425,00 taxpaying citizens. The Society has members and chapters in every state. I work closely with our members in Nebraska and can assure you they are dedicated to the protection of the natural character of the Niobrara River Valley and to the preservation of the family farms and ranches which are a positive part of the cultural heritage of this unique pastoral area. As a rather new landowner said recently to me about his neighbors, "The people who live along this river are some of the finest people the good Lord ever put out on the land."

The National Audubon Society is opposed to the O'Neill Project and has been on record in opposition to it for more than 10 years, even before it received Congressional authorization. There are many reasons why we cannot support this federal dam and diversion scheme and why we are compelled to actively oppose it.

Foremost among these is the fact that the project has been advanced with total disregard for the families who have lifestyles and livelihoods tied to the land along this river. Some families have a legacy of five generations associated with a particular piece of property. They love this beautiful country and they have been good to it. Some will lose their homes if this project is built. As many as 300 may be adversely affected. More than 30,000 acres of private land will be taken by the Water and Power Resources Service.

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The Department of Interior's Water and Power Resources Service should be asked to establish a "good neighbor policy" based on the principal that private land should not be condemned without a compelling reason. Since this project does not even make economic sense there is no compelling reason. Furthermore, it is too costly and too destructive to merit consideration at a time when far more worthy federal investments are being eliminated. The project will not even contribute in an overall beneficial way to agricultural productivity.

Whereas the O'Neill Project would destroy the most spectacular stretch of the Niobrara and drastically degrade downstream flows, farmers along the river have offered a positive alternative. They have requested that two sections of the river totalling 62 miles be designated a national scenic river and protected by the Department of Interior in partnership with them. A brochure, which gives a newspaper account of the 47 mile landowner proposal announced last May, is provided. This past fall all of the ranch and farm families along an additional 15 mile reach of river downstream

joined together in a similar request.

As Representative Douglas Bereuter (R-NE) stated on the House floor last June, "The Niobrara is perhaps the most beautiful and unique river valley in the Great Plains." We urge you to protect it and the integrity of the Congressional appropriations process by halting appropriations for the O'Neill Unit.

O'NEILL UNIT, NEBRASKA

WITNESS

PHILIP J. JAMES, CHAIRMAN OF THE BOARD, MIDWEST COMPANIES

Mr. BEVILL. Mr. Philip James.

Mr. JAMES. My name is Phil James. I am a resident of Fremont, Nebraska. Our business is the formulation and distribution of agricultural chemicals and we operate primarily in the Western Plains States. As an agribusinessman, I am directly influenced by the development of our agricultural resources.

As I am sure you are aware, agriculture is Nebraska's largest industry, and the tremendous increase in irrigated acreage in the state in recent years has been a major factor in increasing agricultural activity.

Sound water resource development is something all Nebraskans support, but many are increasingly aware that the O'Neill Pick/Sloan project is the wrong type of water resource development. The project was designed over 20 years ago to irrigate 77,000 acres in an area that at that time was unirrigated. Today, over half this proposed acreage is already irrigated as a result of private development. It is difficult to conceive that a federal project which will result in a subsidy of over $4,000 an acre can be justified to further this development.

Because many of our state's taxpayers are aware of this, the O'Neill/Norden Dam project does not have the support of a majority of Nebraskans. A poll conducted by the Omaha World Herald in the fall of 1980 indicated that two-thirds of the individuals who were aware of the project were opposed to its completion.

The Bureau's most recent supplement to their environmental statement indicates that 80 percent of the present irrigation can continue without the Norden Dam being constructed. If this is true, how can we justify what is, in effect, a subsidy of over $4,000 an acre to benefit a very small number of landowners.

The Ogallala Aquifer High Plains Study, financed by the Department of Commerce, has released data that indicates many additional acres in Nebraska can be irrigated. This potential development can, and will be accomplished by private enterprise. Individual landowners, analyzing their own opportunity for profit, will decide whether additional irrigation is economically justified without the need for a federal subsidy.

The O'Neill unit is presently estimated to cost $335 million. This projection utilizes a discount rate of three and one-fourth percent to determine the present value of benefits arrived. To the extent that the discount rate chosen should bear some resemblance to the opportunity costs which are lost, and therefore, to current interest rates, or estimated interest rates in the foreseeable future, a three and one-fourth rate is totally unrealistic. If a more realistic rate of interest is used to estimate the finance cost of the project, the O'Neill unit would greatly exceed $335 million, or if a more realistic rate were used to determine the present value of future benefits, they would be greatly diminished.

There is the additional matter of who will pay for the project. The landowners in the affected area signed a contract in 1976 to

repay $45 million. The cost since 1976 has increased from $163 million to $335 million, with the irrigators still only obligated to repay $45 million.

Power users up and down the Missouri River Basin are now scheduled to repay $272 million. On an unrealistic estimate of $335 million, power users must bear 80 percent of the cost of the projects completion. That is particularly interesting in light of the fact that in the original legislation authorizing the O'Neill/Norden Dam, Congress specifically excluded the development of hydroelectric power for the O'Neill unit. I question whether Congress intended for power users to bear this disproportional share of the project cost. I would suspect that the current proposal goes far beyond congressional intent.

In conclusion, I would urge the abandonment of this project as economically unfeasible in a time when taxpayers in Nebraska and across the country are mandating restraint in spending at all levels of government.

Thank you.

WINONA AND ROCHESTER, MINNESOTA FLOOD CONTROL PROJECTS

WITNESSES

HON. ARLEN ERDAHL, U.S. CONGRESSMAN FROM MINNESOTA, FIRST DISTRICT
EARL LAUFENBERGER, MAYOR, CITY OF WINONA, MINN.
CHUCK HAZAMA, MAYOR, CITY OF ROCHESTER, MINN.

Mr. BEVILL. Mr. Erdahl.

I would like to have the two mayors come up. Mayor Hazama and Mayor Laufenberger.

STATEMENT OF HON. ARLEN ERDAHL

Mr. ERDAHL. Thank you, Mr. Chairman.

I have a brief statement I will deliver here and we will have some comments from the two mayors wherein these major flood control projects are located.

Mr. Chairman, I appreciate the opportunity to appear before your distinguished subcommittee in support of the U.S. Army Corps of Engineers project as continued in the President's budget. I was very pleased that President Carter included these items in his budget and doubly pleased that President Reagan endorsed them in his March budget revisions.

The appropriations requests include $110,000 to initiate a flood damage prevention study on the St. Croix River at Stillwater, Minnesota; $530,000 to continue Phase II advanced engineering and design of the flood control project on the South Fork of the Zumbro River at Rochester, Minnesota; $8,870,000 to continue construction of the flood control project on the Mississippi River at Winona, Minnesota; and $106,000 for operation and maintenance of the navigation project on the St. Croix River.

I am very pleased to have with me today Mayor Earl Laufenberger of Winona, Minnesota, and also Mayor Chuck Hazama and

Councilman Peter Solinger, Chairman of the Flood Control Committee, from Rochester, Minnesota. They will be happy to respond to any questions you might have about the flood control projects in either city at the conclusion of my testimony. They have also submitted statements for the record.

Mr. BEVILL. The statements referred to will be made a part of the record.

Mr. ERDAHL. The flood control prevention study at Stillwater, Minnesota is needed because the city is very susceptible to damage from floods on the St. Croix River, as evidenced in flooding in 1965, 1969, and 1971. The overall study cost is anticipated to be $408,000 and would be completed in March 1986.

Continued Phase II planning for the flood control project at Rochester, Minnesota is essential so that the city can be protected from costly flooding, which occurred most recently in 1978, when five people lost their lives and damages were estimated at approximately $59 million. With the South Fork of the Zumbro River running through the city, over 2,000 residences, 200 businesses, 21 industries, and ten public buildings would suffer damages if another major flood occurs before the project is completed.

While I wish the provision of additional funds would result in earlier completion of the Phase II design, the Corps of Engineers advises me that nothing can be done to expedite its completion. If the $530,000 is provided in fiscal year 1982, $441,000 will be required to complete reconstruction planning.

I am pleased to report that satisfactory progress is being made on construction of permanent levees to protect the City of Winona, Minnesota, from ravaging flood waters of the Mississippi River. The areas subject to flooding contain residential and business districts as well as industrial areas and public facilities. In 1965, severe flooding caused $8,390,000 in damages. Today, such a flood would cause damages of approximately $99 million.

The project has an overall benefit-cost ratio of 2.1 to 1.0 with the balance of the project to be completed boasting a benefit-cost ratio of 3.8 to 1.0. I urge the subcommittee to approve the $8,870,000 in the present budget. I think the ratios, as you know, Mr. Chairman, and members of the committee, are very significant. This will leave a balance of $9,922,000 to finish the project.

Both Rochester and Winona projects are cost effective. For every dollar spent on these projects, more than a dollar will be returned in benefits to the affected areas.

The remaining item of $106,000 is a continuing cost for maintaining navigation on the St. Croix River. Its approval will be greatly appreciated.

Strong local support for the Rochester and Winona projects are indicated by the presence of two mayors and a councilman. If any member of the subcommittee has any question to be directed at me or the local government officials, we will be glad to respond. If not, we have appreciated the chance to request funding for the previously covered items.

Mr. Chairman, I appreciate very much your allowing us to appear.

[The information follows:]

STATEMENT OF ARLEN ERDAHL

Mr. Chairman, I appreciate the opportunity to appear before your distinguished Subcommittee in support of the U.S. Army Corps of Engineers' projects as contained in the President's budget. I was very pleased that President Carter included these items in his budget and doubly pleased that President Reagan endorsed them in his March Budget Revisions.

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I am pleased to report that satisfactory progress is being made on construction of permanent levees to protect the city of Winona, Minnesota from ravaging flood waters of the Mississippi River. The areas subject to flooding contain residential and business districts as well as industrial areas and public facilities. In 1965, severe flooding caused $8,390,000 in damages. Today, such a flood would cause damages of approximately $99 million. The project has an overall benefit-to-cost ratio of 2.1 to 1.0 with the balance of the project to be completed boasting a benefit-cost ratio of 3.8 to 1.0. I urge the Subcommittee to approve the $8,870,000 in the present budget. This will leave a balance of $9,922,000 to finish the project. Both the Rochester and Winona projects are cost-effective. For every dollar spent on these projects, more than a dollar will be returned in benefits to the affected areas.

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Mr. BEVILL. We have been pleased to have you before us. Certainly, you know this committee will work with you.

Mr. ERDAHL. This went successfully through the House and we ran out of time in the Senate last session.

Mr. MYERS. Are there existing levees now that are being improved?

Mr. ERDAHL. Mr. Chairman, if I might defer to the Mayor from Winona.

STATEMENT OF EARL LAUFBERGER

Mr. LAUFBERGER. We have a portion of the city, the West End of the City, which has a permanent dike the Corps of Engineers built. We have that explained in the memorandum that you have.

The balance of the city will be protected by the continuation of the dike. What we have there at the present time are temporary dikes and they do not get any credit for flood insurance, so the City of Winona is required to have flood insurance or anything that is constructed in the flood plain has to be raised to higher elevation. As soon as the dike is constructed, then the flood insurance will not be necessary.

The first phase of the project of the number 2 program is about 95 percent complete as of today. The whole project is to be completed by 1984.

Mr. MYERS. I used to come to Winona to eat catfish.

Mr. LAUFBERGER. Probably at the Hot Fish Shop. It is still there doing great business.

Mr. MYERS. I think it was in the south part of town.

Mr. LAUFBERGER. That is correct.

[The information follows:]

CITY OF WINONA REQUEST FOR FUNDING

FOR

STAGE II - FLOOD CONTROL

MISSISSIPPI RIVER AT WINONA, MINNESOTA

I. PRESENT AUTHORIZED PROJECT IS PART OF THE AUTHORIZED 1958 FLOOD CONTROL PROJECT.

A. STAGE I WAS COMPLETED IN THE SPRING OF 1967.

B. STAGE II, AUTHORIZED IN 1971, WILL COMPLETE THE PROJECT THAT WAS AUTHORIZED BY THE 1958 FLOOD CONTROL ACT.

C. QUOTE FROM "INTERIM SURVEY FOR FLOOD CONTROL, MISSISSIPPI RIVER AT WINONA, MINNESOTA, BY DEPARTMENT OF THE ARMY, ST. PAUL DISTRICT, CORPS OF ENGINEERS, ST. PAUL, MINNESOTA, JANUARY 1970" TO PROVE THE ABOVE STATEMENTS.

EXISTING AND AUTHORIZED IMPROVEMENTS

CORPS OF ENGINEERS PROJECTS

"The only existing Corps of Engineers flood control project in the immediate Winona area is a continuous flood barrier about 6.1 miles long from Minnesota City downstream to a point just upstream from the Minnesota Highway 43 bridge as shown on Plate 1. House Document #324, 84th Congress, 2d session, contains the interim survey report recommending a local protection project at Winona and the 1958 Flood Control Act authorized construction of the project. A contract was initially awarded for the existing segment of the authorized project (Stage I) in October of 1964 and was about five percent complete when work was suspended for the winter season. The record flood on the Mississippi River in April 1965 prevented resumption of work in the spring and made it advisable to redesign the project increasing levee heights to protect for higher flows. A contract was reawarded in September of 1965 and was completed in the spring of 1967 with federal costs of $2,035,631 and $17,316 contributed by local interests. Included as part of the authorized project is a plan which would strengthen and extend an existing levee downstream from the Lake Winona outlet. The estimated cost of this portion is $1,020,000 federal with $17,000 to be contributed by local interests based on 1965 prices. At the request of local interests, this portion of the authorized project was not constructed in order that the scope of the project could be reconsidered to allow for the protection of additional lands needed by the City for industrial expansion. The uncompleted portion of the project was placed in a "deferred for restudy" category. Expansion of the authorized Lake Winona levee alignment is considered further as part of this survey report."

II. DESCRIPTION OF PROJECT

THE PRESENT AUTHORIZED PROJECT, STAGE II, WOULD TIE INTO THE DOWNSTREAM EXTREMITY OF THE COMPLETED LEVEE PROJECT, STAGE I, AT HUFF STREET AND WOULD EXTEND DOWNSTREAM TO PROTECT THE INDUSTRIAL BASED RIVERFRONT AND WOULD PROVIDE THE NECESSARY CLOSURE BELOW LAKE WINONA NEEDED TO COMPLETE THE AUTHORIZED PROJECT. THE FLOOD BARRIER WOULD EXTEND FROM HUFF STREET TO BELOW PEERLESS CHAIN, THEN FOLLOW THE ABANDONED GREAT WESTERN RAILROAD ROW TO CONNECT TO T.H. #61-14 WEST OF AND ADJACENT TO BURNS VALLEY CREEK.

QUOTE FROM SAID INTERIM SURVEY

PLAN OF IMPROVEMENT SELECTED

GENERAL DESCRIPTION

"The selected plan of improvement which includes both nonstructural and structural measures would provide the most practical and economical plan for fulfilling the existing and prospective flood control needs at Winona. The proposed plan would include levee and flood wall protection with necessary interior drainage works for the riverfront and the Lake Winona closure reaches as well as a sound floodplain management program to prevent unwise development of the area bordered by US Highway 61 and Burns Valley and Pleasant Valley Creeks. The plan would also complete the authorized project by providing the downstream flood barrier needed to prevent Mississippi River backup flows from entering Lake Winona and inundating the area now only partially protected by the completed segment of the authorized plan. The selected plan would also provide control of Burns Valley Creek by means of channel improvement, raising and extending the existing levee system, a drop structure, an erosion control structure, a bridge modification and a sewer line modification. The structural plan proposed is shown on Plate 3 with pertinent features and typical sections shown on Plates 4 and 5."

PROJECT FEATURES

"The recommended flood barrier consisting of levees and floodwalls would tie into the downstream extremity of the completed levee project, would extend downstream to protect the industrial based riverfront and would provide the necessary closure below Lake Winona needed to complete the authorized project. Control of Burns Valley Creek would be afforded by extensive channel improvement and raising of existing side levees. Included in the Burns Valley Creek modifications would be a drop structure and necessary erosion control facilities. Practically no disruption would result to the existing industrial and residential development in the area. In addition the recommended alignment below Lake Winona provides protection for an area that would permit growth opportunities not originally included in the authorized plan.

"Earth levees averaging 10 feet in height and totalling approximately 3.8 miles in length comprise about 85 percent of the proposed flood barrier. Concrete floodwalls also averaging about 10 feet in height total about 3,400 feet in length and have been designed integral with a sheetpile cutoff wall to control underground seepage."

III. COST BENEFIT RATIO

THE BENEFIT COST RATIO FOR STAGE II AS QUOTED IN SAID INTERIM REPORT IS 2.9.

SAID INTERIM REPORT STATES THAT "UNTIL STAGE II OF THE AUTHORIZED PLAN IS CONSTRUCTED AVERAGE ANNUAL DAMAGES WITHIN THE AUTHORIZED PROJECT LIMITS WILL REMAIN AT ABOUT $1,610,000 ANNUALLY."

IN THE SAME PARAGRAPH SAID INTERIM REPORT ALSO STATES "THE DISTRICT ENGINEER FINDS THAT A FLOOD BARRIER EXTENDING DOWNSTREAM FROM THE STAGE I LEVEE TERMINUS ALONG THE WINONA RIVERFRONT AND AROUND THE LOWER SECTION OF THE COMMUNITY TO REPLACE THE AUTHORIZED STAGE II LEVEE IS ECONOMICALLY JUSTIFIED.

IV. COST AND HARDSHIP ENCOUNTERED BY THE CITY UNTIL STAGE II IS COMPLETED

THE OUT-OF-POCKET EXPENSE TO THE CITY FOR RECENT FLOODS HAS BEEN TREMENDOUS AND IS SHOWN AS FOLLOWS:

YEAR	TOTAL COST OUTLAY	REIMBURSEMENT FROM "OEP"	NET COST OUTLAY
1965	$1,912,580	$1,746,268	$166,312
1967	252,875	-	252,875
1969	109,448	104,777	4,671
1971	33,970	-	33,970

THE ABOVE COSTS MAINLY COVER MAINTAINING TEMPORARY DIKES AND TEMPORARY PUMPING IN THE STAGE II AREA AND DO NOT INCLUDE SALARIES OF CITY EMPLOYEES AND VOLUNTEERS AND ACTUAL FLOOD DAMAGES SUSTAINED.

THE CITY HAS NO ASSURANCE THAT IF A FLOOD OF THE 1965 MAGNITUDE OCCURRED AGAIN PRIOR TO COMPLETION OF STAGE II THAT THE "OEP" WILL ASSIST IN THE COST OF THE FLOOD FIGHT.

DUE TO TAX LEVY LIMITATIONS NOW EXISTING IN MINNESOTA, THESE FLOOD FIGHT COSTS ARE CUTTING DEEPLY INTO THE CITY CAPITAL IMPROVEMENT PROJECTS.

THE ESTIMATED DAMAGES AS DETERMINED BY THE CORPS OF ENGINEERS, THAT THE CITY WOULD HAVE INCURRED WITHOUT A FLOOD FIGHT ARE $35,900,000 IN 1965. IF A FLOOD EQUAL TO THE 1965 FLOOD ENTERED THE CITY IN 1979, THE DAMAGES WOULD BE $89,750,000 IN 1979 DOLLARS.

Mr. ERDAHL. I am sure you are aware of these two fine communities in my district that contain Rochester and the home of the Mayo Clinic.

Mr. HAZAMA. When you come to us you know you are in trouble.

STATEMENT OF CHUCK HAZAMA

Mr. HAZAMA. I think one of the things that we say we want to try to do in the determination—we haven't had to me to resolve this whole thing—the whole problem is a story that came out during the last flood in 1978.

Ike and Zeke were sitting on top of the garage and they saw the flood waters coming down in a very short time. And, of course, Ike turned to Zeke and said, "God, this is going to be one heck of a flood."

And Zeke turned around and said, "Yes, with all this stuff coming down, we are really going to have a tough time."

All of a sudden, Ike turned to Zeke and said, "Holy mackeral, what is that?" And he saw a straw hat going back and forth on the surface of the water.

Zeke said, "Aw, don't worry, that is only grandfather. He said he was going to mow the law come hell or high water."

With that kind of determination, we want to try to resolve this flood control problem in Rochester.

[The information follows:]

City of Rochester
Minnesota

March 24, 1981

The Honorable Arlen Erdahl
House of Representatives
1017 Longworth Office Building
Washington, D.C. 20515

The Honorable Arlen Erdahl:

We appreciate your past efforts dealing with the problem of flooding in the City of Rochester.

The City of Rochester is subject to frequent flooding from the Zumbro River and its tributaries. In the past twenty years, the City of Rochester has suffered substantial damages from flooding on five different occasions. In July of 1978, Rochester suffered severe flooding resulting in over $50,000,000 in damages.

The process of formulating flood control improvements for Rochester has been going on for over two decades. The flood control improvements have been jointly developed by the Army Corps of Engineers and the Soil Conservation Service and have been submitted to congress for authorization.

Authorization for Rochester's flood control improvements has been included in the Water Resource Development Act of 1978 which did not receive congressional approval and is included in the current pending legislation. We need these flood control improvements in our city and we need them as quickly as possible.

It is essential that we receive appropriations in the amount of $530,000 for fiscal 1982, to allow the planning of the project to proceed as scheduled.

Thank you,

Chuck Hazama, Mayor
City of Rochester

Peter Solinger, Chairman
Rochester Flood Control Committee

City of Rochester
Minnesota

HISTORY OF FLOODING IN ROCHESTER, MINNESOTA

The city of Rochester, Minnesota is located in the south fork of the Zumbro River waterbed at the confluence of four tributaries to the Zumbro River. Presently, the city of Rochester is subject to substantial damage of periodic flooding from the Zumbro River and its tributaries. Since 1951, the Zumbro River at Rochester has left its bank eleven times, an average of one flood every 1.5 years. The city of Rochester has incurred major flood damages five times in the past twenty years, with the latest occurring in July of 1978, with over $50,000,000 in damages.

Approximately one-third of the area within the city limits of Rochester is flood prone. Included in the Rochester flood plain are over 2,200 residences, 200 businesses, 21 industries and 10 public buildings which would be subject to over $60 million dollars in damages from an intermediate regional flood (a flood having a 1% chance of occurring in any given year.) The city power plant, wastewater treatment plant, water supply system and most major streets and bridges in Rochester would presently be affected by flooding.

HISTORY OF FLOOD CONTROL PLANNING AND PROPOSED PROJECT

A preliminary report was first completed on flood control in the South Fork Zumbro River Basin in 1939 in compliance with Section 6 of the Flood Control Act of June 22, 1936. Later authorizations included a resolution of the Committee of Public Works of the U. S. House of Representatives dated March 5, 1952, and the Water Resources Development Act of March 7, 1974, Title I (Public Law 92-251). The proposed flood control project was recommended by the Chief of Engineers in House Document Np. 93-1561, 93rd Congress, 1st Session.

The proposed flood control improvements at Rochester consist of two separate, but interrelated projects formulated by the Army Corps of Engineers and the Soil Conservation Service. The element formulated by the Army Corps of Engineers involves the construction of 9.3 miles of channel modifications and supplemental levees within the city of Rochester, while the Soil Conservation Service element involves the construction of seven upstream reservoirs with associated watershed land treatment measures.

The projects were formulated in conjunction by the two federal agencies to represent a coordinated flood control program. The Army Corps of Engineers portion of the project is able to be reduced due to the flood waters which would be detained by the S.C.S. proposed retention reservoirs.

PROJECT COST AND FINANCING

The total cost of the two interrelated flood control projects approaches $80,000,000, with the Corps project estimated at approximately $63,000,000 and the S.C.S. project estimated at approxaimtely $15,000,000. It should be kept in mind that these cost estimates are based on 1978 price levels.

The city of Rochester is concerned about the rapidly increasing cost of the proposed flood control improvements with the resultant increase in the local share and the President's proposed cost sharing policy for water projects which would have the affect of almost doubling the city's local cost. For example, in 1971, the local cost of the proposed Corps of Engineer's flood control improvements was $2,600,000, while in 1978, the local cost of both the Corps and S.C.S. projects were estimated at approximately $9,000,000. If the President's so proposed cost sharing policy were to be accepted, the city of Rochester's local share of just the Corps portion of the flood control improvements would exceed $13,000,000.

AUTHORIZATION EFFORTS

Since the city is concerned that the cost of the proposed flood control improvements is rapidly exceeding the city's ability to assume these costs, the city of Rochester has been diligently attempting to obtain Congressional authorization for

the improvements and hopefully their construction as soon as possible.

The city of Rochester's proposed flood control improvements have been included in an authorization bill on two separate occasions. During the 95th Congress, Rochester's improvements were contained in the Water Resources Development Act of 1978. As this legislative act was reviewed by both the Senate and the House, Rochester's improvements were retained, however, in a final maneuver in the Senate, the act was inserted in HR 10979 (a bill which authorizes pot-hole repairs) and sent to the House. When the legislative issue was brought up for a vote in the House, a quorum was not present for a vote causing the 95th Congress to adjourn for the final time with no resolution of the legislature.

At the present time, authorization for both segments of Rochester's flood control improvements are included in H.R. 4788, which has been adopted by the House, and 5703, which has yet to come out of the Water Resources Subcommittee.

lh/7/80

CHRONOLOGY OF FLOOD CONTROL PLANNING
February 20, 1979

1. Preliminary report for flood control in the Zumbro River Basin was completed in 1939 and was transmitted to Congress on February 9, 1942. That report concluded that flood losses were insufficient to justify the estimated project costs and recommended that more detailed studies not be undertaken at that time.

2. A resolution of the U.S. House of Representatives Committee of Public Works adopted March 5, 1952, authorized the Board of Engineers for Rivers and Harbors to review the reports on the Zumbro River and its tributaries submitted in 1942 to determine if any of the recommended improvements should be made.

3. An interim review report on the preliminary examination for flood control on the Zumbro River was submitted on March 27, 1953. The report considered various flood control plans, all of which the Distric Engineer found economically unjustifiable. The Board of Engineers for Rivers and Harbors concurred with that recommendation.

4. At the request of the City of Rochester, through the Minnesota Department of Natural Resources, a floodplain information report on the South Fork Zumbro River and tributaries was completed by the Corps in 1968. This was the first major report of which the City has copies.

5. A review survey report of the Zumbro River Basin was submitted in April, 1972. A joint public meeting was held in the City on February 1, 1972 for the purpose of allowing local interests the opportunity to assist in the selection of a plan. In this report, the Corps recommended a flood control plan consisting of approximately ten miles of channel improvements, supplemented by intermittent sections of levee and regulation of land use. The report recommended that the scale of channel modifications be reduced as appropriate, if the SCS recommended a system of headwaters reservoirs for the watershed.

6. Congress authorized the initial stage of preconstruction planning for the Corps project in the Water Resources Development Act of 1974.

7. The SCS proposed a system of seven headwaters reservoirs and land treatment measures in 1975.

8. The Draft Phase I General Design Memorandum and Draft Revised Environmental Impact Statement were completed in September 1976. This report selected a joint Corps/SCS flood control plan consisting of 9.3 miles of channel modifications, supplemental levees, floodplain regulations, 20 miles of hiking and biking trails, four new parks, a system of 7 upstream reservoirs and watershed land treatment measures.

9. A citizen's committee appointed by the Mayor and Common Council met 14 times during the formulation of the Phase I report. In addition, a watershed steering committee appointed by the local government sponsors of the reservoir program provided citizen views on the proposed watershed developments.

10. A final joint public hearing was held on the Draft, Design Memorandum No. 1, Phase I, dated September, 1976 on December 16, 1976.

11. The Common Council resolution of the City's intent to participate in the proposed flood control project on February 24, 1977.

12. The Design Memorandum No. 1, General, Phase I, dated August, 1977 was submitted for federal agency review in Fall, 1977. Federal agency review is near completion. The project is expected to be presented to Congress in April, 1979.

13. The following schedule was anticipated in Aguust 1977 for the completion of the project:

a.	Completion of General Design Memorandum Phase II, Project Design	September 1981
b.	Preliminary Recreation Master Plan	May, 1982
c.	Completion of real estate acquisition	June, 1982
d.	Fish and Wildlife Compensation Plan	July, 1982
e.	Channel designs for downstream sections	September 1982
f.	Plans and Specifications for downstream sections	October 1983
g.	Initiation of construction	1984

Mr. BEVILL. Thank you very much for a very fine presentation.

LIBERTY PARK SEAWALL

WITNESS

HON. FRANK GUARINI, U.S. CONGRESSMAN FROM NEW JERSEY

STATEMENT OF CONGRESSMAN GUARINI OF NEW JERSEY

Mr. GUARINI. I have submitted a statement which I ask be put into the record.

Mr. BEVILL. Without objection, it will be included in the record.

Mr. GUARINI. We seek continued funding of a seawall at the Statue of Liberty site. In the statement is a history of the legislation which I have submitted to give you background.

I will just add a few comments. Perhaps one of the most impressive views we have in our country is the sight of the Statue of Liberty as you come into New York Harbor. It is fortunate my district has the Statue of Liberty adjacent to it.

The Statue of Liberty, over the years, has been sitting among abandoned ships, derelict vessels, debris, burned out piers, and it was a decision to make an urban park, the first urban park in New Jersey—The Statue of Liberty Park.

We have gone forward and so far have developed 32 acres of an anticipated 800 acre park, having already spent over $40 million of state and federal funds.

Although it draws many millions of people from all over the metropolitan area, I might say that the Statue of Liberty and its park doesn't belong just to New Jersey or New York, it is indeed a national symbol of what we represent as a nation. We encourage people to go there and we want to see this preserved and kept in the best possible condition.

Adjacent is Ellis Island, which would be right off Liberty Parkway, and is, of course, the greatest orphanage the world has ever known. These two historical places will be adorned and protected by the Crescent Seawall.

It is necessary to have a $2.5 million authorization, which is $1 million additional we are asking. The Army Corps of Engineers has gone through the necessary procedures and made agreements with the Department of Environmental Control in New Jersey and has worked very, very closely with the State of New Jersey in the various steps and phases in bringing this profit to reality. An appropriation is needed for fiscal year 82 of $8 million. I should clarify by saying this is a 70-30 split here, with the state agreeing to put up the 30 percent, which means we only need $5.6 million.

The importance of getting this completed now is the fact that the State of New Jersey has already appropriated, without any funds from the federal government the $1.4 million needed to dredge between the park and Bedloe Island, which is where the Statue of Liberty sits. The Army Corps of Engineers wants to move expeditiously because that $12.4 million would be lost by natural fill over a period of time if there is any delay in the operation.

What we are really asking is that we have a supplemental authorization of $1 million for fiscal year 81 and that we have an appropriation of $5.6 million for fiscal year 82. This would protect the $40 million investment that the State of New Jersey and the Federal Government have made and will certainly be a tremendous improvement to the wildlife of the park, the recreation, the view of the Statue of Liberty and its accessibility to the people.

We are asking for something which I think is important to our nation as a whole and I think our great lady deserves no less.

Mr. BEVILL. I was up there with the Corps less than a year ago.

Mr. GUARINI. It is marvelous what they have been doing.

Mr. BEVILL. Yes, it is.

Are there any plans to do anything with Ellis Island?

Mr. GUARINI. No. This has been under discussion. So many plans have been put forth but Ellis Island just sits there, waiting for some grand design.

This crescent, of course, would make Ellis Island only 850 feet from the mainland, which means a causeway could very easily go over there. There is currently regular boat service connecting Liberty Park with the Statue of Liberty Island—Bedlow Island, and Ellis Island so that people coming to the metropolitan area can visit Bedloe Island and Ellis Island where there is a great deal of tourist interest.

I feel it is so important for us to beautify this area and to have this as a cornerstone of pride in our country. This has taken a great deal of time and we have given this a great deal of thought before coming to a conclusion. I hope we can eventually design a program for Ellis Island.

Mr. BEVILL. I hope you can, too. I agree with you, both of those are very historical.

Mr. GUARINI. There have been many developers who have wanted to put in a real estate development like Roosevelt Island over in New York but I don't think that would serve the national interest nor a historic sense of our traditions.

Mr. BEVILL. The committee will certainly work with you and I hope we can help solve those problems. I know they are there as you described them.

Mr. GUARINI. I appreciate your concern and interest.

Mr. BEVILL. We appreciate your testimony.

The committee will stand adjourned until 2:00.

[Whereupon, at 12:00 noon, the subcommittee was recessed, to reconvene at 2:00 o'clock the afternoon of the same day.]

STATEMENT BY THE HON. FRANK J. GUARINI

Chairman Bevill, Members of the Subcommittee, I appreciate the opportunity to present the views and recommendation of the State of New Jersey and my support of their request regarding the development of Liberty State Park, specifically the continued funding of the construction of a protective seawall at that site.

Liberty State Park, located in my Congressional District, is one of the most dramatic sites in the world. On the edge of a great harbor, opposite two national monuments, the Park offers public access to the waterfront and new recreational opportunities in the center of the New Jersey/New York metropolitan region.

Liberty State Park continues to be one of our State's proudest assets, providing the benefits of education and recreation to millions of visitors. The Park is serving as a vital stimulus to the revitalization of the northern New Jersey waterfront on New York Bay and prompting urban redevelopment of nearby cities and communities. New Jersey's first urban State Park is located within a few miles of the centers of Jersey City, Newark, Hoboken and New York City. Adjacent to the New Jersey Turnpike and close to the PATH rail service, Liberty State Park now our most popular park, is easily available to 16 million people.

The first phase of development of this 800 acre park with 2 miles of waterfront, took place in 1976 with construction of a 32 acre overlook and initial restoration of the historic railroad terminal complex. Development included a picnic grove, boat dock, and an array of historic State and American flags. Since that time, development has been continuous and now includes the restored station house of the terminal complex, boat launch ramp, roads, parking areas, administration building and wildlife habitat.

A parallel program with the U.S. Army Corps of Engineers, known as the Harbor Cleanup, has removed the debris out of the water area around the edge of the Park making it more usable for recreational boating and fishing.

On April 28, 1979, ferry boat service was inaugurated from Liberty State Park to the Statue of Liberty, for the first time allowing visitors from New Jersey to travel to this famous monument by water. The State is currently discussing expanded boat service throughout the year with the National Park Service, which will be feasible once restoration of the Northern Terminal and docking facilities are completed.

The next major development planned is for construction of a protective seawall (sand levee), the principal purpose of which is to protect the shoreline of the Park along the Hudson River from serious and devastating erosion and flooding. The concept of the seawall was developed between the New Jersey Department of Environmental Protection and The Port Authority of New York and New Jersey. The necessity for this seawall was recognized in the initial design plans in 1975 and as a consequence the Water Resources Development Act of 1976, Public Law 95-587, Section 152 specifies: "The Secretary of the Army acting through the Chief of Engineers, is authorized to participate in the construction of a levee and protective seawall at Liberty Park, New Jersey...." Costs will be shared 70% Federal and 30% State.

An application with the Corps of Engineers was filed by the New Jersey Department of Environmental Protection on January 17, 1975 for a permit for the dredging and fill required for construction of the sand levee seawall.

Objections from the U.S. Fish and Wildlife Service to some of the fill were resolved when the Department of Environmental Protection revised the alignment of the seawall, thus reducing the landfill required from 43 acres to 14.4 acres. The Federal agencies unanimously approved the realignment and as a consequence, the Corps of Engineers issued a permit on January 3, 1980. The revised alignment will be less costly, total costs for construction of the seawall currently are estimated at $23,700,000.

Construction of the seawall will be broken into four phases. Phase I was initiated this month as authorized through language contained in the FY 1981 Energy and Water Development Appropriations Conference Report, PL 96-367, which "approved the acceptance by the Corps of Engineers of an advance of approximately $1.5 million from the State of New Jersey for preparation and construction of the Liberty Park Seawall and Levee..."

As part of the agreement reached between the Corps of Engineers and the State of New Jersey, the State of New Jersey agreed to proceed to let contracts to accomplish the required dredging by April, 1981. This dredging contract is presently underway at a cost to the State of New Jersey of $1,426,000.

The Corps of Engineers is scheduled to let their first contracts in late summer 1981 to begin work on the south embankment of the seawall. If work does not begin on schedule by the Corps of Engineers, the dredging work undertaken by the State of New Jersey will be filled in through natural processes and the funds invested will be wasted.

In order to proceed with the letting of the contracts this summer as currer scheduled by the Corps of Engineers, a supple-

mental authorization as contained in the FY 1981 Energy and Water Appropriations Act, of $1 million will be required. The State of New Jersey is prepared to advance the money again on the same basis as provided in Public Law 96-367, to be reimbursed 30% State/ 70% Federal at such time as funds are appropriated by Congress.

In FY 1982, the total cost of work to be done is $8 million. The Federal share of this amount will be $5.6 million. The Corps of Engineers is required to have authorization to spend the total amount as contracts will be let through this agency. Ultimately the Corps will only spend their 70% authorized share, New Jersey will pay 30% of the costs. The actual appropriation required in FY 1982 is $5.6 million.

With these two actions, New Jersey and the U.S. Army Corps of Engineers will be able to proceed with constructions of the seawall as scheduled. In the event that appropriations are not approved by Congress, we risk jeopardizing an investment which totals to date in excess of $40 million. Federal investments included in this amount involve $2.4 million in Title X Public Works Funds; $7.8 million through the New York Harbor Cleanup (Army Corps of Engineers); $1.087 million in HUD funds; and $7.8 million through the Department of the Interior.

It would be a terrible instance of being penny wise and pound foolish to place this considerable investment of State and Federal dollars at risk.

I urge your favorable consideration of this request as you begin consideration of your committee's Appropriation action.

Thank you.

AFTERNOON SESSION

PORTSMOUTH GAS CENTRIFUGE PROJECT

WITNESSES

HON. BOB McEWEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

ANN LADD, LEGISLATIVE ASSISTANT

Mr. BEVILL. The committee will come to order.

Congressman McEwen, we are pleased to have you with us today and you may proceed as you wish and put your statement in the record or do as you wish.

STATEMENT OF HON. BOB MCEWEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. MCEWEN. Thank you, Mr. Chairman.

Mr. Chairman, I am glad to be here today to share with you and the other members of the committee my views on uranium enrichment.

I am going to focus on two points: one, the importance of completing the Portsmouth Gas Centrifuge Enrichment Plant in a timely manner and two, additional steps that should be taken to permit long-range planning of uranium enrichment activities.

The assured supply of enriched uranium from the Department of Energy's diffusion plants has been an essential element in the development of nuclear power in this country.

In addition, to supply 100 percent of our domestic needs for enriched uranium, the U.S. Government filled virtually the entire demand for enrichment outside of the Soviet bloc until the late seventies.

To date, foreign sales of enrichment have totalled nearly $3 billion.

However, doubts about the reliability of the United States as a supplier of enrichment have recently caused foreign customers to cancel hundreds of millions of dollars worth of enrichment contracts with Department of Energy in favor of European suppliers.

Unless the United States can demonstrate its commitment to be a reliable supplier of enrichment services, additional foreign and domestic enrichment contracts may be lost to foreign competitors.

Construction of the gas centrifuge plant is the only basis on which DOE can accept new contracts for enrichment services. It is a key element in reestablishing the U.S. as a reliable international supplier of enriched uranium.

In addition, the Department of Energy currently holds long-term contracts to supply separative work well above the capacity of its diffusion plants. DOE must also supply all of the requirement for government and defense needs.

Although some of the contracts are to supply nuclear power plants whose construction may be delayed, all reasonable forecasts of nuclear power growth indicate a need during the early 1990s for enrichment capacity in excess of the diffusion complex.

These demands for enrichment can be met most economically by keeping the Portsmouth centrifuge plant on schedule for operation in 1989.

There are additional, perhaps even more compelling reasons to complete the Portsmouth plant as rapidly as possible. Enrichment by the centrifuge process requires less than 1/20th the electric power consumed in the diffusion process. Building the Portsmouth plant is fully justified on the basis of the energy that it could save if used to replace the equivalent output of a diffusion plant.

Over 20 billion kilowatt-hours per year—enough electricity to supply all the yearly needs of the State of Colorado—could be saved by replacing 8.8 million SWUs of diffusion plant capacity by the production from the Portsmouth centrifuge plant.

This tremendous energy savings would result in a substantial cost saving as well. Lower costs for uranium enrichment would be passed on to consumers in the form of lower electricity rates.

It would also help the United States compete for foreign sales of enriched uranium and hence help our balance of trade.

Uranium enrichment is nearly a $2 billion per year business operated by the Department of Energy. I use the term business loosely here, because while effective operation of the enrichment enterprise requires business decisions regarding production and inventory management, capacity expansion, marketing, and technology development; the financial constraints imposed by the yearly congressional appropriations cycle preclude the management flexibility and long-range planning necessary to operate in a businesslike manner.

In order to provide the needed flexibility, and hence improve the economy and efficiency of DOE's enrichment activities, I have introduced H.R. 2144 to establish in the U.S. Treasury a uranium enrichment revolving fund. Similar legislation has been introduced by Senator John Glenn of Ohio.

I would like now to discuss briefly this proposal that can help ensure the long-term availability of sufficient enriched uranium to meet domestic and foreign needs at the lowest possible cost without requiring additional taxpayers' money.

In fact, all of the capital and operating funds expended will be recovered through the sale of enrichment services.

The fund would consist primarily of proceeds from the sale of enriched uranium and of bonds sold to finance the construction of new enrichment capacity.

Congress will be able to make additional appropriations into the fund, but the fund could be completely self-supporting by the mid to late eighties.

The Department of Energy will be authorized to use the fund to support all of its uranium enrichment activities, without further approporiation and without fiscal year limitation.

Thus, the Department of Energy will obtain the flexibility needed to manage the enrichment enterprise in a cost-effective manner. However, Congress will retain all necessary oversight over DOE's enrichment activities.

DOE will not be allowed to begin construction on any new enrichment plants without express congressional authorization, nor will it be allowed to exceed by more than 15 percent in any fiscal

year the plant and capital equipment outlays specified in the annual budget for those activities submitted by DOE and subject to change by Congress.

In addition, the Department of Energy will be required to submit detailed annual reports to the Congress on all phases of operation of its enrichment enterprise and all financial activities in connection with the revolving fund.

Dozens of similar revolving funds have been set up in the U.S. Treasury to maintain a wide variety of self-supporting Federal programs.

The enrichment revolving fund has been patterned after, and would function in a manner closely resembling the revolving fund that has successfully supported the activities of the Bonneville Power Administration since 1974.

At this point I would like to read to you some of the conclusions of the Uranium Enrichment Management Review team—a group of independent business executives that DOE asked to review the management of its uranium enrichment activities.

In reference to the proposed uranium enrichment revolving fund, the Review Team stated:

"If a revolving fund were established, the enrichment enterprise would be managed as a self-sufficient entity, generating adequate cash flow for operation and capital outlay.

"The enterprise would have an exceptionally strong borrowing base, should bond financing become necessary for major capital expansion projects.

"This financial flexibility would enable it to time purchases vis-a-vis receipts, manage cash effectively, and employ other cost-saving techniques used by corporate management.

"Besides these financial advantages, the revolving fund would give the enterprise greater visibility among its domestic and overseas customers * * *"

I appreciate your courtesy and the opportunity to appear.

Mr. BEVILL. We will put the entire statement in the record. We appreciate the fine presentation you have made.

Mr. MEYERS. We will be talking to you.

Mr. BEVILL. We will work with you.

[The statement of Mr. McEwen follows:]

STATEMENT OF BOB MCEWEN

Mr. Chairman, I'm glad to be here today to share with you and the other members of the committee my views on uranium enrichment. I'm going to focus on two points—one, the importance of completing the Portsmouth Gas Centrifuge Enrichment Plant in a timely manner, and two, additional steps that should be taken to permit long-range planning of uranium enrichment activities.

The assured supply of enriched uranium from the Department of Energy's diffusion plants has been an essential element in the development of nuclear power in this country. In addition to supplying 100 percent of our domestic needs for enriched uranium, the U.S. Government filled virtually the entire demand for enrichment outside of the Soviet bloc until the late 1970's. To date, foreign sales of enrichment have totaled nearly $3 billion. However, doubts about the reliability of the United States as a supplier of enrichment have recently caused foreign customers to cancel hundreds of millions of dollars worth of enrichment contracts with the Department of Energy in favor of European suppliers. Unless the United States can demonstrate its commitment to be a reliable supplier of enrichment services, additional foreign and domestic enrichment contracts may be lost to foreign competitors. Construction of the gas centrifuge plant is the only basis on which DOE can accept new contracts

for enrichment services. It is a key element in re-establishing the U.S. as a reliable international supplier of enriched uranium.

In addition, the Department of Energy currently holds long-term contracts to supply separative work well above the capacity of its diffusion plants. DOE must also supply all of the requirement for government and defense needs. Although some of the contracts are to supply nuclear power plants whose construction may be delayed, all reasonable forecasts of nuclear power growth indicate a need during the early 1990's for enrichment capacity in excess of the diffusion complex. These demands for enrichment can be met most economically by keeping the Portsmouth centrifuge plant on schedule for operation in 1989.

There are additional, perhaps even more compelling reasons to complete the Portsmouth plant as rapidly as possible. Enrichment by the centrifuge process requires less than one-twentieth the electric power consumed in the diffusion process. Building the Portsmouth plant is fully justified on the basis of the energy that it could save if used to replace the equivalent output of a diffusion plant. Over 20 billion kilowatt-hours per year—enough electricity to supply all the yearly needs of the State of Colorado—could be saved by replacing 8.8 million SWUs of diffusion plant capacity by the production from the Portsmouth centrifuge plant.

This tremendous energy savings would result in a substantial cost saving as well. Lower costs for uranium enrichment would be passed on to consumers in the form of lower electricity rates. It would also help the United States compete for foreign sales of enriched uranium and hence, help our balance of trade.

Uranium enrichment is nearly a $2 billion per year business operated by the Department of Energy. I use the term business loosely here, because while effective operation of the enrichment enterprise requires business decisions regarding production and inventory management, capacity expansion, marketing, and technology development; the financial constraints imposed by the yearly Congressional appropriations cycle preclude the management flexibility and long-range planning necessary to operate in a business-like manner.

In order to provide the needed flexibility, and hence improve the economy and efficiency of DOE's enrichment activities, I have introduced H.R. 2144 to establish in the U.S. Treasury a uranium enrichment revolving fund. Similar legislation has been introduced by Senator John Glenn of Ohio.

I would like now to discuss briefly this proposal that can help ensure the long-term availability of sufficient enriched uranium to meet domestic and foreign needs at the lowest possible cost without requiring additional taxpayers money. In fact, all of the capital and operating funds expended will be recovered through the sale of enrichment services.

The fund would consist primarily of proceeds from the sale of enriched uranium and of bonds sold to finance the construction of new enrichment capacity. Congress will be able to make additional appropriations into the fund, but the fund could be completely self-supporting by the mid to late 80's. The Department of Energy will be authorized to use the fund to support all of its uranium enrichment activities, without further appropriation and without fiscal year limitation.

Thus, the Department of Energy will obtain the flexibility needed to manage the enrichment enterprise in a cost-effective manner. However, Congress will retain all necessary oversight over DOE's enrichment activities. DOE will not be allowed to begin construction on any new enrichment plants without express congressional authorization, nor will it be allowed to exceed by more than 15 percent in any fiscal year the plant and capital equipment outlays specified in the annual budget for those activities submitted by DOE and subject to change by Congress. In addition, the Department of Energy will be required to submit detailed annual reports to the Congress on all phases of operation of its enrichment interprise and all financial activities in connection with the revolving fund.

Dozens of similar revolving funds have been set up in the U.S. Treasury to maintain a wide variety of self-supporting Federal programs. The enrichment revolving fund has been patterned after, and would function in a manner closely resembling, the revolving fund that has successfully supported the activities of the Bonneville Power Administration since 1974.

At this point I would like to read to you some of the conclusions of the Uranium Enrichment Management Review team—a group of independent business executives that DOE asked to review the management of its uranium enrichment activities. In reference to the proposed uranium enrichment revolving fund, the Review Team stated:

"If a revolving fund were established, the enrichment enterprise would be managed as a self-sufficient entity, generating adequate cash flow for operation and capital outlay. The enterprise would have an exceptionally strong borrowing base, should bond financing become necessary for major capital expansion projects. This

financial flexibility would enable it to time purchases vis-a-vis receipts, manage cash effectively, and employ other cost-saving techniques used by corporate management.

"Besides these financial advantages, the revolving fund would give the enterprise greater visibility among its domestic and overseas customers. . ."

Decisions on productivity levels and capacity expansion options are currently made on the basis of their impact on the annual budget rather than on long-term economics. For example, in fiscal year 1981 the construction of the gas centrifuge plant was delayed at least one year primarily for fiscal year 1981 Federal budgetary purposes. This 149 million dollar reduction resulted in an increased cost for plant construction of at least 200 million dollars. Similar cost increases would occur if there is another delay in construction.

Mr. Chairman, it is vitally important for this country to reestablish its position as a reliable supplier of uranium enrichment services at as low a price and as energy efficiently as possible. For those reasons I urge you to approve the full Department of Energy request for construction of the Portsmouth Gas Centrifuge Enrichment Plant to keep the project on schedule. While recognizing that this is not a direct responsibility of this Committee, I also urge your support for the establishment of a uranium enrichment fund. The revolving fund will bring much needed stability to the enrichment enterprise. It will make the scheduling of projects like the Portsmouth plant less subject to annual budget constraints and will provide for increased flexibility and long range planning of uranium enrichment activities that will result in improved overall economy and efficiency.

DOE SMUD PROPOSED PHOTOVOLTAIC PROJECT

WITNESS

HON. ROBERT T. MATSUI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Congressman Matsui, our good friend and colleague, we are delighted to have you with us. You may submit your statement or proceed as you wish.

STATEMENT OF HON. ROBERT T. MATSUI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. MATSUI. Mr. Chairman, members of the subcommittee and Mr. Fazio, my colleague, I want to thank you for giving me the opportunity to appear before you this morning for the purpose of speaking in support of a project which is located in the Sacramento Valley of California.

I will submit my written testimony for the record and just address specific points, if I may.

Pending before this subcommittee is a most progressive energy project which could prove essential to the advancement of our national photovoltaic program.

The Sacramento Municipal Utility District proposes to construct a 100-MW photovoltaic power plant for the provision of a power resource to match the summer peak loads of the Sacramento region.

This utility district is in a preferred position to undertake this first large-scale photovoltaic project.

The power curve generated by photovoltaics coincides with the energy demands of the Sacramento region, peaking during the extended summer daylight hours.

Current SMUD landholdings adjacent to its Rancho Seco nuclear plant can fulfill the land requirements, thereby minimizing costs.

Support facilities are presently available at the site, including substation interconnection capabilities, transportation, security, and water sources. Their presence will reduce the capital costs involved.

Highly trained technical manpower is currently available at the site, thereby minimizing the potential salary overhead.

SMUD has the financial and management capabilities required for this major undertaking. Its assets are in excess of $1 billion and its current revenues are in excess of $188 million.

SMUD has demonstrated a record of innovation and leadership in the development of new sources of generation.

SMUD's proposal calls for the staged development of this 100 megawatt plant, thereby ensuring for the project the proper flexibility for the incorporation of improvements in material and design.

SMUD's proposal calls for this utility district to fund all capital costs and provide all management services. This utility district is willing to commit $270 million and its efforts to this project.

The Federal Government, under the terms of this proposal, is being asked to serve as the guarantor of the Department of Energy's cost projections for photovoltaics.

Based on the DOE estimates, the first megawatt of generation should cost approximately $12,000/KW, whereas the final 35 megawatts should cost $2,160/KW, resulting in an average cost of $2,700/KW.

Implementation of this project will require SMUD to purchase at the initial stages energy priced higher than conventional alternatives. SMUD thereby is requesting that the Federal Government underwrite this exposure.

Based on the most conservative estimates, the completion of the project will result in no Federal funds having been expended.

At issue before this subcommittee is the Federal commitment to the first phase of the project. Its total cost is approximately $12 million, with the Federal share being less than $6.8 million. SMUD and the State of California will be responsible for 43 percent of the cost associated with this initial stage.

The future commercialization of photovoltaics is very much dependent upon the establishment of on-line demonstration projects which prove the economic viability of this alternative energy resource.

Today the Federal Government is in a position to leverage $26 million in reimbursable Federal expenditures against private sector outlays of $270 million—truly a unique opportunity by which to translate photovoltaic theory into actual commercial generation.

I wish to thank the chairman and members of this committee for this opportunity.

[The statement of Mr. Matsui follows:]

STATEMENT OF CONGRESSMAN ROBERT T. MATSUI

It is a pleasure to testify before this Subcommittee on behalf of a most progressive energy project, beneficial both for the citizens of the Sacramento Valley and for the advancement of our national photovoltaic program.

The Sacramento Municipal Utility District proposes to construct a 100 MW photovoltaic power plant for the provison of a near-term power resource to match the summer peak loads of the Sacramento region. A photovoltaic endeavor of this magnitude has never been attempted. Given the historic nature of this energy

project, I firmly support SMUD's request for a mutual sharing by the federal government and this utility district of the technical and cost risks associated with this first major commercialization of photovoltaics.

The original concept for this photovoltaic power plant was developed by SMUD in conjunction with Phase I of the DOE's Solar photovoltaic Flat Panel Application Experiment program. The design was then further refined and optimized in a privately funded design effort to achieve the proper costing formula.

Based on this indepth research and study, SMUD has concluded that it is in a preferred position to develop this first large-scale photovoltaic project. Among the unique aspects which favor SMUD in this endeavor are:

1. The photovoltaic plant's power availability curve coincides with SMUD's system demand, peaking during the extended summer daylight hours.

2. Current SMUD land holdings adjacent to its Rancho Seco Nuclear plant can provide the necessary 1,100 acres of land necessitated by the project.

3. Support facilities are presently available at the site, including substation interconnection capabilities, transportation, security, and water sources.

4. Highly trained technical manpower is currently available at the site.

5. SMUD has the financial and management capabilities required for this major undertaking. In 1980, its assets were in excess of $1 billion and its revenues were $188 million, and

6. Most importantly, SMUD has a demonstrated an unsurpassed record of innovation and leadership in the development of new sources of generation. In the 1960's SMUD was at the forefront of the development of stairstep of hydroelectic power in the Sierra Nevada. in 1974, it brough on line a 900-megawatt nuclear generating station, the largest such plant west of the Mississippi River. This spring it will be starting construction on a 72-megawatt geothermal plant utilizing the steam energy found in the earth.

This expertise has led SMUD to devise this proposed photovoltaic power plant in 12 sequential stages over a 12-year period. Power increments will be staged in, starting at 1 megawatt and increasing to 35 megawatts in the final stage. This phase-in process will permit SMUD to incorporate increasingly more cost-effective, mass-produced photovoltaic arrays. Under this design plan, the project will retain a significant degree of flexibility so as to allow for the integration of technological breakthroughs in material or design as they become commercially available. This will not be a static undertaking limited to current technologies; it will serve as a laboratory for photovoltaic advancements.

The Sacramento Municipal Utility District is willing to fund the entire capital cost associated with this project, an estimated outlay of $270 million. The utility district is willing to be responsible for the overall project management. Inclusive in this commitment are all aspects of financing, licensing, planning, construction, start-up, operation, and management.

The proper rule for the federal government to serve in this innovative enterprise is as a guarantor of the Department of Energy's cost projections for photovoltaic. SMU is willing to commit to an average capital cost of $2,700 per kilowatt for the construction of this 100 MW power plant. This commitment is based on a conservative interpretation of DOE's pricing projections for both module and balance-of-system costs during the next ten years.

Based the Department of Energy's estimates. the first megawatt of generation for this project should cost approximately $12,000/KW, whereas the final 35-megawatts should cost $2160/KW, resulting in an average cost of $2700/KW. Since the implementation of this project demands that SMUD purchase at the initial stages energy priced higher than conventional alternatives, SMUD is requesting that the federal government underwrite this exposure. The successful completion of the project, however, will result in no federal funds having been expended.

In view of the sequential nature of this, the sole issue before this Subcommittee today is the initial increment of generation—that is, the first megawatt of photovoltaic power. The estimated cost for this step is $12 million, with private and state shares exceeding 43 percent of the cost. Hence at this time, all that is needed to commence this innovative energy project is for the federal government to guarantee $6.8 million—a minor risk given the historic importance of this undertaking.

This proposed obligation is of a very limited nature given the substantial safeguards inherent in this project. As I noted previously, this proposal calls for twelve decisional stages, with each stage requiring the adoption of innovative, proof-tested designs. The commitment to proceed with each new stage will not be made until specific cost requirements have been met. This approach will minimize risk of cost overruns for both the federal government and the rate payers of the Sacramento Valley.

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This proposed photovoltaic power plant is consistent with the Department of Energy's announced support of a National Photovoltaic Program. The future commercialization of photovoltaics is very much dependent upon the establishment of on-line demonstration projects which prove the economic viability of this alternative energy resource.

By endorsing this SMUD proposal, the federal government can act as a critical catalyst in achieving an on-line demonstration project. Moreover the federal government is in a position to leverage $26 million in reimbursable federal expenditures against private sector outlays of $270 million. Given the President's recent budget recommendations, the union of private sector funds with federal guarantees may be the sole means by which we will be able to translate photovoltaic theory into actual commercial generation.

Mr. BEVILL. We are always pleased to have you before our committee. As you know, we will certainly work with you on your projects.

Now your colleague, Mr. Fazio, we will recognize as I know he has some questions.

Mr. FAZIO. I really don't have any questions. I would just like to welcome my good friend and neighbor and indicate to the members of the committee that I join with him in enthusiastic endorsement of this plant.

We have a great opportunity to move ahead with the commercialization of photovoltaics. There are many, many well-financed industries in this particular business but they have not had the opportunity to bring to bear their technology on a large-scale power generation facility. This is the first opportunity they would have.

There is a great deal of interest in their ongoing participation. We have in SMUD a very capable utility that has been innovative in the past. We have a good site for this facility. We have recently been led to believe by the State Energy Commission, in California, with some assurance from the Senate Assembly, there is a good possibility the State of California would also join in financing of this.

As a result, I think it would be a great opportunity for this committee to make the strides in this particular form of energy technology we have been waiting for for so long.

I simply hope Mr. Matsui's presentation will weigh heavily on the minds of this committee as we deliberate on the Department of Energy's budget this year.

Mr. BEVILL. I am sure anything Bob says will weigh heavily on this committee. We will enter into the record the statement of Mr. Walbridge.

[The written statement of Mr. William C. Walbridge follows:]

STATEMENT OF WILLIAM C. WALBRIDGE, GENERAL MANAGER, SACRAMENTO MUNICIPAL UTILITY DISTRICT

My name is William C. Walbridge. I am the General Manager of the Sacramento Municipal Utility District (SMUD), a publicly owned electric utility which provides services to consumers in a 750 square mile area in California's Central Valley which includes our State's capitol city of Sacramento.

For the past 20 months SMUD has been working with Acurex Solar Corporation on a photovoltaic project. My purpose today is to call your attention to that project.

Before proceeding with the main thrust of my testimony, I would like to take a few minutes to acquaint you with SMUD so that you may better understand our motivation in proposing a 100-megawatt photovoltaic powerplant and to apprise you of the capabilities we can bring to that project to assure its successful completion. Following that, I will provide an overview of the project and our thoughts on the

appropriate role for the Federal Government in that effort. Finally, I would like to comment on the beneficial impact this project can have on the development of the photovoltaic industry in our Country and the acceptance of photovoltaic generation by the electric utility industry.

SMUD operates under authority of the California Municipal Utility District Act. That Act conveys to us those powers necessary to conduct an electric utility operation, including the powers to purchase and sell electricity, to construct new facilities, to sell debt securities, to establish rates for electric service and to enter into such contractual relationships as may become necessary.

We are governed by a five-person Board of Directors elected by the voters within our 750-square mile service area. SMUD provides electric service to approximately 750,000 people within that area and currently sells surplus power to the Pacific Gas and Electric Company. We are well established in the financial marketplace, having issued more than $600 million, AA-rated bonds since 1959. In 1980, our assets were slightly in excess of $1 billion and our revenues were $188 million. Our peak load was 1,574 megawatts this past summer and our 1980 sales were 8.9 billion kilowatt-hours.

SMUD has been an innovator and a leader in the electric utility industry since it commenced operation in 1947. In the 1960s, we developed a stairstep of hydroelectric power in the Sierra Nevada. This project consists of six powerhouses with a combined output of 650 megawatts. In 1974, we brought on line a 900-megawatt nuclear generating station, the largest such plant west of the Mississippi River.

SMUD was an industry leader in providing underground residential distribution system as a standard of service. In the early 1960s, we pioneered in equipment and design development that made such systems economically feasible. Continued attention to the aesthetics of utility design has brought SMUD national recognition.

Since the early 1970s, we have been developing innovative programs to bring about more efficient use of electrical energy. We currently have more than 15 active programs to educate and assist customers to more efficiently utilize energy. Among these are air conditioning load control, weatherization and attic insulation programs and passive solar design systems.

Our record of innovation and leadership extends to our efforts to develop new sources of generation. This spring we will be starting construction on a 72-megawatt geothermal plant utilizing the steam energy found in the earth. Additionally, we are a participant with four other utilities in developing the power generation benefits of hot water geothermal by using modular constructed, binary cycle power plants. We are also pursuing the opportunities offered by small hydroelectric generation, which was often neglected in the past. We have under construction a 400-kilowatt mini-generator on a fishwater release valve at a SMUD-owned dam to recover energy which was formerly dissipated. Additional enhancements to our hydroelectric project under design or licensing will add 10 megawatts and 50 million kilowatt-hours per year. In cooperation with others, we are installing, or propose to install, small generators on existing days.

These efforts, as well as others, have enabled us to develop a large, competent, dedicated staff well qualified to successfully manage innovative projects such as the proposed photovoltaic power plant.

Why does SMUD wish to construct a 100-megawatt photovoltaic power plant? Because we think it makes good sense. It fits well into our power supply planning, providing energy when our system demand is greatest.

Sacramento is a growing area. Since 1975, we have added more than 60,000 new customers. We project future load growth of more than 3 percent per year. To provide reliable electric service, we must add by 1992 about 700 megawatts of "baseload" generation to serve year-round energy needs and "peaking" capacity to meet peak hour and seasonal demands. Geothermal and coal are in our plans for baseload requirements. Hydro power and solar are our options for peaking supply.

As I stated earlier, we have been aggressively pursuing the development of small hydro power, both at new sites and by backfitting generating facilities into existing dams. From this experience, we have a good fix on the cost of the hydro alternative and it has formed the basis of our commitment to invest $2,700 per kilowatt (in 1980 dollars) into the development of a large photovoltaic power plant.

SMUD is uniquely suited to develop this first largescale photovoltaic project for several reasons:

1. The power availability curve from a photovoltaic plant coincides well with SMUD's system demand, peaking during the long summer daylight hours.

2. The substantial land requirements (1,000 acres) is available at SMUD-owned property adjacent to its Rancho Seco nuclear plant.

3. Support facilities are already available at the site. This includes transportation, water, security and a transmission substation interconnecting five 230,000-volt

transmission lines of SMUD and the Pacific Gas and Electric Company. Nearby are transmission lines of the Western Area Power Administration with whom SMUD is also interconnected.

4. Technically trained manpower is available at the site.

5. SMUD has the financial and management capabilities required for such a major undertaking.

Subsequent to discussions with the Department of Energy (DOE) starting in January 1980, we submitted to DOE a proposal for the project being reviewed today. That proposal, dated December 4, 1980, is being submitted for the record.

The 100-megawatt photovoltaic plant is based on a system designed by the Acurex Solar Corporation. The original concept was developed for Phase I of the DOE's Solar Photovoltaic Flat Panel Application Experiment program in which SMUD was also a participant. The design was further refined and optimized in an Acurex-funded design effort to develop the cost basis for the proposed 100-megawatt project.

This design utilizes flat plate photovoltaic modules arranged in arrays producing approximately 17 kilowatts each. These arrays track the sun by use of a single axis clock drive. While adding 1½ to 2 percent to the cost of the project, it will mean an increase in annual energy production of between 14 and 20 percent. This tracking design also provides for a closer match between power production and system demand. Because of the repetitive nature of the panel and array concept incorporated in the design, there is ample opportunity to develop mass production and field construction and installation techniques which will drive down capital costs.

The project comprises 12 sequential stages over a 12-year period. These stages will produce power increments starting at 1 megawatt and increasing to 35 megawatts in the final stage. The initial three stages will address the financial, technical and operational conditions, with the first 1 megawatt increment becoming operational approximately 18 months after project startup. By staging the project in this manner, SMUD will be able to incorporate increasingly cost-effective, mass-produced photovoltaic arrays.

The 12-stage approach offers the best in flexibility. The design will not be locked up as would be the case for a single-stage project. We plan to incorporate improvements or technological breaththroughs in material or design throughout the project life as they become commercially available.

This staged approach also minimizes the risk and maximizes the management control of the project. At the completion of each installation increment, the project will be reviewed to measure accomplishments of technical and cost objectives. At the review points, decisions can be made to alter the installation schedule to achieve the project cost milestones. The commitment to proceed with each subsequent stage will not be made until specific cost milestones can be met or appropriately revised based on experience with previous stages. As these decisions will be made based on real data, not projections, this approach will provide minimum risk of cost overruns, while still providing generating capacity in a timely manner to meet SMUD requirements.

As I stated previously, SMUD will commit to an average capital cost of $2,700 per kilowatt. The first 1 megawatt increment is forecast to cost approximately $10,000/kw, but the final 35-megawatt stage will cost $2,160/kw, resulting in a project average cost of $2,700/kw. This projection of price reduction is based on a conservative interpretation of DOE's projections for both module and balance-of-system costs during the decade of the 1980s. It is important to note that our baseline cost projection for this plant provides a substantial margin between SMUD's commitment and the DOE goals.

SMUD is proposing that the entire capital cost of this project be borne by the utility district. No Federal funds are required for its construction. SMUD has proposed two options for the DOE participation in our project. The first option is a contingent liability cooperative agreement under which money would transfer only if, by mutual agreement, the project were terminated prior to completion, or the cost exceeds the $2,700/kw average cost projection. With the second option, the Department of Energy would underwrite, on a reimbursable basis, the early year costs of the project to the extent that these costs exceed the $2,700/kw competitively determined value to the utility. At such time as we are able to construct photovoltaic systems for less than $2,700/kw, SMUD would repay the DOE for the monies advanced in the early years of the project. In either case, exposure for this project is estimated to peak at $26 million in the eighth year with the yearly incremental exposure being in the range of $1 to $4 million.

Thus, SMUD is not requesting Federal cost sharing of this project, but, rather, we are requesting that the Federal Government act as a catalyst in bringing about this commitment of private funds. Since implementation of the project requires that the initial stages be purchased at prices higher than conventional alternatives, SMUD is

requesting that the Federal Government underwrite this exposure, not the cost associated with the initial purchases. The estimated $26 million Federal financing exposure is less than one-tenth of SMUD's total projected investment. With successful completion of the project, no Federal funds will have been expended.

Federal participation can serve as a catalyst to bring large investments of private capital into the development of the photovoltaic industry and to establish the viability of photovoltaic generation as a proven technology for utilities to use in their resource planning.

In the best interest of their customers, electric utilities are reluctant to rely on unproven technologies for generating plants which will be needed to serve customer load. This 100-megawatt project operating on a utility system can prove the technology, the economics and the operability of photovoltaics.

The photovoltaic manufacturing industry has been grappling for years with the question: "Which comes first, supply or demand?" Industry cannot commit to the purchase of uneconomic power supply technologies. On the other hand, the photovoltaic industry cannot invest in research and development and produce capacity unless a market for their product exists. Without these investments, the costs will not reduce to meet the economics required for a broad market. This problem also will be addressed by SMUD's program, which provides for large-scale purchases throughout the transition from today's prices to those which are truly economic to a broad market base.

In summary, I would like to stress the following points:

1. Photovoltaic technology offers great potential for central station generation when it is shown to be economical and reliable.

2. A large photovoltaic project is required to develop the cost cutting benefits of mass production and repetitive construction techniques in the industry.

3. SMUD's proposal for the staged development of 100 megawatts provides the mechanism to bring photovoltaics to economic viability and offers the project flexibility to incorporate improvements in materials and designs.

4. SMUD's proposal is unique in that its size and location on an operating utility system will develop the photovoltaic market and will prove photovoltaics as a viable resource for electric generation.

5. SMUD's proposal is also unique in that we are not asking the Federal Government to fund the project. Rather, we ask the Government to act as a catalyst by underwriting on a reimbursable basis some of the exposure in the early stages of the project.

The Department of Energy is in a position to leverage $26 million in reimbursable Federal expenditures against private sector outlays of $270 million.

Finally, I wish to stress SMUD's demonstrated capability to carry this project to a successful conclusion and our willingness to commit our efforts and our money to the project.

I would appreciate your thorough consideration of this project as you deliberate on the energy programs for our country.

Thank you for this opportunity to appear today.

HIGH TEMPERATURE GAS-COOLED REACTOR

WITNESSES

HAROLD M. AGNEW, PRESIDENT, GENERAL ATOMIC CO.
NORVAL E. CAREY, VICE PRESIDENT, GOVERNMENT OPERATIONS, GENERAL ATOMIC CO.
RICHARD F. WALKER, PRESIDENT, PUBLIC SERVICE COMPANY OF COLORADO AND CHAIRMAN, GAS-COOLED REACTOR ASSOCIATES

Mr. BEVILL. I am going to recognize our good friend and colleague on the Appropriations Subcommittee, Clair Burgener of California, and ask him to introduce our next witness.

STATEMENT OF HON. CLAIR W. BURGENER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BURGENER. If Mr. Agnew would come forward. Harold. I will just steal a minute because I am very proud of this witness. I met

Harold Agnew 36 years ago, Mr. Chairman, on a little island in the Southwest Pacific. He was a young nuclear scientist and I was a young Army Air Corps officer and we were in the 509 Composite Group, which had the unhappy task of carrying the atomic bombs to Hiroshima and Nagasaki.

He, as a matter of fact, was on the mission. I got to stay safely on the base and he went to Hiroshima that very fateful morning in August of 1945. He has now become a much more mature and distinguished nuclear scientist while I have just plain grown old.

It is a real privilege to introduce Harold Agnew, President of General Atomic Company. Harold, we are happy to have you.

Mr. MEYERS. You must have been an officer.

Mr. BURGENER. He was a civilian.

Mr. AGNEW. I was a lieutenant with an assimilated rank.

Mr. BURGENER. I don't know how they let a civilian go on that raid and kept those military types safely at home.

Mr. AGNEW. I thought it was the other way around.

Mr. BEVILL. Mr. Walker, President of the Public Service Company of Colorado, we are glad to have each of you.

STATEMENT OF HAROLD AGNEW

Mr. AGNEW. It is a privilege to be here. With your permission, I would like to enter my written testimony into the record and I will simply summarize that particular testimony.

[The statement of Mr. Agnew follows:]

I. INTRODUCTION

The High Temperature Gas Cooled Reactor (HTGR) is an advanced, high efficiency, converter reactor system which, in addition to electrical generation, offers a unique capability to meet industrial requirements for high temperature process steam and process heat. The basic technology has been demonstrated by the Peach Bottom I (40 MWe) and the Fort St. Vrain (330 MWe) HTGR nuclear stations, wherein the high temperature and high pressure steam generated is used to produce electricity. The next stage of HTGR development is the demonstration of full scale commercial technology.

The current Department of Energy/Industry program is focused on the unique high temperature capabilities of the HTGR to provide process steam and process heat for industrial applications. The near term application of the HTGR is to generate high temperature (1000°F) steam for process heat use in chemical, oil, shale oil and metals refining industries. In these applications, nuclear process heat substitutes directly for fossil energy. Many process steam applications also involve the simultaneous cogeneration of electricity to most efficiently use the energy produced by the system. This version of the reactor is the HTGR Cogeneration system.

In addition to the cogeneration applications, another near term use of the HTGR is as a replacement production reactor to produce special nuclear defense materials. The HTGR is one of the candidate systems being studied by the Department of Energy (DOE) to meet this need.

Longer term applications involve HTGR reactors with higher operating temperatures. These reactors can serve higher temperature process heat markets such as methane reforming, direct coal gasification, and eventually direct water splitting for hydrogen production. At the higher operating temperatures, the HTGR may also be used to generate electricity using closed cycle helium gas turbines with overall efficiencies of up to 50%. The latter systems using dry cooling towers are particularly suited to location in water-scarce areas.

II. JUSTIFICATION

High Temperature Gas-Cooled Reactors offer higher thermal efficiencies than the existing LWR technology as well as improved fuel utilization by employing the uranium/thorium fuel cycle. The HTGR has inherent safety characteristics; i.e., inert helium gas as a coolant, prestressed concrete reactor vessel and massive high-heat capacity graphite core, which significantly reduces both the likelihood of accidents and the consequences to the public and the plant. The HTGR is the only reactor capable of producing the high temperature steam to meet the industrial requirements of the oil, chemical, synfuels and aluminum process industries and displacing the substantial quantities of fossil fuels otherwise required. Estimates of existing process steam markets (e.g., in oil and chemical industries) indicate that more than 70

reactors could be deployed to meet existing needs, saving the equivalent of 1-1/2 million barrels of oil per day. Future use in support of the synfuels industries would add substantially to the total potential market.

The in-depth studies of the HTGR as a replacement production reactor (RPR) indicate that the existing design, developed under the DOE/Industry program, is ideally suited to meet the RPR requirement for the efficient, low cost coproduction of special nuclear materials and electric power generation. This offers the opportunity for a cost effective HTGR program which would satisfy the defense requirements and simultaneously fulfill the objective of demonstrating the technology for civilian nuclear power program.

A major segment (over 25%) of the electric utility industry operating through Gas-Cooled Reactor Associates (GCRA) and major oil, gas, process steam users and chemical firms support the development of gas reactors. Through FY'80 private industry has invested about $1 billion and the government has provided approximately $400M to develop this technology. It is the only nuclear program which has received the majority of its development funding from the private sector.

The value of the HTGR for process heat applications has been recognized internationally with over $1.3 billion being invested in the technology to date. Both West Germany and Japan have well established HTGR development programs with 1981 national budgets of $250M and $25M, respectively. Formal HTGR cooperative programs have been established at both the government and private level with Germany, which include the exchange of both technology and personnel. Similar relationships are under development with Japan.

III. MULTI-YEAR SCOPE AND SCHEDULE

HTGR Cogeneration (HTGR) Lead Project

The current program is focused on the development and demonstration of a 2240 MW thermal HTGR process steam/cogeneration plant. To minimize the magnitude and open ended nature of the financial commitment, the program has the following features:

1. A phased program with decisions required at defined milestones.
2. The requirement for technical participation by an organized users group (Gas Cooled Reactor Associates) which also functions to establish the plant owner/operator and develop the private sector cost and risk-sharing mechanisms.
3. The requirement for the private sector to provide the substantive funding of the construction of the HTGR demonstration plant.

These features serve to focus the government's investment principally on the development and proof testing of the HTGR technology for the demonstration facility. Financial and performance risks would be well defined and

shared among users, suppliers and the government. The progress of the program through the several phases preceding construction of a demonstration plant would require agreement at each phase by all the participants on cost and risk-sharing in the next phase.

Phase I (Program Definition - FY'81) is being directed toward reviewing and prioritizing the HTGR design and development requirements for an HTGR process steam cogeneration plant project. Candidate plant operators and sites are being identified. Detailed program planning for Phase II will be completed. The HTGR technology development will continue to focus on the near-term applications of the HTGR. The milestones identifying the completion of Phase I consist of:

1. HTGR Lead Plant definition
2. Identified candidate operators and sites
3. Detailed program plan (including costs and benefits) for following phases.

Specifically during FY'81 the HTGR Applications Program will advance the HTGR-Process Steam/Cogeneration plant conceptual design by completing the top-level technical documents and specifications. Design of key critical path components such as the steam generator and circulator will be significantly advanced. Evaluation of safety features in light of the Three Mile Island accident will be completed. Technology development requirements will be identified and long-term design and development plans for major systems and components of the HTGR-NSS will be issued.

During FY'81 the HTGR Technology Program will continue work on development of low-enriched uranium/thorium fuel cycle. The reference fuel form, fuel process and details of the fuel cycle will be selected. Basic data, information and technology in the areas of structural materials, safety and nuclear heat source components will be provided. Critical path component design verification testing will be initiated.

Phase II (Project Definition - FY'82 and FY'83) is focused on the preparation of a decision package for proceeding to Title I design. This decision package will contain the plant conceptual design, schedule and cost estimates, Environmental Impact Statement (EIS), and project management plan. During Phase II, the lead plant operator/owner and a site will be identified. Generic Licensing topical reports will be completed and reviewed with the NRC. The HTGR technology development efforts will be directed principally to support the conceptual design and licensing efforts, including testing of key components.

Phases III and IV (FY'84 - FY'87) will be devoted to the development of Title I (Preliminary Design) and Title II (Final Design) designs and the associated licensing efforts. The output will include successively more

detailed cost estimates and schedules, as well as the management and cost sharing plan. At the conclusion of Phase IV, firm priced bids will be available on all major plant components. These outputs will provide the decision packages for proceeding to Phase V, Demonstration Plant Construction.

The primary responsibility of the government in the HTGR Cogeneration Project Program will be to support the development of the appropriate technology and first-of-a-kind design. The commercial value of the demonstration plant will be supported by the private sector. Both the government and private sectors would share in the first-of-a-kind capital costs.

IV. MULTI-YEAR BUDGET ESTIMATE

Projected 2240 MW(t) HTGR Cogeneration Project Funding, FY'81 - FY'94 (1980 $M)

Summary of financial participation over program life.

- First-of-a-kind Nuclear Design and Development, Technology Development	$ 350 Government
- Equivalent Plant Commercial Value	$ 763 Private
- First-of-a-kind Plant Capital Costs (sharing determined prior to commitment to build)	$ 138 Joint (Government and Private)
- Total Program Cost	$1251

Funding Schedule - Cogeneration Project
Nuclear Design and Development, Technology Development (1980 $M)

Phase I - Program Definition (FY'81)	$ 26
Phase II - Project Definition (FY'82, '83)	$ 82
Phase III - Title I (FY'84, '85)	$109
Phase IV - Title II (FY'86, '87)	$ 79
Phase V - Title III (FY'88, '89)	$ 32
(FY'90, '91)	$ 17
(FY'92-'94)	$ 5
TOTAL	$350M

V. HTGR FY'82 BUDGET DETAIL

HTGR Plant Design and Technology	$ 45M
Advanced HTGR System Technology	10
Fuel Treatment Technology	5
TOTAL	$ 60M

Recommended HTGR Program Approach

The $60M request for FY'82 funding of the HTGR program will provide the following:

Establishment of a coordinated and integrated overall HTGR Program Plan, which will:

1. focus the overall technical effort,
2. lead to a demonstration of design and process technology, licensability and operability of the HTGR, and
3. establish the industrial capability and technical basis for all HTGR systems.

The phasing and private sector participation in the program will minimize risk and open ended commitments to all participants.

In addition, the HTGR Fuel Treatment Program directed by the Oak Ridge National Laboratory will be continued with FY'82 funding of $5M.

Recommended NRC FY'82 HTGR Program

We also recommend the Committee restore a $3.5M funding level for NRC reactor safety research in FY'82 to pursue critical licensing efforts to carry forward the HTGR program outlined above.

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STATEMENT OF HAROLD M. AGNEW, PRESIDENT, GENERAL ATOMIC CO.

HTGR CHARACTERISTICS

High level of inherent safety: Added plant investment protection.

Electrical generation at high net thermal efficiency: Low cooling water requirements.

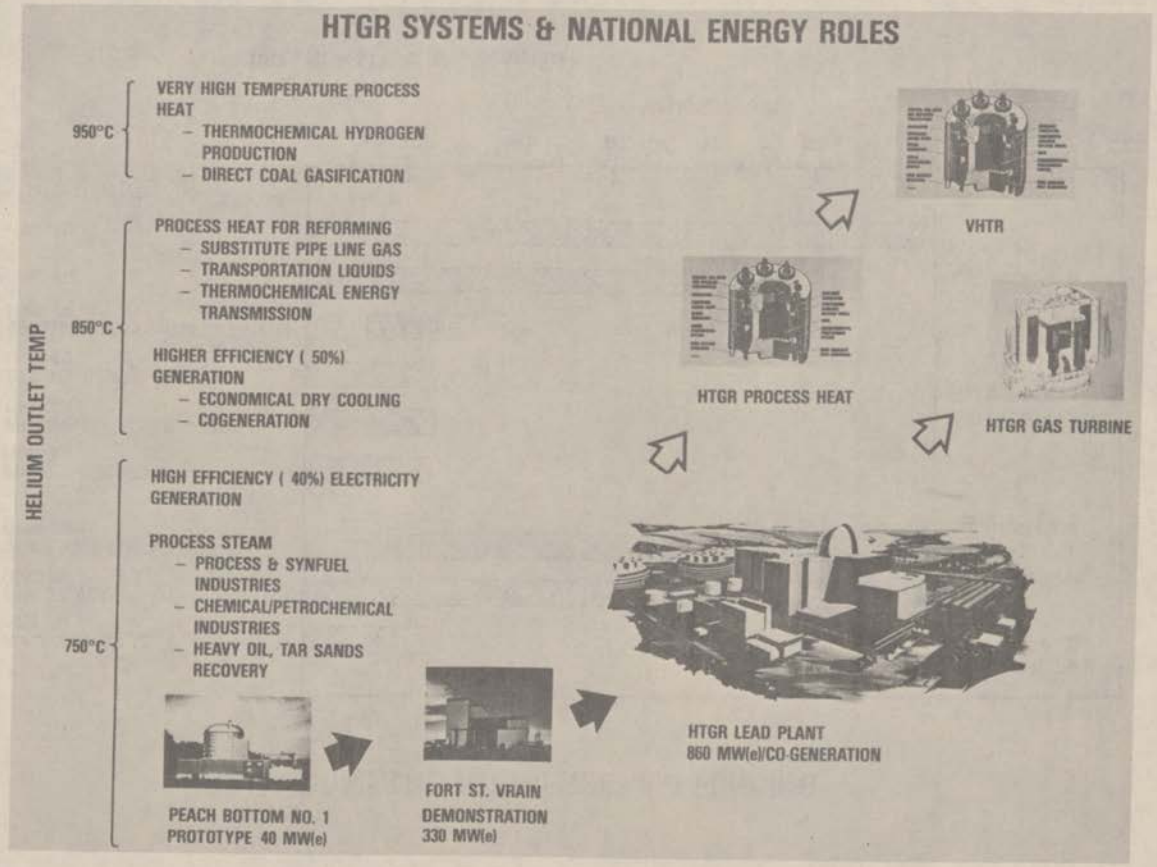
Low radiological discharges: Reduced plant operator exposures; small off-site releases.

Flexible uranium/thorium fuel cycle: Reduces U_3O_8 requirement 25–50 percent; use of low to high enriched fuels.

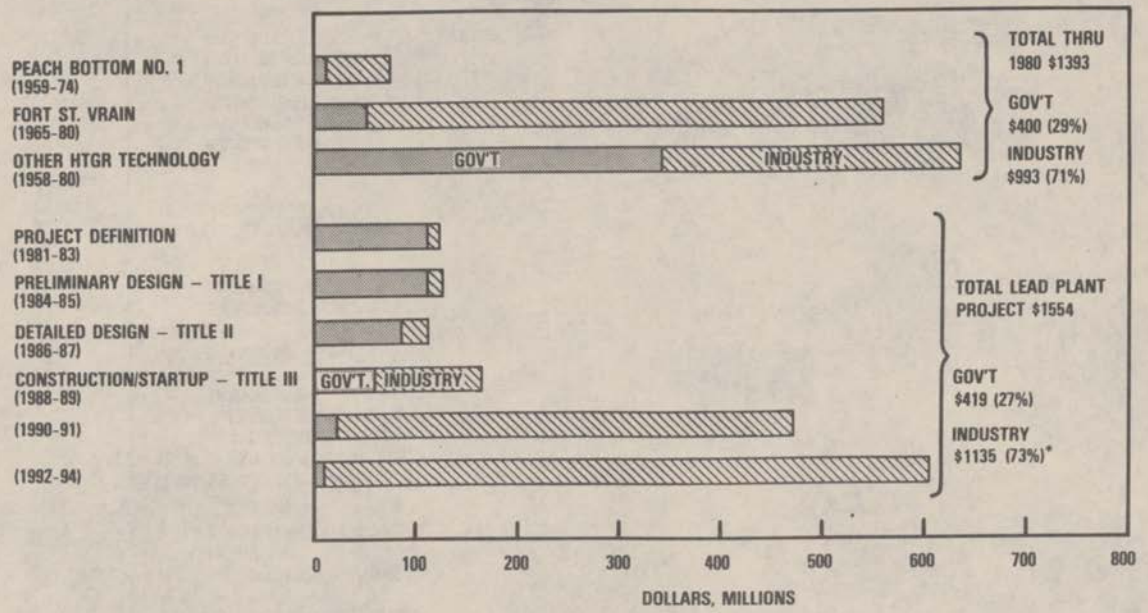
Less susceptibility to transients or unexpected occurrences: High "thermal inertia."

Greater accessibility to equipment during plant operation.

High temperature capability allows industrial and process applications: Displaces fossil fuels in non-electric areas.

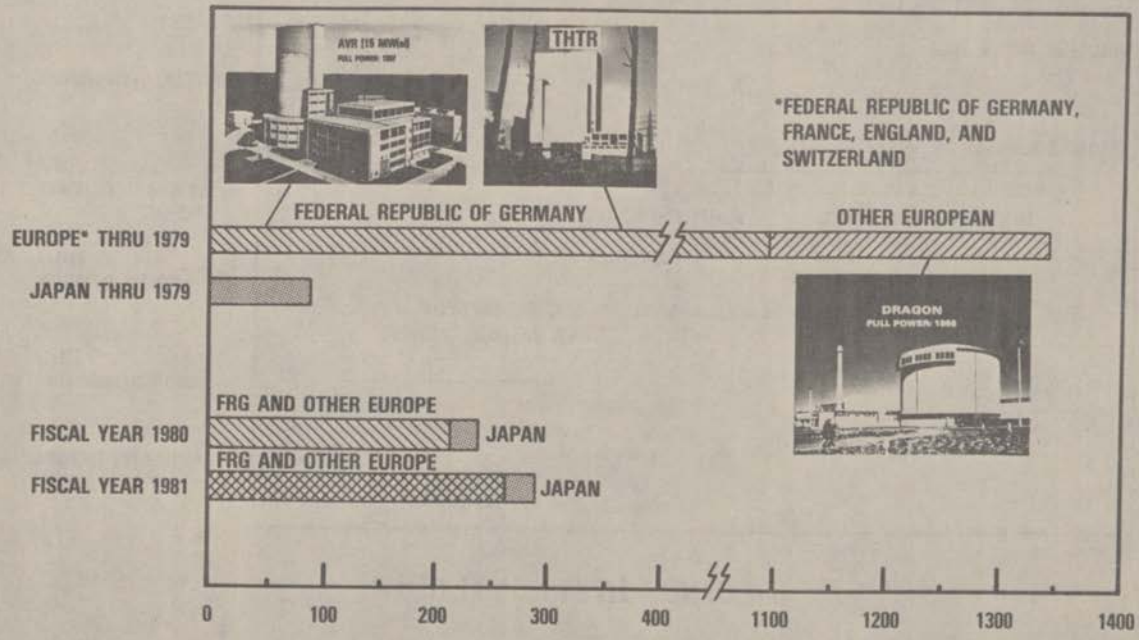

HTGR SYSTEMS & NATIONAL ENERGY ROLES
HELIUM OUTLET TEMP
950°C
VERY HIGH TEMPERATURE PROCESS HEAT
– THERMOCHEMICAL HYDROGEN PRODUCTION
– DIRECT COAL GASIFICATION
850°C
PROCESS HEAT FOR REFORMING
– SUBSTITUTE PIPE LINE GAS
– TRANSPORTATION LIQUIDS
– THERMOCHEMICAL ENERGY TRANSMISSION
HIGHER EFFICIENCY (50%) GENERATION
– ECONOMICAL DRY COOLING
– COGENERATION
750°C
HIGH EFFICIENCY (40%) ELECTRICITY GENERATION
PROCESS STEAM
– PROCESS & SYNFUEL INDUSTRIES
– CHEMICAL/PETROCHEMICAL INDUSTRIES
– HEAVY OIL, TAR SANDS RECOVERY
VHTR
HTGR PROCESS HEAT
HTGR GAS TURBINE
HTGR LEAD PLANT
860 MW(e)/CO-GENERATION
FORT ST. VRAIN
DEMONSTRATION
330 MW(e)
PEACH BOTTOM NO. 1
PROTOTYPE 40 MW(e)

DOMESTIC HTGR PROGRAM FUNDING

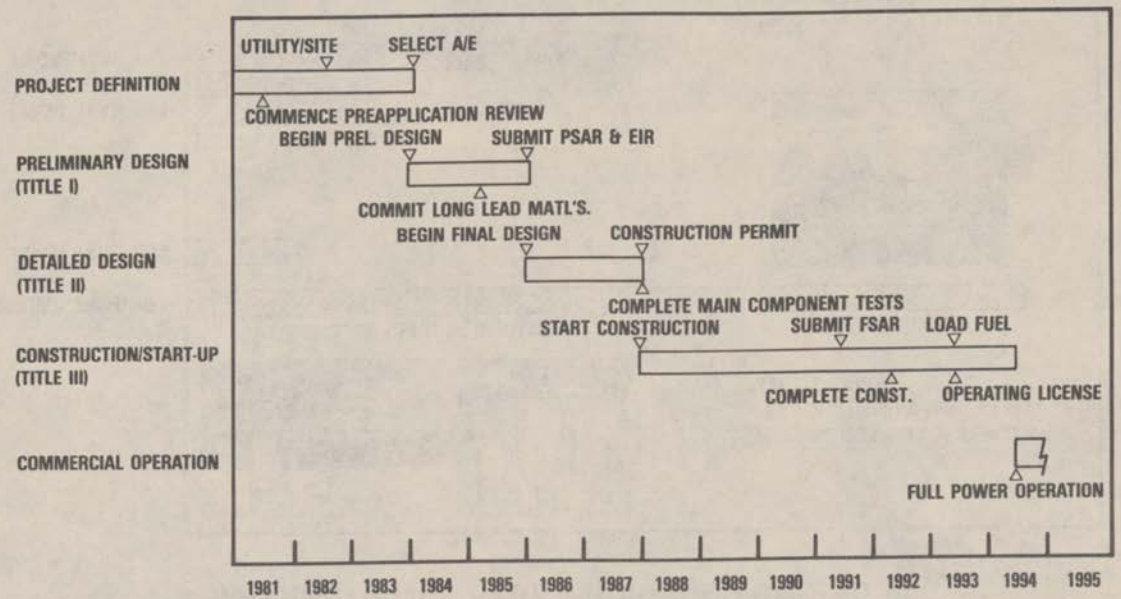


*INCLUDES INTEREST DURING CONSTRUCTION

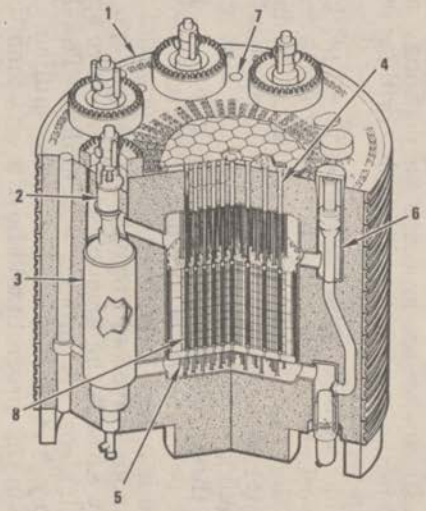
INTERNATIONAL HTGR PROGRAM FUNDING



HTGR LEAD PLANT SCHEDULE



COMPARISON OF COMMERCIAL AND HTGR-RPR DESIGN



	COMMERCIAL STEAM CYCLE PLANT	REPLACEMENT PRODUCTION REACTOR
1	PRESTRESSED CONCRETE REACTOR VESSEL (PCRV)	SAME
2	HELIUM CIRCULATORS	SAME
3	STEAM GENERATORS	SAME
4	CONTROL ROD DRIVES	SAME
5	REACTOR INTERNALS	SAME
6	CORE AUXILIARY COOLING SYSTEM	SAME
7	HELIUM PURIFICATION & PUMP DOWN SYSTEMS	CAPACITY INCREASE
8	CORE	SAME (MODIFY FUEL LOADINGS & FUEL CYCLE TO ACCOMMODATE TARGET MATERIAL)
X	TURBINE PLANT	MODIFY SECONDARY SYSTEM TO ALLOW OPERATION WITHOUT POWER PRODUCTION
Y	FUEL HANDLING	MODIFY REFUELING EQUIPMENT TO HANDLE PRODUCT TARGETS, ADD TARGET STORAGE HANDLING CELL(S)

STATEMENT OF MR. AGNEW

Mr. AGNEW. I think you are aware of the nature of the high temperature cooler reactor endeavor. It is unique in that it combines safety, efficiency and adaptability which hasn't been available in the nuclear business to the degree to which this particular system provides.

In a matter of unforeseen accidents, one has a matter of hours to react, whereas in the present water systems, one has tens of seconds.

This unique safety advantage, I think, is something that the investors in public utilities really should demand of the utilities when they invest in future plants.

At the same time, downstream, because of its efficiency which comes from its very high operating temperatures, we see the possibility of using nuclear energy directly to process heat in the steel business, in cement and in the synfuels business. We think that is extremely important.

As you can see here, the original reactor which was built and operated for some eight years at a very high efficiency at Peach Bottom and a demonstration at Fort St. Vrain.

What we are talking today is funding so we can proceed with the lead plant high temperature gas plant which Mr. Walker will tell you about.

Downstream we see process heat perhaps a direct cycle with the turbine in the reactor vessel and that will generally pull down very high temperatures.

The history of funding is unique in all of the nuclear programs in this country. This is the only program where the industry can supply the major fraction of the funding. To date we have supplied almost three-quarters of the total funding and in the program we are looking ahead you will see in the blue we would propose to supply three-quarters of the funding for the private sector. That has not been shown in any of the nuclear development programs.

There is a very large international program. As you can see, the total amount invested through Germany, Japan, through this date, actually exceeds the amount which we have spent in this country.

Our budget was around $43 million. The Federal Republic of Germany budget was around $250 million. The Japanese have started in this program and have a very ambitious program.

The next chart—and you have a copy of these charts; I think we made them available to you—shows the program which we would follow in this particular program.

The last viewgraph points out a particular opportunity where we cannot only serve the commercial sector but we believe we are the leading candidate for the replacement production reactor for the Defense Department to supply its needs.

Since you gentlemen are concerned with fusion, in order for fusion worldwide to get going, they would need tritium to start up on. It is not a negligible amount. I would believe the amount of tritium this country alone will need will be several tens of kilograms. This same will be true of Europe and Japan. Somebody will have to supply that.

I believe this particular instrument has the dual purpose of generating electricity, bringing in a much safer system to the

world and at the same time taking care of these very crucial and necessary requirements for tritium.

In addition, Mr. Chairman, I would support very much the money which has been recommended for the Nuclear Regulatory Commission to continue its work in safety research related to this technology and for its licensing work.

That, Mr. Chairman, is a summary of my submitted remarks. I think Mr. Walker would like to speak.

Mr. BEVILL. We will be glad to hear from you.

[The statement of Mr. Walker follows:]

Statement of Richard F. Walker

STATEMENT SUBMITTED FOR THE RECORD
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES
FY 1982 ENERGY AND WATER DEVELOPMENT APPROPRIATIONS
HIGH-TEMPERATURE GAS-COOLED REACTOR PROGRAM

RICHARD F. WALKER
PRESIDENT OF PUBLIC SERVICE COMPANY OF COLORADO
AND
CHAIRMAN OF GAS-COOLED REACTOR ASSOCIATES

Mr. Chairman and Members of the Subcommittee, my name is Richard F. Walker, and I am President of Public Service Company of Colorado. As Chairman of Gas-Cooled Reactor Associates (GCRA), I appreciate the opportunity to appear before you today in support of the High-Temperature Gas-Cooled Reactor (HTGR) Program.

After the past year's significant progress within the HTGR Program, we are dismayed by the recent action by the Administration to precipitously terminate this Program. This action has not had the benefit of detailed discussions between industry and government officials. As you are aware the utility industry's available options with respect to expanding its generation capacity have been restricted for various economic and political reasons. If we are to continue to provide the Nation with a reliable source of low cost energy it is essential that we continue to replace and expand our capacity in a fashion acceptable to the public. The HTGR offers the Nation an advanced nuclear alternative that has the potential of meeting a number of these issues and, thus, is an important option to utilities and to the Nation. Termination of this Program would limit our energy options and eliminate the potential for the HTGR to contribute to our future electrical and industrial energy requirements. I strongly recommend to this Subcommittee the restoration of a viable HTGR Program.

The utility industry has a long history of support for the development and commercialization of the HTGR. Through participation in various organizations that have provided technical guidance and financial support, utilities have spent approximately $200 million on the HTGR. At the present time, utility interest and support for the HTGR Program are represented through GCRA, a Utility/User organization that was established in February 1978. GCRA has grown to represent over 25% of the installed generation capacity in the U.S. In addition, GCRA utilities represent approximately 25% of the on-line nuclear capacity and about 40% of the capacity currently under construction. This background of nuclear experience provides GCRA with a sound base for evaluating and comparing the characteristics of the HTGR as an alternative nuclear energy source. GCRA's role in the HTGR Program is responsive to the institutional need for front-end participation in technology development by the end-user of the technology. This role ensures that the investment of government and private sector resources will result in HTGR systems that will most favorably impact the U.S. energy economy. Utility financial support, through GCRA, for the HTGR Program has steadily increased to a level of about $2 million in 1981. These funds support a full-time staff that represents Utility/User interests within the programmatic activities, such as site and application studies, plus provides overall Program integration support to DOE. To date, utility support has been instrumental in the design and construction of two HTGR facilities: the Peach Bottom prototype HTGR at Philadelphia Electric Company and the Fort St. Vrain

demonstration plant which is currently operating and providing electricity for Public Service Company of Colorado. Since 1978, Fort St. Vrain has generated over 2 billion KWhs. With a design rating of 330 MWe, the plant has successfully operated for sustained periods of time near 70% power. With the recent release from the Nuclear Regulatory Commission, efforts are underway to proceed to higher power levels for test operations.

Fort St. Vrain has provided critical confirmation and demonstration of many key HTGR concepts. Significant is the HTGR's excellent fuel performance and the resulting low radiation exposure to plant personnel. There has been excellent correlation between predicted fuel performance and observed data. Other major contributions of Fort St. Vrain have been in the areas of core physics confirmation, plant control and response, and plant performance at high temperatures. Plant operating experience to date has demonstrated predictable, easily managed performance even during extreme modes of operation, including temporary loss of forced cooling. The high core heat capacity has shown temperature transients to be slow, predictable, and easily controlled. Fort St. Vrain has also demonstrated high-performance and high-temperature capabilities. Operation to date has achieved 1400°F primary loop and 1000°F steam temperatures--the highest of any nuclear plant in the U.S. Public Service Company of Colorado is pleased to be playing a key role in the development and demonstration of the HTGR concept.

GCRA's constituency also includes potential industrial process heat users who are interested in employing the HTGR in energy-intensive industries such as petroleum refining, chemicals, and metals as well as the emerging synfuel industries. A Process Heat Advisory Committee has been established within GCRA to provide a forum for process heat users to interact with utilities and provide input and support to the HTGR Program.

Vendor/supplier support for the HTGR Program was initiated through the General Atomic Company (GA), which is jointly owned by the Gulf and Royal Dutch Shell Oil Companies. The private investment by GA in excess of $700 million has contributed to the Peach Bottom prototype HTGR and to the Fort St. Vrain HTGR demonstration plant as well as to the technology embodied in the current HTGR designs. More recently, the General Electric Company (GE) has become an active participant in the HTGR Program. Primary interest to date has been directed toward the process heat/cogeneration applications and the supporting materials technology development. Other key industrial entities that are involved in the HTGR Program include: Bechtel National, Inc., Combustion Engineering, United Engineers and Constructors, and United Technologies Inc. This broad cross section of industrial participation offers the potential to provide the full design and manufacturing capability to deploy HTGR systems. As sound and stable support is established within the government and Utility/User projects are identified, the natural competitive forces will merge to establish a viable commercial infrastructure for supplying the HTGR.

Another important area of Program support comes from international efforts aimed at developing the HTGR technology. The most active efforts are under way in the Federal Republic of Germany (FRG), Japan, and Switzerland. Of the foreign programs, the program in the FRG is the largest and most experienced. Since 1960 the FRG has invested approximately $1.5 billion in HTGR development. The current emphasis of the German program is the completion of a 300-MWe HTGR-Steam Cycle demonstration plant, which is expected to begin operation in 1984. At the present, the German utilities in cooperation with the German

coal and gas companies are investigating a follow-on HTGR-Steam Cycle/Cogeneration project in conjunction with a coal gasification facility. In support of the overall U.S./German cooperation on HTGR technology development, a cooperative agreement between GCRA and a group of German utilities has been developed. Signing of this agreement is projected during the spring of 1981.

As presented in our testimony before this Committee last year, GCRA, in cooperation with all Program participants, has been under way with a comprehensive effort to identify an HTGR Lead Project. During 1980, a detailed evaluation of the Lead Project candidates has been conducted that has served to establish a consensus on the status and merits of the technical, economic, and market characteristics of various HTGR systems. The Lead Project evaluation effort has also served to better focus the ongoing technology development programs supported by DOE. Copies of the detailed reports on each Lead Project option have been issued to members of the Subcommittee staff. Through the Lead Project evaluation effort, the HTGR-Steam Cycle/Cogeneration (SC/C) system has been identifed by the Program participants as the primary Lead Project system for the following key reasons:

- The technical feasibility of the system is assured through the Fort St. Vrain demonstration plant plus long-standing design experience.

- Relative to the other Lead Project options, the HTGR-SC/C system requires the fewest resources, involves the fewest technical risks, and can be deployed on the earliest schedule. Accordingly, this option warrants the greatest private sector financial support.

- The HTGR-SC/C system can serve a large potential market that ranges from baseload electricity to industrial process steam. In particular, the system is ideally suited for cogeneration with central, baseloaded industrial applications such as petroleum refining, enhanced oil recovery, and synfuels.

- The development of the HTGR-SC/C system provides a large fraction of the technology required for the more advanced HTGR systems. Further, deployment of the HTGR-SC/C system advances the industrial infrastructure that assures access to the advanced HTGR systems.

Because of these factors, we feel strongly that the HTGR-SC/C system merits a high priority for government support as the HTGR Lead Project. Upon confirmation of the licensing and economic performance of the Lead Project, commercial follow-on systems may be deployed.

An attractive feature of the HTGR technology is the evolutionary applications for broadened energy markets. For example, used in conjunction with molten salt as the heat transfer medium, the HTGR-SC/C evolves into a system which has the ability to store and transport heat over distances in the range of 50 miles, making it ideally suitable for distributed and/or load-following cogeneration applications. This system is referred to as the HTGR-Sensible Energy Transmission and Storage (HTGR-SETS).

A more advanced concept, the HTGR-Reformer (HTGR-R) system provides heat storage and transportation over even longer distances. In the HTGR-R application, a portion of the reactor thermal energy is converted to a storable/transportable energy form through the use of a highly endothermic, reversible chemical reaction whereby methane and water are combined in the presence of a

catalyst to form a synthesis gas of hydrogen and carbon monoxide. The balance of the reactor thermal energy is used for base load electricity generation through the conventional steam cycle. In a closed cycle application, the chemical energy is transported to remote locations utilizing the Thermochemical Pipeline (TCP) and converted to thermal energy through an exothermic methanation reaction providing delivered heat in the range of 600°C/1100°F. Through the TCP, the HTGR can serve dispersed industrial customers over a range of 200 miles. In open-cycle applications, the HTGR-R can be directly coupled to processes which utilize large quantities of hydrogen and carbon monoxide such as the ammonia and methanol industries. Because peak reforming temperatures in excess of 1300°F are required to achieve suitable conversion efficiencies, the HTGR is uniquely capable of supplying these requirements. Furthermore, all of the process heat application versions (HTGR-SC/C, HTGR-SETS and HTGR-R) are readily adaptable to synfuel production and enhanced oil recovery applications.

Through an HTGR-SC/C Lead Project, the industrial infrastructure would be established that would be capable of deploying commercial HTGR systems by the turn of the century for the generation of electricity and/or process steam. Given the commercial deployment of the HTGR-SC/C system, the development of other HTGR system concepts can be readily achieved. In addition to HTGR-SETS and HTGR-R for process heat/cogeneration applications, access to the HTGR-Gas Turbine (HTGR-GT) for efficient ($\sim$40%) electricity generation with dry cooling can be pursued as cooling water scarcity becomes a severe problem. Alternatively, the HTGR-GT may be coupled with bottoming power cycles that achieve efficiencies in the range of 47% or with cogeneration applications that require low temperatures such as district heating. In fact, combining the LMFBR fuel technology and the HTGR-SC/C technology would provide eventual access to an alternate breeder concept--the Gas-Cooled Fast Breeder Reactor (GCFR).

Clearly then, the HTGR system is an energy option that has the multi-application and evolutionary flexibility which can adapt to many market requirements and resource concerns in the energy supply picture. Furthermore, the safety and environmental impact features of the HTGR provide added margin for enhancing its economic life. These features result in minimal reliance on engineered safety systems, greater siting flexibility, and added plant investment protection.

In support of the efforts to establish a Lead Project, GCRA has undertaken efforts to identify and develop candidate Lead Utilities that would build and operate the HTGR Lead Plant. To date, six utilities have expressed interest in investigating a Lead Project. Interests range from electricity generation at Florida Power and Light Company to process heat/cogeneration applications at Public Service Electric and Gas Company, to a developmental application, such as oil shale processing, involving Idaho Power Company and the Idaho National Engineering Laboratory. Studies are ongoing to evaluate specific sites and applications, which are oriented toward establishing a Lead Project as well as follow-on projects.

Regarding the cost-sharing arrangements for the Lead Project, it has been GCRA's consistent intent that the Lead Utility will finance the construction of the Lead Plant to the extent of its commercial value. In addition, the utilities through GCRA and EPRI will support a share of front-end costs associated with the Lead Project. Vendor/supplier support for the Lead Project is expected through an industrial team that will provide the design and manufacturing capabilities required for the Project. It is expected that the vendor/supplier

team would share in the Lead Project risks through fixed/incentive prices on the plant components and fuel supply, and provide a broadened vendor/supplier infrastructure for subsequent HTGR commercial plants. Government support is required for the front-end design and development of nuclear systems and components, fuel cycle development and demonstration, and a share of the Lead Project costs and risks over and above the Project's commercial value. The details of such cost-sharing arrangements await serious attention by the appropriate government officials and the ensuing negotiations between the Program participants.

Regarding government support for FY 1982 at the Department of Energy, GCRA urges the Energy and Water Development Subcommittee on Appropriations to support the ongoing efforts to establish a National HTGR Program and Lead Project. In particular, stable government support is required to complete Program Definition activities and to engender a Lead Project commitment by the private sector. The near-term Program should provide the information required for such a decision with emphasis on the design and development activities required for a HTGR-SC/C Lead Project. Additional design and development should be included to support advanced follow-on systems. A target schedule for the HTGR-SC/C Lead Project has been developed that leads to a Project Authorization in 1984 and to plant startup in 1994. A DOE funding level of $55 million in FY 1982 is required to support this schedule and continuing development of advanced HTGR systems. Further, it is recommended that the HTGR Fuel Recycle Program be continued at a funding level of $5.0 million.

In order to support the safety and licensing aspects of the HTGR Program, adequate support and funding is required to support ongoing safety-related research and preapplication review activities within the Nuclear Regulatory Commission (NRC). The recommended FY 1982 funding level for HTGR-related activities at NRC is $5.0 million. In addition, a long-term Program Plan for NRC activities in support of the HTGR Program needs to be established.

The Utilities/Users of Gas-Cooled Reactor Associates believe that the HTGR offers significant advantages to the Utility/User industry and the Nation as a whole. Accordingly, we urge that a National HTGR Program be established that supports an aggressive Lead Project.

Mr. Chairman, that concludes my prepared statement. Thank you for the opportunity to present the utility viewpoint to your Subcommittee. I would be pleased to answer any questions.

STATEMENT OF MR. WALKER

Mr. WALKER. Thank you, Mr. Chairman, and committee. I appreciate being allowed to testify with Dr. Agnew.

My background is not as distinguished as his but I am from Colorado. I am President of the Public Service Company of Colorado. For the St. Vrain is one of our generating facilities and has generated over 2 billion kilowatt hours and has been a good addition to the Peach Bottom.

I am appearing here as Chairman of the Gas-Cooled Reactor Associates. We felt in order to bring this HTGR concept which has all of the attributes Dr. Agnew talked about from generation of electricity to cogeneration of steam, to process heat to direct cycle that uses very little water—and maybe even none—to a gas-cooled breeder.

It is a complete system and is compatible—all the different parts of it.

We felt the need to form this organization as a vise as a utility. We represent about 25 percent of the electric generating capacity in the United States in our group. We provide funding for our staff and carry on our work and coordinate with the Department of Energy.

We are very disappointed that we have had a difficult time with the Administration and, as you gentlemen know, we were zeroed out on this year's budget, not just cut back but taken from $43 million to zero.

It is very difficult for us to keep our utility group together who have spent some $200 million to date on this. We certainly want to get some funding back.

In my testimony we recommend the levels of some $55 million for the project, $5 million for fuel cycling and NRC funds.

Our last year's decision has been to identify what project we should go ahead with. We have come down on the steam cycle used to generate electricity with the potential of steam for cogeneration industrial process.

We have six utilities that are making studies on whether they would become the lead utility. One of them is the Florida Power and Supply Company. Their South Dade site is a good site for a nuclear plant. They are spending $250,000 on their site related to whether they could be the lead plant.

Public Service Electric and Gas in New Jersey is interested not only in the electric generation aspect but cogeneration with steam with some of their industrial users.

We have interests in the west. Idaho Power is one of our members. As you know, the reactor's first site is there. It is a good location for a project.

Also, we in the west have a real interest in the synthetic fuel aspect of the energy puzzle and we see the long-term goal as the possibility of being able to use nuclear heat to retort the tremendous amount of shale and possibly coal that we have.

It is my considered opinion as a western you cannot go to extreme high levels in syn fuel production by burning the resource and polluting the air. I think this would not happen until the nineties but it is a wonderful way to make nuclear heat without burning the shale or coal.

We would certainly urge the committee to consider our requests and we appreciate the time, and I particularly appreciate you allowing me to fit in with Dr. Agnew.

Mr. BURGENER. Thank you very much. We will try our best to reeducate the administration.

WATER AND ENERGY PROGRAMS

WITNESSES

JOSEPH E. LEMA, DIRECTOR OF TRANSPORTATION, NATIONAL COAL ASSOCIATION
CARTER MANASCO, LEGISLATIVE REPRESENTATIVE
ANDREA INNES, LEGISLATIVE REPRESENTATIVE

Mr. BEVILL. Mr. Joe Lema of the National Coal Association. Joe, we are pleased to have you with us here. You may proceed as you wish.

Carter, would you like to come up. This is my former Congressman right here. He is the best Congressman my district ever had.

[The statement of Mr. Lema follows:]

Statement of Mr. Joseph Lema

STATEMENT OF JOSEPH E. LEMA, DIRECTOR OF TRANSPORTATION, NATIONAL COAL ASSOCIATION, BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES, MARCH 25, 1981

My name is Joseph E. Lema. I am National Coal Association's Director of Transportation. NCA represents coal producers and other organizations associated with the coal industry. My testimony will address a vital need for port and inland waterway transportation improvements required to move coal efficiently to destinations in the United States and through ocean ports to destinations overseas. Before discussing this in greater detail, I will outline briefly the principal actions that we consider necessary and appropriate to improve our ports and inland waterways. We believe that:

- Port Dredging: To reduce port congestion, harbors and channels at ports on the East, Gulf, and West Coasts and on the Great Lakes should be dredged to water depths that will accommodate deep draft vessels of greater sizes in sufficient numbers to furnish adequate port capacities as determined to be practical and economic by the Corps of Engineers.

- Fast Track Permitting: To enable timely and full response to the world demand for U.S. coal, fast track permitting processes should be adopted to expedite completion of groundside terminal storage and bulk handling improvements, new and expanded vessel loading docks and piers, and the associated harbor and channel improvements at coastal and Great Lakes ports.

- Inland Waterway Navigation: To remove serious capacity constraints and increase efficiency and safety of navigation on inland waterways, in particular those heavily used by shippers of bulk commodities such as coal and grain, transportation construction and rehabilitation work should be completed at critical locations on several segments. It is suggested that priority be given to navigational improvements on the Ohio River and its tributaries such as the Monongahela, Kanawha, and Cumberland Rivers, and on the Upper and Lower Mississippi, Illinois, Tombigbee-Warrior, and Tennessee Rivers. High priority needs include increasing waterway lock capacity and replacing obsolete waterway lock structures at:

  - Gallipolis on the Ohio River,

  - Lock and Dam No. 26 on the Mississippi River, including work in progress and the addition of a second 1,200 foot chamber,

  - Lock and Dam No. 7 and No. 8 on the Monongahela River, and

  - Marseilles, LaGrange, Peoria, and Dresden Island on the Illinois River.

- Expedited Environmental Review: To shorten time required for planning, programming, and constructing groundside, harbor and channel improvements at coastal and Great Lakes ports, and inland waterway navigation improvements on major commercial transportation segments of the inland waterway system, expedited environmental review procedures should be developed incorporating lead agency designation for coordinating local, state, multi-state, and federal agency participation and acceleration of the review process within a specified, fast track time schedule.

I will now discuss three points which lead NCA to seek legislative action on port dredging, navigation improvements on inland waterways, and fast track permitting with expedited environmental review for water transportation projects:

- First, I will show that U.S. coal production and exports have grown significantly from 1977 to 1980 and are forecast to increase much more substantially by 1990.

- Next, I will discuss the key role of our inland waterways as major coal distribution systems, and the urgent need to eliminate serious capacity constraints on some segments.

- Finally, I will focus on the immediate need to expand seaport capacity with respect to both groundside terminal facilities and depths of harbors and channels to meet the world demand for U.S. coal.

U.S. COAL PRODUCTION AND EXPORTS HAVE GROWN SIGNIFICANTLY FROM 1977 TO 1980 AND ARE FORECAST TO INCREASE MUCH MORE SUBSTANTIALLY BY 1990.

To document the importance of legislative action in support of port dredging and navigation improvements on inland waterways, it is useful to first consider the role of water transportation in the movement of coal and how expected growth in coal production and exports will affect the current situation in regard to water transportation of coal. The U.S. Army Corps of Engineers Institute for Water Resources is conducting a National Waterways Study (NWS) which will be reported to the Congress in September. The study is a major effort mandated by Section 158 of the Water Resources Development Act of 1976. It has accumulated much detailed information on the use of our waterways during a four year period of investigation to date.

The NWS has determined that water transportation carries about 20 percent of all coal shipments over some part of the distance from mine to consumer destination. In this regard, it is noteworthy that the inland waterway system and the ports on the East, Gulf and West Coasts and the Great Lakes provide for an increasing amount of intermodal transportation service, joining with railroad systems to move high volumes of coal shipments long distances, in addition to furnishing other essentially single mode movement of coal shipments by water carriers. Inland coal terminals built in the past few years at Superior, Wisconsin on the Great Lakes and at St. Louis, Missouri and Cora, Illinois on the Mississippi River are good examples of new facilities now used heavily for combined water and rail carrier shipments of coal. For many years, coastal ports at Baltimore, Maryland, Hampton Roads, Virginia, Mobile, Alabama, and New Orleans, Louisiana have also provided intermodal connections for coal shipments having U.S. and/or overseas destinations. Thus, it is important to recognize that our ports and inland waterways serve both as unique and distinct commodity transportation systems and as components of an intermodal transportation infrastructure, factors which should be considered when evaluating the need for waterway transportation improvements.

It is expected that the present involvement of water carriers in coal transportation will continue to be high in the 1980's and beyond. Even if the 20 percent level of participation in overall coal transportation mentioned earlier remains constant, and it is not expected to decrease, the amount of coal to be moved by water carriers will grow appreciably as U.S. coal production and exports increase in coming years.

I have incorporated a tabulation of annual U.S. coal production and exports for 1977 to 1980 and NCA forecasts to 1990 in my written statement to show the implications of higher coal production and exports on water transportation systems.

U.S. COAL PRODUCTION AND EXPORTS 1977 TO 1980 AND FORECASTS TO 1990
(millions of tons)

	COAL PRODUCTION			COAL EXPORTS		
	East	West	Total	Canada	Overseas	Total
1977	527.4	163.9	691.3	17.2	36.5	53.7
1978*	469.0	184.8	653.8	15.2	24.6	39.8
1979	554.9	221.4	776.3	19.1	45.6	64.8
1980	582.0	248.0	830.0	17.0	72.0	89.0
1990 (Forecast)	827.0	518.0	1,345.0	24.0	118.0	142.0
Average Annual Growth 1980-1990	3.6%	7.6%	4.9%	3.5%	5.1%	4.8%

SOURCES: 1977-1979: U.S. Department of Energy
1980: National Coal Association
1990 Forecast: NCA (1981)

*U.S. Coal Production was depressed in 1978 due to coal and rail strikes.

U.S. coal production has grown from 691 million tons in 1977 to 830 million tons in 1980, a 20 percent increase in total annual coal production in the past four years. At the same time coal exports have grown from about 54 million tons to 89 million tons, an increase of about 65 percent; and overseas exports, excluding Canada, have grown from 36.5 million tons to 72 million tons, an increase of about 97 percent.

NCA forecasts show that in the period 1980 to 1990, U.S. coal production is expected to grow at an average annual rate of 4.9 percent and exports at an average annual rate of 4.8 percent. Thus, we believe that in 1990 coal production will reach about 1.35 billion tons annually, an increase of 62 percent above 1980; and total coal exports will reach 142 million tons annually, an increase of about 60 percent, with overseas exports reaching 118 million tons, an increase of about 64 percent, compared with 1980 levels. This expected annual growth in U.S. coal production and exports will place severe demands on our ports and inland waterways, demands that call for concerted actions now to eliminate serious water transportation capacity constraints on our inland waterways and at ports on the East, Gulf and West Coasts, and the Great Lakes.

THE KEY ROLE OF OUR INLAND WATERWAYS AS MAJOR COAL DISTRIBUTION SYSTEMS, AND THE URGENT NEED TO ELIMINATE SERIOUS CAPACITY CONSTRAINTS ON SOME SEGMENTS.

Six major inland waterway segments and the Great Lakes furnish essential transportation for movement of coal produced in eastern, central and western states. These segments carry about 180 million tons of coal. The Ohio River and its tributaries, notably the Monongahela, Kanawha, and Cumberland Rivers among others in the Upper Ohio River Basin, accounts for about 55.5 percent of the total inland and Great Lakes movements -- more than 100 million tons of coal. The other major segments and their shares are: Great Lakes, 12.5 percent; Lower Mississippi River, 6.6 percent; Upper Mississippi River, 6.0 percent; Illinois River, 5.3 percent; Tennessee River, 4.7 percent; and Tombigbee-Warrier River System, 4.5 percent. All other segments account for 4.9 percent of waterway coal shipments.

The demands on the inland waterways to move coal are forecast to increase sharply by the NWS cited earlier. Under various scenarios, the study shows coal shipments to be the commodity traffic having the highest expected rate of increase in transportation demand from 1977, the study's base year, to the year 2003, a 25 year period in which coal traffic is projected to increase within a range of 126 to 197 percent under different scenarios.

Considering present traffic flows, expected increases in coal traffic, existing waterway lock capacities, and the current condition of waterway locks which represent the critical capacity control points on the inland waterway system, we believe that actions should

be taken now to expedite completion of construction and rehabilitation of several lock structures, namely: Gallipolis on the Ohio River; Lock and Dam No. 26 on the Mississippi River, including work in progress and the addition of a second 1,200 foot chamber; Lock and Dam No. 7 and No. 8 on the Monongahela River; and Marseilles, LaGrange, Peoria, and Dresden Island on the Illinois River.

The present Gallipolis Lock and Dam was completed in 1937, and is now extremely inadequate. This week Congressman Perkins of Kentucky, joined by Congressman McEwen of Ohio, has introduced a bill, H.R. 2778, to authorize construction of a modification of the Gallipolis Lock and Dam. This project should be undertaken at the earliest possible time. Additionally, we believe that a second 1,200 foot chamber at Lock and Dam No. 26 on the Mississippi River should also be approved.

EXPANSION OF SEAPORT CAPACITY WITH RESPECT TO BOTH GROUNDSIDE TERMINAL FACILITIES AND DEPTHS OF HARBORS AND CHANNELS TO MEET THE WORLD DEMAND FOR U.S. COAL.

To assure that the U.S. position in the world coal marketplace becomes fully established and well secured in the next few years and over the last two decades of this century, those involved in the U.S. coal export delivery system must act quickly to upgrade and expand coal ports by the use of ground storage coupled with modern bulk commodity coal-handling equipment and adequate coal pier space for ocean colliers at coal ports on the East, Gulf, and West Coasts and the Great Lakes.

Private enterprise has already shown that it is in a position to expand and upgrade groundside facilities required to handle coal at the ports. It is now imperative that government match ongoing private sector initiatives by: (1) dredging channels and harbors to depths necessary to accommodate ocean colliers that are 100 thousand to 150 thousand deadweight tons in size in addition to the 60 thousand deadweight ton vessels now commonly used; and (2) adopting a fast track permitting process for groundside, harbor and channel improvements at the ports along with an expedited environmental review procedure in order to achieve modern coal port operations on the East, Gulf and West Coasts and the Great Lakes.

Fast track permitting and expedited environmental review are port development activities which may be made the lead responsibility of the Corps of Engineers in its traditional role with respect to port development projects. In regard to expedited environmental reviews it is considered essential that a lead organization be designated to coordinate local, state, multi-state, and federal agency participation in the process. Both permitting and environmental review should be mandated for completion within a strict, relatively short time frame.

Mr. Chairman, this concludes my remarks in regard to the urgent need for legislative action to permit early improvements in port and inland waterway transportation. I will be glad to respond to questions now and/or subsequent to this hearing.

Mr. LEMA. Thank you, it is a privilege for me to be before your subcommittee and to be joined by Carter Manasco who is a dear colleague of mine and an important person.

Thank you, Mr. Chairman.

My name is Joseph E. Lema. I am National Coal Association's Director of Transportation. NCA represents coal producers and other organizations associated with the coal industry.

My testimony will address a vital need for port and inland waterway transportation improvements required to move coal. We believe that four areas deserve attention by the Congress.

One. Port Dredging: To reduce port congestion, harbors and channels at ports on the East, Gulf and West Coasts and on the Great Lakes should be dredged to water depths that will accommodate deep draft vessels of greater sizes as determined to be practical and economic by the Corps of Engineers.

Two. Fast Track Permitting: To enable timely and full response to the world demand for U.S. coal, fast track permitting processes should be adopted to expedite completion of groundside terminal improvements, new and expanded docks and piers, and associated harbor and channel improvements at coastal and Great Lakes ports.

Three. Inland Waterway Navigation: To remove serious capacity constraints and increase efficiency and safety of navigation on inland waterways, transportation, construction and rehabilitation work should be completed at critical locations on several segments.

It is suggested that priority be given to navigational improvements on the Ohio River and its tributaries such as the Monongahela, Kanawha and Cumberland Rivers, and on the Upper and Lower Mississippi, Illinois Tombigbee-Warrior, and Tennessee Rivers.

High priority needs include increasing waterway lock capacity and replacing obsolete waterway lock structures at: Gallipolis on the Ohio River; Lock and Dam No. 26 on the Mississippi River, including work in progress and the addition of a second 1,200 foot chamber; Lock and Dam no. 7 and No. 8 on the Monongahela River; and Marseilles, LaGrange, Peoria, and Dresen Island on the Illinois River.

Four. Expedited Environmental Review: To shorten time required for planning, programming and constructing expedited environmental review procedures should be developed incorporating lead agency designation for coordinating local, State, multi-State, and Federal agency participation and acceleration of the review process within a specified, fast track time schedule.

To document the importance of legislative action in support of port dredging and navigation improvements on inland waterways, it is useful to first consider the role of water transportation in the movement of coal and how expected growth in coal production and exports will affect the current situation in regard to water transportation of coal.

The U.S. Army Corps of Engineers Institute for Water Resources is conducting a National Waterways Study which has determined that water transportation carries about 20 percent of all coal shipments over some part of the distance from mine to consumer destination.

In this regard, it is noteworthy that the inland waterway system and the ports on the East, Gulf and West Coasts and the Great Lakes provide for an increasing amount of intermodal transportation service, joining with railroad systems to move high volumes of coal shipments long distances, in addition to furnishing other essentialy single mode movement of coal shipments by water carriers.

Thus, it is important to recognize that our ports and inland waterways serve both as unique and distinct commodity transportation systems and as components of an intermodal transportation infrastructure, factors which should be considered when evaluating the need for waterway transportation improvements.

It is expected that the present involvement of water carriers in coal transportation will continue to be high in the 1980s and beyond.

Even if the 20 percent level of participation in overall coal transportation mentioned earlier remains constant, and it is not expected to decrease, the amount of coal to be moved by water carriers will grow appreciably as U.S. coal production and exports increase in coming years.

NCA forecasts show that in the period 1980 to 1990, U.S. coal production is expected to grow at an average annual rate of 4.9 percent and exports at an average annual rate of 4.8 percent.

Thus, we believe that in 1990 coal production will reach about 1.35 billion tons annually, an increase of 62 percent above 1980; and total coal exports will reach 142 million tons annually, an increase of about 60 percent, with overseas exports reaching 118 million tons, an increase of about 64 percent, compared with 1980 levels.

This expected annual growth in U.S. coal production and exports will place severe demands on our ports and inland waterways, demands that call for concerted actions how to eliminate serious water transportation capacity constraints on our inland waterways and at ports on the East, Gulf and West Coasts, and the Great Lakes.

Six major inland waterway segments and the Great Lakes furnish essential transportation for movement of coal produced in eastern, central and western States. These segments annually carry about 180 million tons of coal.

The Ohio River and its tributaries, notably the Monongahela, Kanawha, and Cumberland Rivers, among others in the Upper Ohio River Basin, accounts for about 55.5 percent of the total inland and Great Lakes movements—more than 100 million tons of coal.

The other major segments and their shares are: Great Lakes, 12.5 percent; Lower Mississippi River, 6.6 percent; Upper Mississippi River, 6.0 percent; Illinois River, 5.3 percent; Tennessee River, 4.7 percent; and Tombigbee-Warrier River System, 4.5 percent. All other segments account for 4.9 percent of waterway coal shipments.

Considering present traffic flows, expected increases in coal traffic, existing waterway lock capacities, and the current condition of waterway locks which represent the critical capacity control points on the inland waterway system, we believe that actions should be taken now to expedite completion of construction and rehabilita-

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tion of several lock structures. One 110 feet by 1,200 feet and one 110 feet by 600 feet lock at an estimated $258.2 million.

To assure that the U.S. position in the world coal marketplace bcomes fully established, those involved in the U.S. coal export delivery system must act quickly to upgrade and expand coal ports by the use of ground storage coupled with modern bulk commodity coal-handling equipment and adequate coal pier space for ocean colliers at coal ports on the East, Gulf and West Coasts and the Great Lakes.

Private enterprise has already shown that it is in a position to expand and upgrade groundside facilities required to handle coal at the ports. It is now imperative that government match ongoing private sector initiatives by: [1] dredging channels and harbors to depths necessary to accommodate ocean colliers that are 100,000 to 150,000 deadweight tons in size in addition to the 60,000 deadweight ton vessels now commonly used and; [2] adopting a fast track permitting process for groundside, harbor and channel improvements at the ports along with an expedited environmental review procedure in order to achieve modern coal port operations on the East, Gulf and West Coasts and the Great Lakes.

Mr. Chairman, this concludes my remarks in regard to the urgent need for legislative action to permit early improvements in port and inland waterway transportation.

I will be glad to respond to questions now and/or subsequent to this hearing.

Thank you for this opportunity to appear before this subcommittee. I have submitted a written statement for the record.

Mr. BEVILL. That is a very fine statement.

You mentioned the importance of our waterways in moving coal. As you know, the Corps of Engineers predict the Tennessee-Tombigbee, 70 percent of their freight will be coal. You and your association do support that project?

Mr. LEMA. We believe the Tennessee-Tombigbee is a very important access point for moving coal from Tennessee, Kentucky and other points in Appalachia. We certainly look forward to seeing that transportation system in place.

Mr. BEVILL. You are aware of Mrs. Boggs' bill to make these ports 55 feet deep. You are supporting that?

Mr. LEMA. We are supporting that.

Mr. BEVILL. Thank you very much.

Are there any questions?

Mr. MANASCO. May I ask my associate to stand. She has improved the image of the coal industry 1,000 percent.

Mr. BEVILL. Thank you very much.

PHOTOVOLTAIC HIGHER EDUCATION EXEMPLAR PROGRAM

WITNESSES

SPECIAL ASSISTANTS TO THE PRESIDENT OF GEORGETOWN UNIVERSITY:

T. BYRON COLLINS, S.J.

WILLIAM L. GEORGE, S.J.

Mr. BEVILL. Father Collins and Father George.

Father George is Special Assistant to the President of Georgetown University.

We are delighted to have you here. You may proceed as you wish.

STATEMENT OF FATHER WILLIAM L. GEORGE, S.J.

Father GEORGE. I would like to give a brief summary report, then ask our report be submitted for the record.

[The report follows:]

APPROPRIATIONS COMMITTEE REQUEST FOR FISCAL YEAR 1982—SUBCOMMITTEE ON ENERGY AND WATER

Mr. Chairman and Members of this Committee, we are Frs. T. Byron Collins, S.J. and William L. George, S.J., Special Assistants to the President of Georgetown University.

We thank you for your past support of the Higher Education National Exemplar Photovoltaic Facility Program.

This Photovoltaic Exemplar will demonstrate that college and university academic facilities can use sunlight on the properly designed academic buildings to produce electricity in an economical manner. The project is underway and approximately 50% complete. (Exhibit 1)

The building structural components that are in place is shown on the attached photograph. On the roof surface, there will be a photovoltaic flat plate water-proof roof mounted.

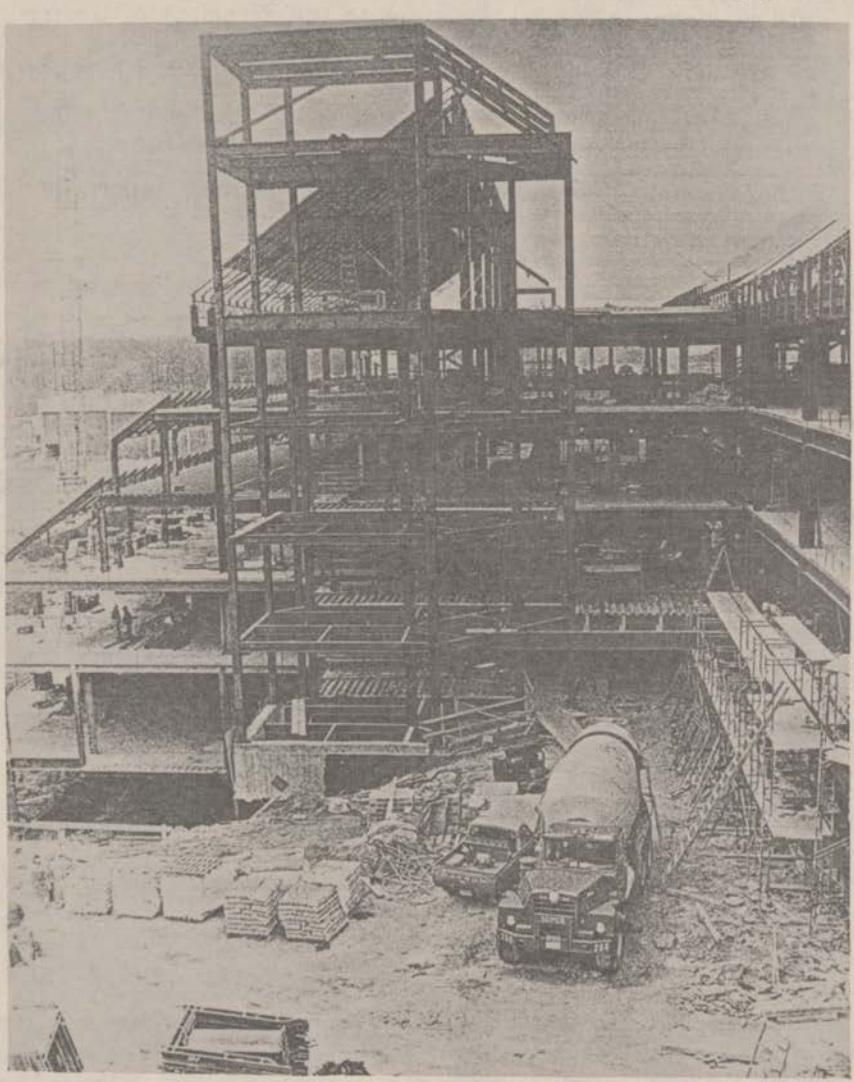
The program is to have the manufacturers get into mass production of photovoltaic modules. This take a research program and puts it on the market. We point out that twelve major manufacturers (Exhibit 2) are preparing to do this at their own cost and submit bids for the project. Total estimates of their own funds in producing the modules is between $4—$8 million dollars. This is in accordance with our agreement to get mass production started or photovoltaic plate roofs for academic facilities.

In accordance with the DOE grant (attached), we request the Committee's support for continued funding in Fiscal Year 1982 to complete the project.

We have received $4.6 million dollars. We request the final funding of $5.4 million dollars for a total grant of $10 million.

Georgetown is providing more than $15,000,000 from other sources toward this exemplar project.

EXHIBIT 1



Higher Education Photovoltaic Exemplar - Nation's Capital -Georgetown University

EXHIBIT 2

OFFERORS LIST

National Exemplar Photovoltaic Program
Georgetown University

1. Stone & Webster Engineering Corp.
245 Summer Street, Boston, Mass.
P.O. Box 2325, Boston, Mass. 02107

2. Solar Power Corporation
Affiliate of Exxon Corp, with subcontractors:
- o The Architects Collaborative
- o Stone and Webster

20 Cabot Road
Wohurn, Mass. 01801

3. Solarex Corp., with subcontractors:
- o Monegon
- o Burt, Hill and Associates
- o Mueller Associates
- o Potomac Electric Power Company

1335 Piccard Drive
Rockville, Maryland 20850

4. Mobil Tyco Solar Energy Corp.
with subcontractor:
- o Solar Design Associates, Lincoln, Mass.

16 Hickory Drive
Waltham, Mass. 02153

5. Helionetics, Inc.
with subcontractor

17312 Eastman Street
Irvine, Ca. 92714

6. General Electric Company
with subcontractors:
- o Solec International, Inc. Hawthorne, Ca.
Acquisition: Great Western Silicon

Advanced Energy Programs Dept.
P.O. Box 8661, Philadelphia, Pa. 19101

7. Westinghouse Electric Corp.
with subcontractors:
- o Burt, Hill & Associates

Power Systems Co., Advanced
Energy Div., P.O. Box 10864
Pittsburgh, PA 15234

8. BDM Corporation, with subcontractor:

- o ARCO Solar

1801 Randolph Road, S.E.
Albuquerque, N.M.

9. Facilities Systems Engineering
Corp. (FSEC), with subcontractor:

2305 Utah Avenue
El Segundo, CA 90245

10. ARCO Solar, Inc., with subcontractors:

- o Ford Bacon Davis, UTAH, Inc.
Salt Lake City, Utah

- o Super Sky Products, Inc.

- o Antione-Heitmann, Assoc.

Alternates:
- o Black & Veatch
- o Kawneer Company
- o Antoinine-Heitmann, Assoc.

20554 Plummer Street
Chatsworth, CA 91311

11. Hughes Aircraft
Support Systems/Areospace GPS

P.O. Box 90515
Los Angeles, CA 90009

12. Motorola, Inc.
Motorola Semiconductor Group

MD-A110 52nd McDowell
Phoenix, Arizona 85008

EXHIBIT 3

PART I - BUDGET PLAN

Grantee: Georgetown University
Grant No.: DE-FG05-80CS83014
Amendment No. A002

TASK I - PHOTOVOLTAIC HIGHER EDUCATION EXEMPLAR

The total estimated cost of the Academic Center (AC) is $17,680,000, of which the Department of Energy support will not exceed $4,000,000. The total DOE current funding obligation for Task I is $4,000,000. The proposed cash flow for the IC is incorporated in the basic grant document.

Drawdowns under the DOE Letter of Credit will be based on the Cash Flow Statement. When disbursements by G.U. vary for the projected cash flow, such drawdowns to cover actual disbursements will be prorated on the basis outlined in the Cash Flow Plan.

TASK II - PHOTOVOLTAIC SYSTEM

The total estimated cost of the Photovoltaic System to be installed on/into the Georgetown University Academic Center is $6,000,000. It is planned that the DOE support will be incrementally funded, $600,000 - FY 1981, $3,050,000 - FY 1982, and $2,350,000 - FY 1983.

Notwithstanding the total DOE support of $6,000,000, the current DOE obligation of funds for Task II is $600,000. The Grantee understands that notwithstanding the inclusion of $6,000,000 as the total estimated cost for this Task II, the Government is not obligated to pay beyond the $600,000 obligated herein.

Drawdowns under the LOC for this task will be based on actual reimbursement billings on hand. Drawdowns for payments under a fixed-price contract will be based on percentage of work completed and/or progress payments.

Budget - Photovaltaic System

1.	Technical Consultant Subcontracts	$ 307,903.00
2.	Management	92,097.00
3.	Photovaltaic System Subcontracts	5,600,000.00
	Total Task II	$6,000,000.00

The total estimated DOE support for Tasks I and II is $10,000,000. The total current DOE funding obligation for the two tasks is $4,600,000.

Father GEORGE. I note that the project is ahead of schedule, that the physics of the photovoltaics is expressing itself very clearly and attractively in the structure itself. It is about 50 percent complete at the moment.

We had asked that the committee provide $5.4 million needed to complete the project in the 1981 supplemental and 1982 appropriations bills if at all possible.

Father Collins can speak more directly.

Mr. BEVILL. We are glad to have you.

STATEMENT OF FATHER BYRON COLLINS, S.J.

Father COLLINS. It is a pleasure to be here.

Because of the support of this committee, this project, which is the Exemplar for Higher Education, is under way. We are about at a 50 percent mark.

It is a matching project. It is about a 50-50 match on the project. We do need the funds to finish the project. We will have our money alongside to match that we are asking from the committee.

We are doing what we said we would do which is to take a research capability developed by ourselves with the Department of Energy, and produce a photovoltaic flat plate shingle that will be used as a roof shingle and put into the marketplace.

The list of companies that have agreed to submit bids on this are 12. There are several from California, the Midwest and the East, that will provide two to five hundred thousand dollars of their own money to submit a bid.

So we are in desperate need of the funds from the committee to match our funds to complete the project.

We are on schedule.

Mr. BEVILL. Very good.

Are there any questions?

Mr. MEYERS. It is good to see you again.

Mr. BEVILL. It is always good to see you, Father Collins and Father George. Thank you for coming. We may need your help to get the bill through.

Father COLLINS. We are good at prayer.

ENERGY RESEARCH

WITNESS

DR. W. EDWARD LEAR, EXECUTIVE DIRECTOR, AMERICAN SOCIETY FOR ENGINEERING EDUCATION, ON BEHALF OF THE AMERICAN SOCIETY FOR ENGINEERING EDUCATION, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES COUNCIL OF GRADUATE SCHOOLS, AMERICAN COUNCIL ON EDUCATION AND THE BUSINESS-HIGHER EDUCATION PROGRAM

Mr. BEVILL. Dr. Lear.

Dr. Lear has so many outstanding qualifications that I won't try to look at all of them. The most important: he was Dean of the Engineering School at the University of Alabama for 14 years. That in itself is sufficient qualification.

[The statement of Dr. Lear follows:]

Statement of Dr. W. Edward Lear

My name is W. Edward Lear, and I am the Executive Director of the American Society for Engineering Education. The society which I represent has individual and institutional membership consisting of virtually all of the engineering colleges in the United States, the majority of the faculty members of those colleges, and a large number of the major corporations of the nation which are are technologically-based and therefore have a strong stake in engineering education. I am also representing today in addition to ASEE the National Association of State Universities and Land Grant Colleges, the Association of American Universities, the Council of Graduate Schools, the American Council on Education, and the Business-Higher Education Forum. Among them, these organizations have a membership of approximately 1,400 public and private universities which are the source of essentially all of the engineering and scientific manpower (and woman-power) of the nation.

Mr. Chairman and distinguished members of the Subcommittee, I am pleased to have this opportunity to discuss with you two issues related to the appropriation for the Department of Energy. First I shall present some facts about the precarious engineering manpower situation of the nation and suggest the role which the Department of Energy can play in providing a piece of the solution to what has come to be widely recognized as "the crisis in engineering education". I should also like to speak to the critical importance to the nation of a continuing, stable commitment to DOE support of energy-related research in the universities.

The engineering manpower situation, although complex in its origins, is simply stated: Unless strong corrective measures are taken quickly by both the public and private sectors to reverse current trends, our engineering colleges will not be able to supply graduates in either the quantity or quality to meet the future industrial and defense needs of the nation.

The implications of such a result are obvious. The very knowledgeable members of this Subcommittee are well aware of the direct connection between strong technological and scientific capability and the productivity and innovation which allow industry to compete in the world market and the military to maintain a sophisticated modern defense capability.

The problems in engineering education which have been accurately labled a crisis have been documented in a number of recent studies, among them the report to President Carter from the National Science Foundation and the Office of Education on the state of engineering and science education in the United States. Each study shows that for the engineering colleges there is severe overcrowding of generally antiquated undergraduate classroom and laboratory facilities, laboratory equipment which is both inadequate and obsolete, a pool of available new faculty which is far too small to supply current needs, and faculty leaving for the more attractive salaries of industry. These problems interact with other forces in the following way to place in jeopardy the future supply of engineering graduates:

(1) Undergraduate engineering enrollment in the U.S. is at an all-time high resulting in excessive faculty loads and overcrowded facilities.

In 1980, 59,000 B.S. degrees were awarded, compared to 38,000 four years earlier. (As an aside, this represents 6% of all bachelor's degrees awarded in U.S. universities. Comparable figures in Japan, West Germany, and eastern Europe are 21%, 37%, and 42%, respectively.)

(2) Competition for these graduates among industry and government employers is keen. Starting salaries are in the $25,000/year range for some disciplines. The fresh graduate frequently commands a higher salary than some of his PhD-trained professors.

(3) The number of U.S. engineering students continuing to graduate study has declined steadily for the past several years, primarily due to the high salaries available to B.S. graduates compared to typical graduate student stipends of $4,000 - $8,000.

(4) Engineering PhD production in the nation was 2,700 in 1980, down 1,000 from the 1972 figure. Of the 2,700 graduates, roughly 1,000 are foreign nationals, the majority of whom return to their native countries. Among the remaining U.S. citizens, 63% typically take jobs in industry or government, leaving 600-700 available for university faculty positions.

(5) High undergraduate enrollments plus normal attrition in faculty ranks have resulted in 2,000 open faculty positions in U.S. engineering colleges today.

(6) Unable to fill faculty positions, engineering colleges in increasing numbers are moving to limit or decrease enrollments to insure quality education.

(7) Limited and decreased enrollments result in even keener competition for B.S. graduates, further decreasing the attractiveness of graduate study for the students.

(8) The cycle continues.

We have what is clearly an unstable situation calling for fast corrective action if disaster is to be averted in our engineering manpower supply. I should like to make it clear that although I have not spoken specifically of engineering manpower with energy expertise in focusing on the general shortage of engineering faculty which is leading toward a shortage of B.S. graduates, the two are inseparable. Energy is the business of engineers and a shortage of engineering manpower at whatever level is a shortage of technical manpower for the solution of energy problems.

An obvious key point of attack on the problem is to increase the number of engineering B.S. graduates who continue their studies toward the PhD, thus increasing the pool of people with advanced training available not only for faculty positions, but also for the needs of industry and government. Here the Congress has the opportunity -- and also the obligation, given the importance of this issue to the economic and defense strengths of the nation -- to take through the Department of Energy appropriation a small but very important step in correcting the current situation.

In the budget recommended for the Department by the Administration is a $1 million line-item for the support of energy related graduate traineeships in engineering. This is a scaled-down version of the $5 million authorization for this purpose by the Congress during the past session. We urge that the program be initiated at the $5 million figure at a minimum to insure a reasonable federal seed-money impact on this national problem.

Given the current backlog of open faculty positions and normal annual replacement needs, a conservative estimate is that it will require the production of 1,000 new engineering PhD's per year (which would return us to the 1972 level) to eliminate the shortfall over the next several years. A $5 million traineeship program will allow approximately 250 new students to begin study toward the PhD this year, assuming a $12,000 first-year stipend which will make graduate study a more attractive alternative, plus an $8,000 per student cost-of-education allowance to the institution.

It is apparent that the recommended support for 250 new graduated students per year will not alone solve the problem. This is a severe national problem requiring national attention, but with no more federal government intervention than is appropriate or necessary. The universities, industry, state governments, and private giving all must become partners in the problem solution. However, federal support should play the role of catalyst when it is in the national interest to do so. The allocation of the relatively small amount of seed money proposed can serve as leverage by calling attention to the problem and the need for substantial support from the other sectors; in fact, I feel personally that it would be perfectly appropriate to make federal funding after the third year contingent upon a matching effort by the industrial sector. It should be noted, incidentally, that the federal government has a much higher than usual direct stake in insuring an orderly solution to the engineering manpower problem, since the government itself is a large employer of engineers at all levels. The defense establishment, for example, today needs engineers and advanced engineering concepts on a large scale.

In recognition of our engineering manpower difficulties the private sector is already moving to establish mechanisms to allow it to pick up a share of the load. Several working groups with industry/university-membership are exploring their mutual responsibilities in providing the support required to alleviate the current crisis. One of these is the Engineering Manpower Taskforce of the Business-Higher Education Forum, a group of thirty major corporate chief executives and an equal number of university presidents, organized by the American Council on Education. Another, the ad hoc Committee on Engineering Education, was organized by a group responsible for the manpower needs of several of the nation's leading employers of engineering talent. I feel that there is every reason to be optimistic that industry is going to be responsive to its obligation.

Let me now turn to another vitally important element of the appropriation for the Department of Energy. That is the need for a continued commitment to the support of energy research in the universities through the University Research Support Program and the Basic Energy Sciences, High Energy Physics and Nuclear Physics Programs of DOE through which university faculty and graduate student expertise in brought to bear on energy problems. Such support is not only a major

part of the life blood of the graduate programs which must supply the requirements of industry, universities and government for highly-skilled energy experts, but is a prime element in assuring U.S. energy independence and long-term leadership in energy resource development.

The approach through university research to the marketplace has proved itself time and again in recent decades as the major source of scientific and technological developments of extreme importance to the personal, economic and defense health of the nation. It is important that we remember this lesson as we consider the imperative requirements of the nation to meet our energy needs, find new ways to increase our industrial productivity, strengthen our defense, and address other pressing problems. We would therefore urge the Subcommittee to consider carefully the adequacy of the recommendations of the Administration for DOE support of university research to insure that our past commitment to a sound investment policy is sustained and that the current rush toward budgetary retrenchment does not produce sudden and disruptive changes in our national research effort.

Mr. Chairman, members of the Subcommittee, thank you for allowing me this opportunity to explore these important issues with you. I shall be pleased to respond to any questions which you may have.

STATEMENT OF MR. LEAR

Mr. LEAR. I appreciate very much this opportunity to discuss briefly—and I assure you I will be brief—a very small but important item in the Administration's recommendation for the Department of Energy. That is the Energy-Related Traineeship Program for Engineers.

What I would like to demonstrate in the short time I have available is the importance of that far beyond what might be apparent in the language of the budget.

This is not only to provide the graduate trained people for the energy industry but in alerting that we are on the verge of a very sharp decrease in the number of engineering people—manpower in general—that is available for the Nation's industrial and defense needs.

The problem we are faced with is very simple. Unless we do turn things around, the engineering colleges of the Nation are simply not going to be able to furnish either the numbers or the quality of people required for our industrial defense needs. It is as simple as that.

The way this comes about, briefly, the colleges are bursting at the seams with people which overextends the facilities and faculty capabilities of the Nation's colleges.

The students coming out are getting offers in record fashion. The industrial people and the government people are bidding for them—starting salaries in the range of $25,000 are not unusual in many of the disciplines, higher than some of the professors of the students.

As a result of this, the incentive to go to graduate school with the low stipend and long time involved is not great and we have lost people in the last years out of the engineering colleges. That is down a thousand from 1972.

The problem is we need about 2,000 people right now on the faculties of these engineering colleges. Of these graduates, almost half are foreign nationals. Of the balance of U.S. citizens, two-thirds go into industry and government which leaves a very small three or four hundred available for engineering faculties with a 2,000 need. There is no way to pick up that slack.

The thing that engineering colleges are doing in increasing numbers is limiting enrollment which in turn causes more competition for the people coming out, less incentive to go to graduate school, fewer people in the pool.

It is a self-generating cycle that needs positive input to turn it around.

We need funding at the level of $5 million which will allow us to turn out 250 new people into the stream each year which is not going to do the job. We need about a thousand a year over the next few years to do this, to create a partnership between government and the private sector, universities and industry, to pick up the balance of that load or the major portion of it and use the traditional catalyst role of government to create a program which would be a model for the private sector to follow.

We would urge very strongly this program be initiated at that level.

I have some remarks about energy research in the printed testimony which I will have submitted for the record.

Mr. BEVILL. Thank you very much for a very fine presentation. We are delighted to have you appear before our committee and we will certainly work with you and give you every consideration we can.

SOUTHEASTERN POWER ADMINISTRATION

WITNESSES

W. DONALD COLMER, VICE PRESIDENT, PUBLIC AFFAIRS, MISSISSIPPI POWER & LIGHT CO., JACKSON, MISS.

SHERWOOD W. WISE, ESQ.; WISE, CARTER, CHILD & CARAWAY, JACKSON, MISS.

Mr. BEVILL. Our distinguished Chairman of the House Appropriations Committee is here and some of his good people from Mississippi, I will let you introduce.

Mr. WHITTEN. Are they next in line?

Mr. BEVILL. We will take them up at this time.

STATEMENT OF HON. JAMIE L. WHITTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. WHITTEN. I have known Bill Colmer for many, many years. He doesn't have any problem he can't solve but it takes him a good while to solve some of them. We are glad to have you. I came just to hear your testimony. I left my hard questions in the other room.

[The statement of Mr. Colmer follows:]

Testimony

of

W. Donald Colmer, Vice President, Public Affairs

Mississippi Power & Light Company

Jackson, Mississippi

Mr. Chairman, on behalf of the officers and directors of Mississippi Power & Light Company and our 300,000 customers, I thank you and your Committee for hearing our views today.

We have never had any reason to speak to you on the subject of the appropriations for the Southeastern Power Administration and would not have asked to be heard today, except for the January 27, 1981 letter we received from your Committee staff. The nature of the questions contained in that letter was disquieting, to say the least, and prompted us to ask for this opportunity.

* *

As you requested in your letter of invitation dated March 5, 1981, I will summarize our response and then if time permits, present our entire statement.

Your letter of inquiry begins with an expression of concern over the inability of the Southeastern Power Administration to serve but a small portion of its preference customers. It also expresses interest in options available to provide low-cost peaking or baseload power to the cities comprising the Municipal Energy Agency of Mississippi (MEAM).

We share your concern over the availability of low-cost power to electric customers; and on behalf of our 300,000 customers in Western Mississippi, we find it difficult to understand the distinction between our customers and those the Congress has given a more favored status.

The six specific questions in your letter are dealt with in detail in the body of this statement, with the exception of question six.

As we point out in our statement, we interpret Section 15d(a) of the TVA Finance Act of 1959 as prohibiting such transactions.

However, our company does transmit power to and from publicly and privately-owned electric utilities with which we have interconnections. This is accomplished under the terms of rate schedules on file with the Federal Energy Regulatory Commission.

* *

Before addressing the specific questions in your letter, I would like to speak to the matter of concern your Committee expressed regarding the availability of SEPA hydroelectric energy for preference customers.

The municipalities that constitute MEAM referred to in your letter have a total of 31,000 customers. Mississippi Power & Light Company presently serves all the wholesale requirements of five of these eight municipalities, representing 9,000 of the 31,000 total.

In addition, MP&L serves 300,000 customers at retail in 45 counties located in Western Mississippi. This is one of the most economically disadvantaged regions in the United States by every statistical yardstick.

All of the present generating capacity owned by the company I represent uses natural gas and residual oil as fuel.

Our customers, too, have borne the brunt of the federally sanctioned curtailment of our natural gas supply and the subsequent substitutions of higher priced oil.

We fail to comprehend why the Congress is so concerned about the distinction between an electric consumer located in a municipality or rural area served by my company and those that happen to live in adjacent political subdivisions served by a municipal or rural electric power system.

I believe I am expressing to this Committee the collective judgment of our 300,000 customers, few of whom are familiar with the legislative process, that as individuals they have little voice in their government. None of them, to my knowledge, understand the rationale behind the preference clause. Neither do I.

Without belaboring the point, I hope that the Congress will some day remove the second-class status it has imposed on our customers by denying them equal rights to receive economic benefits from federally-owned hydroelectric generating facilities paid for and maintained by their taxes.

Now, in response to your specific questions, I submit the following comments:

Question 1 - The amount of power you currently provide to each MEAM member city and at what cost? Please express costs in cents for kwh.

Response - MP&L has interconnection agreements with the municipalities of Clarksdale, Greenwood and Yazoo City. These agreements, filed with the Federal Energy Regulatory Commission, are public documents and are therefore available to this Committee.

The cost of power exchanged under these agreements varies each hour of the day, based on the type of power supply and upon other terms and conditions of the sale or exchange. However, the use of these Interchange Agreements has been fairly regular. For example, during 1980, MP&L sold a total of 23,407,000 kwh of Emergency, Scheduled Maintenance and Economy energy to Clarksdale, Greenwood and Yazoo City at an average rate of 5.061¢ per kwh. During this period, MP&L has also purchased a relatively small amount of power from these municipalities for somewhat higher prices.

As previously stated, MP&L also provides transmission service to these three municipalities under schedules on file with the Federal Energy Regulatory Commission. This enables them to "shop" for less expensive power supply sources available through utilities with which we are interconnected on an interruptible, short-term or long-term basis. During January 1981, for example, MP&L provided bulk power transmission service to Clarksdale, Greenwood and Yazoo City to facilitate purchase of a total of 17,588,000 kwh of energy from REA

cooperatives in Alabama and a municipality in Louisiana. The net transmission rate averaged 0.131¢ per kwh.

The wholesale power we sell to the municipalities of Canton, Leland, Kosciusko, Durant, and Itta Bena (which are full requirements wholesale customers of MP&L) is priced under schedules filed with and approved by FERC. For the month of January 1981, 190,350,000 kwh was supplied and the average cost per kwh was 3.64¢.

Question 2 - A copy of the latest (1980) Form 1 submitted to FERC and, if possible, a letter size map of your company's service area.

Response - Form 1 for the FERC is now in preparation and will be submitted to FERC, as required by April 1, 1981. When it has been completed and submitted, we will be glad to provide you with a copy of the public document. A copy of our service area map is attached to this statement.

Question 3 - The date and circumstance surrounding your company's last offer to provide Clarksdale, Yazoo City and Greenwood with baseload power. Also, please provide any energy demand and generation cost data you may have on the three cities.

Response - We have no data on the energy demand and cost data for these three municipalities. We have made no recent offers to these municipalities to provide their total baseload requirements at wholesale.

In the latter part of 1964, MP&L representatives discussed an interconnection agreement with the city of Clarksdale and offered to enter into such an agreement with the municipality. This offer was renewed on February 28, 1966 and in February 1969 without results. Again, in December 1969, we proposed an interconnection agreement, which, at the request of Clarksdale, was studied by the Federal Power Commission. The FPC, after study, concluded that Clarksdale, could save $410,000 a year by discontinuing adding additional generating units and purchasing all additional requirements from MP&L. The FPC study states: "It is concluded that the city of Clarksdale can derive substantial benefits by interconnecting with MP&L and it is recommended that the city pursue this with Mississippi Power & Light Company at the earliest opportunity."

Question 4 - Your company's willingness and ability to provide 50 to 100 megawatts of baseload power to Clarksdale, Yazoo City and Greenwood for a period of several years. Assume that each city would need about one-third of the total.

Response - My company has agreed to allow MEAM to purchase up to 2.45% or approximately 62,000 KW of Grand Gulf Nuclear Station. We have been discussing this sale with MEAM, but it has not yet decided whether it wishes to own an interest in the facility.

Question 5 - The rate (in mills-per-kwh) you are currently charging Clarksdale for transmitting 25 megawatts of power from the Alabama Electric Cooperative to the city.

Response - Our company has a rate filed with and approved by the FERC for the wheeling of power. The energy we are transmitting to MEAM is accomplished under the terms of this rate schedule. The price varies with our system load characteristics. However, in January 1981, the average in mills/kwh was 0.131¢ per kwh.

Question 6 - If TVA were willing to make 110 megawatts of baseload power available to Mississippi Power & Light Company for further distribution to the three cities, how much of the benefits associated with the lowest TVA rates could be passed on to the cities? Assume that TVA could provide the power at 25-mills-per kwh.

Response - I am not at liberty to respond to this question as such a transaction is clearly illegal under the prohibitions contained in Section 15d(a) of the 1959 TVA Self Financing Act.

The prohibition was reconfirmed in House of Representatives Report No. 96-491, 96th Congress, First Session, dated September 28, 1979; in Senate Report No. 96-175, 96th Congress, First Session, dated May 5, 1979; and in the Policy Statement on the Area Limitation Provisions of Section 15d(a) of the TVA Act, promulgated October 4, 1979 by the Board of Directors of the TVA, and published on page 59033 of the October 12, 1979 issue of the Federal Register.

Mr. Chairman, I would be remiss if I did not advise this Committee that my company is deeply concerned that the Congress is considering reopening the very old and sometimes very bitter struggle between investor-owned electric utilities and the TVA over service territories.

I recognize the political and economic pressures arising from publicly-financed power systems for a share of the diminishing hydroelectric pie; and for the considerable cost advantage of treasury-financed power systems. But, I urge this Committee to continue to give companies such as MP&L the service area protection we need to continue as a part of America's business community.

As you know, preference had its beginning in the 1906 Reclamation Act when the Congress authorized the Secretary of Interior to give preference to "municipal purposes" such as street lighting and water pumping when power was produced as a by-product of irrigation projects. The purpose for which the power would be used and not the purchasers of power was what concerned Congress in the 1906 Act.

When the Congress created the Tennessee Valley Authority in 1933, it embodied a different concept on preference, specifying that TVA power would be made available on a preferential basis to states, counties, municipalities and cooperatives.

This prompted an ever-widening demand for the creation of governmental power entities on the periphery of the drainage basin of the Tennessee River. About one-fourth of the land area in the State of Mississippi quickly became TVA territory, all of which lies outside the drainage basin of the river.

Investor-owned companies could not compete with TVA; therefore, the only limit at that time was the amount of money Congress was willing to appropriate to keep TVA's expansion program going.

As you know, a compromise was struck that culminated in the passage of the 1959 TVA Financing Act.

Congress put a fence around TVA and at the same time gave TVA the authority to finance its capital requirements through securities issued against power revenues.

In his testimony of September 12, 1979 before another Committee, TVA Chairman David Freeman correctly described the ensuing 20 years. He said in part, "For the last 20 years TVA has lived in peaceful co-existence with the neighboring privately-owned power companies . . . to the mutual advantage of TVA, those companies and their customers." Our company agrees with that statement.

We are now asking this Committee and the Congress to preserve the territorial integrity established in the 1959 Act so that we can continue our peaceful, cooperative relationship with the public power entities.

These are difficult times. We are grappling with the problems of inflation, plant siting, operation, and complex regulatory restraints. We hope to solve these problems, but we can't do it without service territory and customers.

With regard to the general question of transmitting power to and from publicly and privately-owned electric utilities with which we are interconnected, we have the wheeling tariff on file with the FERC under which this is being accomplished daily.

I thank the Committee for its courtesy in hearing our views.

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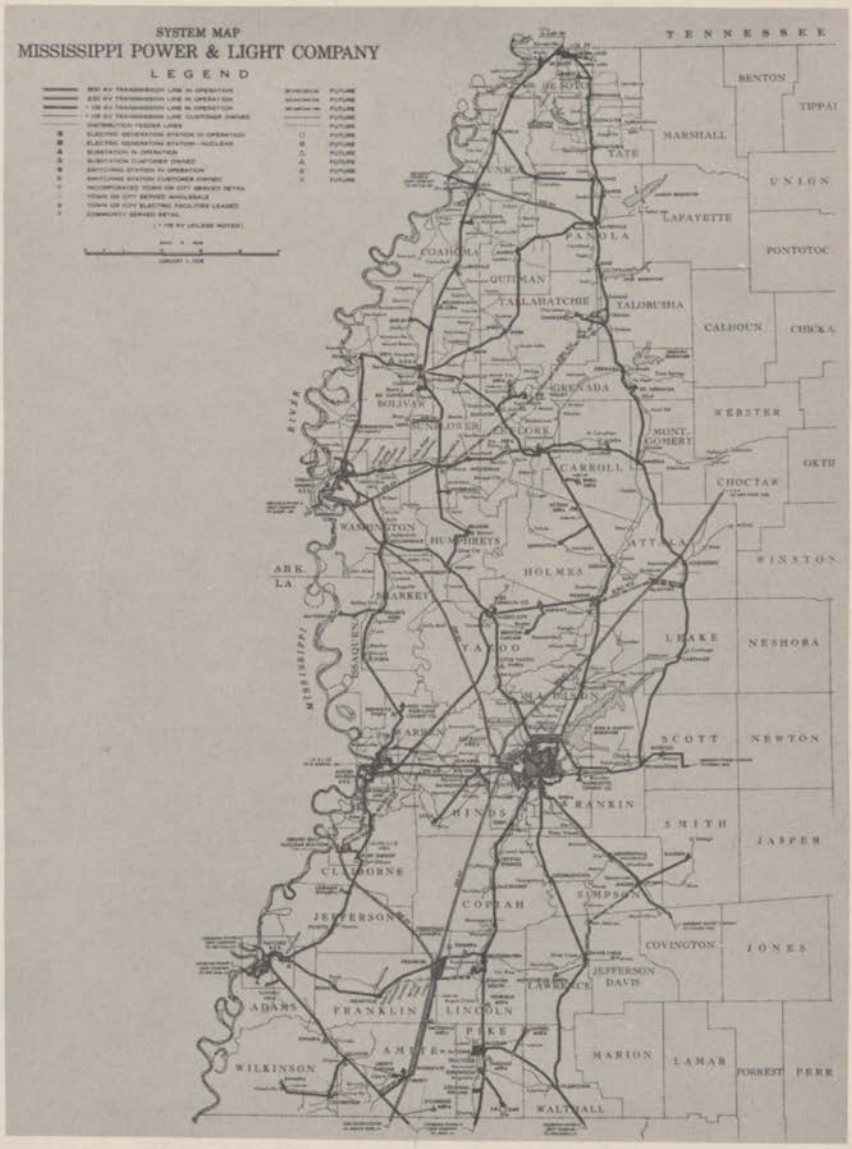
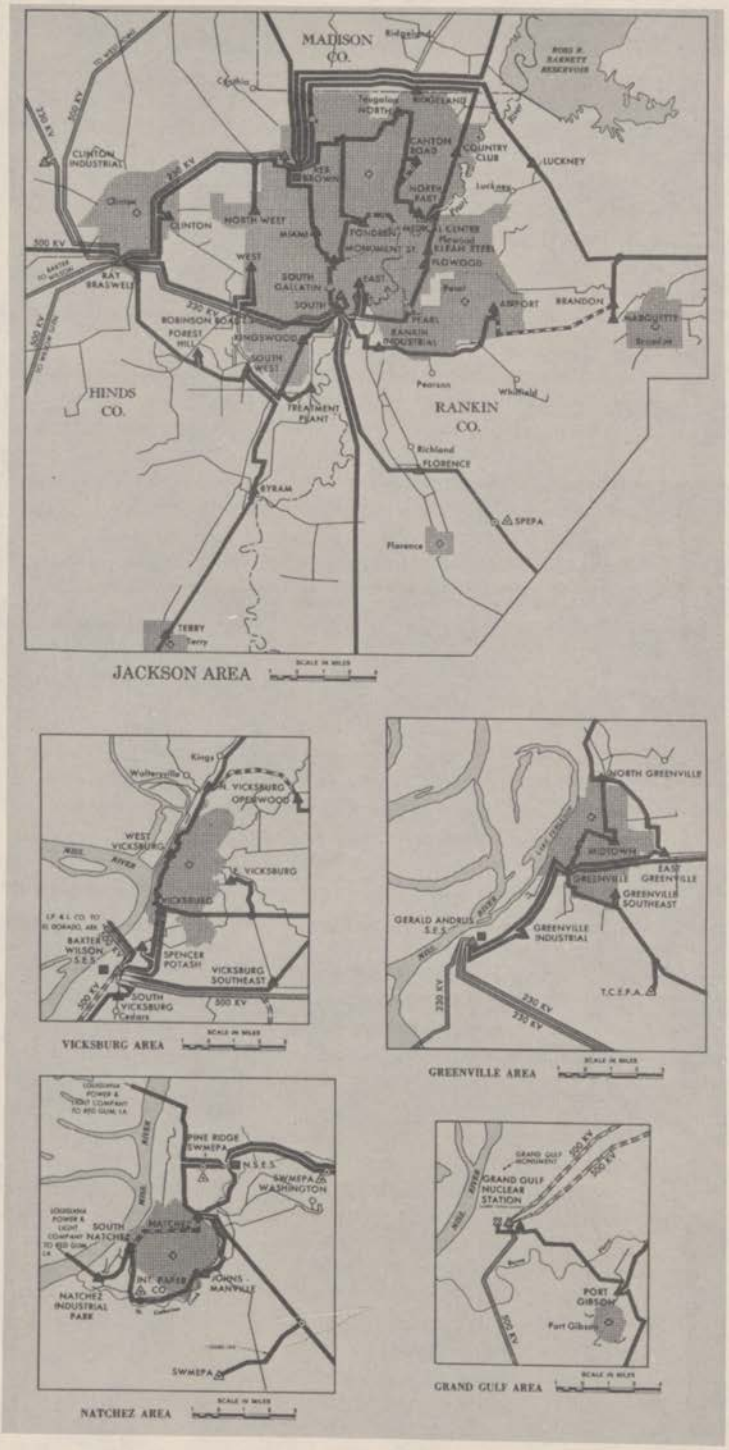

SYSTEM MAP
MISSISSIPPI POWER & LIGHT COMPANY
LEGEND
TENNESSEE
BENTON
TIPPAH
MARSHALL
TATE
UNION
LAFAYETTE
PANOLA
PONTOTOC
COAHOMA
QUITMAN
TALLAHATCHIE
YALOBUSHA
CALHOUN
CHICKASAW
GRENADA
WEBSTER
BOLIVAR
SUNFLOWER
LEFLORE
MONTGOMERY
CARROLL
OKTIBBEHA
CHOCTAW
WASHINGTON
HUMPHREYS
ATTALA
WINSTON
ARK.
LA
HOLMES
MARKET
LEAKE
NESHOBA
YAZOO
ISSAQUENA
SHARKEY
SCOTT
NEWTON
HINDS
RANKIN
SMITH
JASPER
CLAIBORNE
COPIAH
SIMPSON
JEFFERSON
COVINGTON
JONES
JEFFERSON DAVIS
ADAMS
FRANKLIN
LINCOLN
PIKE
AMITE
WILKINSON
MARION
LAMAR
FORREST
PERRY
WALTHALL


MADISON CO.
CLINTON INDUSTRIAL
CANTON ROAD
COUNTRY CLUB
LUCKNEY
CLINTON
NORTH WEST
WEST
SOUTH GALLATIN
EAST
SOUTH
AIRPORT
BRANDON
RAYMOND
BAY BRASWELL
ROBINSON ROAD
FOREST HILL
KINGSWOOD
SOUTH WEST
PEARL
RANKIN INDUSTRIAL
HINDS CO.
RANKIN CO.
TREATMENT PLANT
RICHLAND
FLORENCE
BYRAM
SPEPA
TERRY
JACKSON AREA
VICKSBURG AREA
GREENVILLE AREA
NATCHEZ AREA
GRAND GULF AREA
GRAND GULF NUCLEAR STATION
PORT GIBSON
NORTH GREENVILLE
MIDTOWN
EAST GREENVILLE
GREENVILLE SOUTHEAST
GERALD ANDRUS S.E.S.
GREENVILLE INDUSTRIAL
T.C.E.P.A.
WEST VICKSBURG
N. VICKSBURG
OPEENWOOD
VICKSBURG
BAXTER WILSON S.E.S.
SPENCER POTASH
VICKSBURG SOUTHEAST
SOUTH VICKSBURG
PINE RIDGE SWMEPA
N.S.E.S.
SWMEPA WASHINGTON
SOUTH NATCHEZ
INT. PAPER CO.
JOHNS-MANVILLE
NATCHEZ INDUSTRIAL PARK
SWMEPA

STATEMENT OF MR. COLMER

Mr. COLMER. Mr. Chairman, and you, Mr. Chairman, it is our pleasure to be here. We have known our chairman here for a long time. We respect him, admire him and appreciate the work he does.

Mr. BEVILL. That is the way we feel about him too.

Mr. WHITTEN. This is worthwhile. I am glad I made it to the meeting.

Mr. COLMER. Before I say what little I am going to say here today—and I will be brief because of your compacted schedule—I would like to express the thanks of the management of our company for what you and Mr. Whitten have done in the area of expediting the licensing of nuclear power plants.

This is a matter of great urgency with us and we followed with a lot of interest your handling of this problem and we hope that it will bear fruit.

Mr. BEVILL. I believe you have communicated with him very well. If we can just get better results.

Mr. MYERS. They write nicer letters now, tell us what they are doing.

Mr. COLMER. That is good. We believe they are being responsive in the field too.

Mr. BEVILL. In the last three years they have issued two licenses and there are 13 nuclear power plants sitting ready for license in this country and the poor, rich and middle income people of this country, the consumers, are paying for those plants sitting idle while the Nuclear Regulatory Commission shuffles papers.

Mr. COLMER. Yes, sir; we have a horror story or two and I would like to share with you sometime.

I am here on behalf of the officers and directors of my company and our 300,000 customers located in western Mississippi.

We wouldn't be here at all, we have never had any reason to appear before you because of the subject of the appropriations for the Southeast Power Administration except we did get a letter from your staff and it raised some questions that we felt we wanted to be heard on. We have done that in the written response that we have filed with your clerk.

In summary, this is what we really want to say about your letter.

Your letter of inquiry begins with an expression of concern over the inability of the Southeastern Power Administration to serve but a small portion of its preference customers.

It also expresses interest in options available to provide low-cost peaking or baseload power to the cities comprising the Municipal Energy Agency of Mississippi (MEAM).

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However, our company does transmit power to and from publicly and privately-owned electric utilities with which we have interconnections. This is accomplished under the terms of rate schedules on file with the Federal Energy Regulatory Commission.

Let me say in closing, if I may, Mr. Chairman, that the matter of the possibility of Congress reconsidering the territorial limits it placed on the Tennessee Valley Authority in 1959 causes us a good bit of concern.

I know that Mr. Freeman, the Chairman of TVA, in some testimony last year correctly described the situation that has existed between the Tennessee Valley Authority and those companies like ours that are on the periphery of the service area. He said this:

"For the last 20 years, TVA has lived in peaceful co-existence with the neighboring privately-owned power companies . . . to the mutual advantage of TVA, those companies and their customers."

Our company agrees with that statement.

We are now asking this committee and the Congress to preserve the territorial integrity established in the 1959 Act so that we can continue our peaceful, cooperative relationship with the public power entities.

These are difficult times. We are grappling with the problems of inflation, plant siting, operation, and complex regulatory restraints. We hope to solve these problems, but we can't do it without service territory and customers.

With regard to the general question of transmitting power to and from publicly and privately-owned electric utilities with which we are interconnected, we have the wheeling tariff on file with the FERC under which this is being accomplished daily.

I thank the committee for its courtesy in hearing our views.

Mr. BEVILL. Thank you very much, Mr. Colmer.

Mr. WHITTEN. It is good to have you here.

NUCLEAR REGULATORY COMMISSION

Mr. BEVILL. I see our good friend Congressman Morrison is here. We will move to you so you can get back to your work. The chair recognizes you. You may file your statement and proceed as you wish.

STATEMENT OF HON. SID MORRISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. MORRISON. Chairman Bevill, I would like to thank the subcommittee for the opportunity to express my concerns about the Nuclear Regulatory Commission. I thank you for hearing my testimony out of order so we may get on to other things. Over the years the subcommittee has done an outstanding job in the development of a sound national energy policy.

The Fourth Congressional District of Washington, the Columbia River District, is perhaps the most energy intensive in our country.

From the early development of hydroelectric power, to leadership in nuclear energy, to advanced wind systems, central Washington has played a key role in our Nation's progress towards energy independence.

You can understand why my concern centers around the energy needs of the Northwest and the interests of the Washington Public Power Supply System. But my concerns are not simply parochial.

The problems faced by WPPSS are the same problems which are faced by every utility throughout our Nation.

My major concerns are these: First, and most important, is the serious delays in licensing.

Second, the NRC's enforcement policies.

And, third is the problem of ever-changing regulations and backfitting.

These concerns may only indirectly impact the appropriations process, but because of the leadership you have given, I believe that I am in order in presenting them to you.

NRC safety reviews are not scheduled and completed in a timely fashion. Coupled with a lengthy hearing process the situation is often out of hand. The cost of these delays is enormous and it is simply passed on to the ratepayer.

In the Northwest, even with relatively low power replacement costs, the cost of delaying a nuclear power plant is on the order of $1 million per day.

I understand in other areas like California, with higher electrical costs, licensing delays result in additional costs of over $2 million a day.

Mr. BEVILL. Three billion dollars a year for the country.

Mr. MORRISON. You are helping make my point, Mr. Chairman. I appreciate that.

Mr. BEVILL. It is a very good point.

Mr. MORRISON. In my area two plants have been in search of construction licensing since 1973, and five are in various stages of construction.

One particular plant begins, in a few days, the 24-month countdown toward an operating permit.

Whatever your committee can do to encourage the NRC to staff up to handle these licenses and permits on a timely basis will be vital.

The key, as I see it, to solving this problem is the appointment of a fifth Commissioner and a strong Chairman so the currently deadlocked Commission can begin to function.

I realize this will require some help from other places in the Capitol.

Along with this, NRC management must be improved. This includes the reallocation of manpower resources and priority on licensing case work, goal setting, planning performance measurement, and most of all a workable decision-making process.

This action will allow the Commission to more effectively direct Hearing Boards and further remove the existing bottleneck.

NRC's enforcement policies do not take into account their overall effect on licensing performance and plant safety. The Commission's policy which establishes categories of violations and related predetermined fines, even when utilities identify their own problem, seems to me to discourage self-regulation and would have a negative effect on safety.

Based on WPPSS experience with the interim Enforcement Policy to date, the NRC approach seems to apply the policy in a

very "cookbook" rigid fashion to maximize the civil penalties involved. This clearly does not serve safety.

It is my view that the guiding principle in enforcement policy should be to take those actions which maximize incentives for the utility and plant operators to enhance safety.

Finally, the pace at which new regulations are changed is very disturbing. Ever since Three Mile Island, the regulatory atmosphere has been unstable and rapidly changing. The new requirements often show a lack of adequate understanding of their net effect on plant safety.

When these changes occur, plants that are operating or under construction are often required to "backfit" without clear need or proper cost benefit considerations.

WPPSS, in order to complete emergency facilities in time for scheduled plant operation, has had to commit to multi-million dollar programs based on highly fluid requirements which could be changed at any time.

Now, the Commission has issued yet another set of Emergency Planning requirements and it is not clear at present whether current facilities will meet these new rules.

Mr. Chairman, the NRC's regulatory role needs to be modified. The NRC should not be in the business of specifying detailed design and location.

It is more important that they develop functional criteria necessary to assure safety and judge adequacy of utility implementation. NRC's policies and practices should be revised to require backfitting only if it is necessary to meet established goals.

I would like to again thank you for this opportunity to express my concerns about the NRC. I would hope the subcommittee will carefully consider these problems and provide the NRC adequate funding.

I would also like to offer whatever assistance I can to the subcommtitee in these matters.

Mr. BEVILL. It is a very fine statement and I am sure every member of this subcommittee concurs with everything you have said.

What you may do, you may urge the President to appoint someone to fill this vacancy. We need somebody else. Thank you.

Mr. MORRISON. Mr. Chairman, if members of the subcommittee have recommendations for those positions, I certainly would be delighted to advance them.

Mr. MYERS. It is a good statement. We are concerned about the same problems.

Mr. BEVILL. Thank you for your patience. We are pleased to have you with us.

FUSION PROGRAM

WITNESSES

DR. ALEXANDER J. GLASS, PRESIDENT, KMS FUSION, INC.
TERENCE C. LIDDY, VICE PRESIDENT, KMS FUSION, INC.

STATEMENT OF ALEXANDER GLASS

Mr. GLASS. Mr. Chairman and gentlemen, I want to thank you for the opportunity to be here. I am Alexander Glass and I am the President of KMS Fusion.

I have submitted a written statement for the record and with your permission I would like to have these remarks incorporated into the record as well.

Mr. BEVILL. Permission granted.

[Mr. Glass' statement follows:]

KMS fusion, inc.

KMS Fusion, Inc. is a private company in Ann Arbor, Michigan, conducting a program of research in Inertial Confinement Fusion (ICF) under the sponsorship of the U.S. Department of Energy. KMS Fusion employs 134 people and was funded by DOE at a level of $10.5 million in 1981. The company has been an active participant in laser fusion since 1969, and has contributed major achievements in the ICF program. The first thermonuclear neutrons obtained from a laser-driven implosion were observed at KMS Fusion in May, 1974. KMS Fusion was one of the first laboratories in the world to carry out implosion studies using frequency-converted light. The Chroma I laser at KMS Fusion is the most powerful visible-light fusion laser operating today, anywhere in the world.

In 1979, the Assistant Secretary of Energy for Defense Programs instituted lead laboratory management in the ICF program. The Lawrence Livermore National Laboratory(LLNL) was designated Lead Laboratory for 1.06 m and shorter-wavelength target experiments, referred to as Glass Laser Experiments. As one of the U.S. laboratories conducting fusion research with a powerful glass laser, KMS Fusion was designated one of three support laboratories in the Glass Laser Experiments program. Under lead laboratory management, the KMS Fusion activities are fully integrated into the national ICF program. Cooperation with other laboratories, especially LLNL, is fostered under this arrangement. In 1981, experiments were carried out at KMS Fusion by LLNL scientists working jointly with our staff. We plan to expand on our collaboration in 1982. The responsiveness of KMS Fusion to Lead Laboratory management was cited in last year's report of the House Armed Services Committee.

The facilities at KMS Fusion are cleared to allow us to pursue classified investigations. Since one of the major target design approaches in Inertial Confinement Fusion involves classified concepts, the ability to pursue classified research, both experimental and theoretical, greatly enhances our participation in the national program. We are currently embarking on our first series of classified target experiments.

During 1981, the KMS Fusion program places particular emphasis on the development of target fabrication technology, and the maintenance and operation of a flexible experimental facility. The KMS Fusion target fabrication effort is concentrated on improving glass Microshell technology, developing polymeric materials, and evaluating techniques for the manufacture of complex targets, involving both metal and dielectric components. All of these technologies will be required for the next generation of targets used in ICF research, especially on the Nova facility at LLNL. KMS Fusion is currently supplying both classified and unclassified target components to the other laboratories in the national program, including LLNL, Los Alamos, Sandia Laboratories, the Naval Research

Laboratory, and the University of Rochester. Additionally, we are providing a modest level of on-site support in target fabrication for the Sandia Laboratories, in Albuquerque, New Mexico.

The Chroma I laser generates 2 terawatts (two billion watts) of optical power at the infrared wavelength of 1.05 m, and more than four hundred joules of visible light energy at 0.53 m. It is a flexible facility, with two target chambers, one configured for the study of the internal physics of classified targets ("hohlraum physics") at both infrared and visible wavelengths and the other, using a novel optical system developed by KMS Fusion, for the study of directly driven targets under uniform, spherical illumination. Spherically symmetrical illumination closely approximates a one-dimensional geometry, which greatly simplifies the interpretation of experimental data. In 1980 and early 1981 this facility provided new and compelling data regarding the density profile of the plasma surrounding a metal-coated target. These data, taken together with similar data from plane targets to be obtained this year, will provide valuable insight into the internal workings of laser-fusion targets.

KMS Fusion has also developed a unique experimental capability, the ionized gas jet, which allows us to simulate the conditions of a large target, like those proposed for use in ignition experiments, using a laser of limited energy. Preliminary results from recent gas-jet experiments indicate an absence of deleterious plasma physics phenomena in large targets such as will be used on Nova. The stable, well characterized conditions in the gas jet experiments provide an ideal environment for the development of new diagnostic techniques. Joint experiments involving both KMS Fusion and LLNL personnel were carried out in our facility in 1981, to test new spectroscopic probe methods, and are planned to continue.

The gas jet also provides a unique environment for the study of plasma radiation emission and absorption, data of fundamental interest both for ICF and for thermonuclear weapons physics.

KMS Fusion is also evaluating techniques for broadening the spectral width of laser light, a technique proposed to reduce plasma reflectivity, and enhance the absorption of incident laser light in ICF targets.

In 1982, level-of-effort funding will allow these activities to be continued. We would also propose to expand our program to accomplish the following objectives:

(1) To expand our on-site support at the Sandia Laboratories in Albuquerque
(2) To initiate on-site liaison at LLNL, for better coordination of the two target fabrication efforts
(3) To improve our diagnostic capabilities for the Chroma I laser and the experimental facilities
(4) To develop new techniques for characterizing and measuring fusion targets
(5) To modify the low-power section of the Chroma I laser, to provide better beam quality and greater reproducibility, while reducing maintenance costs

(6) To extend our experimental measurements of classified target physics to shorter wave - length, by adding third harmonic (ultraviolet) capability to Chroma I.
(7) To exploit the novel features of the gas-jet experiment for a broader range of measurements on both plasma physics phenomena and spectroscopic studies.

With level-of-effort funding, we could maintain our present capabilities, but would necessarily delay many of our important objectives to subsequent years. Increased funding, beyond the maintenance of a constant level-of-effort, will allow the full exploitation of the resources which exist at KMS Fusion. These resources include a talented and dedicated professional staff, a uniquely flexible experimental facility, and a target fabrication effort dedicated to supporting all the participants in the national program. Any substantive reduction of support below the current level of effort would seriously diminish our capabilities.

We realize that 1982 is a year of fiscal restraint, and that any proposed budget increases must be subject to the closest scrutiny. However, KMS Fusion strongly supports the continuation of full funding for the national ICF program. We are enthusiastic participants in the pursuit of fusion, both for military and energy applications, and we submit that the potential of inertial fusion for these applications cannot be realized without the demonstration of thermonuclear ignition, either in laser-driven or particle-driven implosions. The present KMS Fusion program is structured to support the achievement of the ignition milestone on the Nova laser and the PBFA II particle-beam facility. We hope that adequate funding will be provided to maintain the ICF program's progress toward the completion of these facilities and the demonstration of ignition.

STATEMENT OF MR. GLASS

Mr. GLASS. As you know, the objective of the inertial confinement fusion program is to control the fusion process both for military and energy applications. During the decade of the 1980s the emphasis within this program is the demonstration of the scientific feasibility of fusion. That is to demonstrate that one can compress and heat isotopic hydrogen to the point of ignition, using powerful beams either from lasers or from partical beams.

KMS has been a participant in the inertial fusion program since its inception. It is a private company in Ann Arbor, Michigan, and has been a pioneer in research since 1969. The first demonstration of a successful laser-driven implosion was accomplished at KMS in 1974. The role that KMS is playing in the inertial fusion program, however, has been changing especially in the last two years.

At present our role is primarily that of supporting the national program. That is, we are working closely with the other participants in the program, especially the national laboratories, Lawrence Livermore, Los Alamos and Sandia, in providing targets for their experiments and in also cooperating both at their facilities and at ours in executing these experiments.

There has been great progress in the program over the last two years, both technically and administratively. The details of the technical progress I have spelled out in my written statement. I won't go into that now, in the interest of time. However, I would like to say a few words about the administrative advantages which I think are very important because it has enabled us to make much more efficient use of the limited resources within this program.

Late in 1979, the assistant secretary for defense programs established a lead laboratory arrangement within the inertial fusion program. Lawrence Livermore Laboratory, at which at that time I was employed, was established as lead laboratory for experiments carried out with glass lasers.

Among the laboratories participating in that part of the program was KMS. Since that time, I think the cooperation within the program has improved markedly. At the present time, KMS is providing targets for fusion experiments to Livermore, Los Alamos, Sandia, the Naval Research Laboratory and to the University of Rochester. During the last year, experiments have been carried out at KMS in our facilities jointly with Livermore participation. We look forward to increased cooperation of this kind.

We are also providing on-site support in the target fabrication area to the Sandia Laboratory.

We greatly appreciate the support that this committee has given us over past years.

In order to continue at our present pace, it is clear that we at KMS need to have essentially a continued level-of-effort funding.

I would like to speak not just for KMS but on behalf of the national program, because we are part of the national program and our program does not make sense unless it is imbedded in a healthy national program.

I would urge you to maintain continued level of support to enable the national inertial fusion program to maintain its momentum. We are in a period of great technical progress and it is urgent that we continue at the present pace.

It is especially important that we maintain the pace of the large facilities at Lawrence Livermore Laboratory and at Sandia, which will enable us to demonstrate ignition of the thermonuclear burn in this decade. Without such a demonstration we cannot achieve the stated objectives of this program, either military or energy related.

That concludes my statement. I will be happy to answer any questions.

Mr. BURGENER. In the simple internal combustion engine we provide ignition with a spark plug. To put it crudely, are you trying to create an exotic super spark plug to provide ignition?

Mr. GLASS. The parallel is well drawn. The two are similar. We need not provide the spark plug from an eternal source, however. It is the shock-wave driven inward by the action of the material at the outside of the fuel mass. It coalesces at the center of the fuel mass and provides the equivalent of the spark plug of the automobile engine.

When I speak of ignition I mean precisely that. It is just like getting the fuel to ignite in the internal combustion engine.

Mr. BURGENER. In general, you are urging a very cooperative friendly competition of all the technologies leading toward fusion?

Mr. GLASS. We do not have enough resources in the inertial fusion program to carry out a multiplicity of independent competitive programs. It makes much more sense in terms of using the resources available to have as cooperative a program as possible. I think all the participants in the program would subscribe to that statement.

Mr. BURGENER. Thank you very much.

Mr. MYERS. The development of a continuous ignition, is that the problem?

Mr. GLASS. Yes, sir. Once ignition is achieved, the next step is to demonstrate that you can propagate the thermonuclear burn to the surrounding fuel mass.

Ignition is generally considered to be the major milestone. There is a capability using the neutrons from fusion to produce this solid material; yes, sir.

Mr. FAZIO. Could you critique this year's budget as it relates to fusion?

Mr. GLASS. I have not seen any official budget figures. I have heard some disquieting rumors, however. I would say, as an absolute minimum, we would look to the maintenance of a level of effort that is in last year's budget, projected forward, increased for inflation. That would be about the minimum amount that we could withstand.

I should also mention that we are also concerned about the possibility of deferral of 1981 funds into 1982. That would have an extremely negative effect on the program.

Mr. FAZIO. We were aware the program had been cut back $30 million with a $10 million deferral.

Mr. GLASS. Yes, sir. In our own organization, we project that, if our budget is cut in proportion to the national budget, we would have to lay off approximately 30 of our 130 employees.

Mr. BEVILL. Thank you for a very fine presentation, Doctor.

FUSION PROGRAM

WITNESSES

MS. MARSHA FREEMAN, WASHINGTON REPRESENTATIVE, FUSION ENERGY FOUNDATION
DR. STEPHEN DEEN, PRESIDENT, FUSION POWER ASSOCIATES

STATEMENT OF MARSHA FREEMAN

Ms. FREEMAN. I would request my written testimony be included in the record.

Mr. BEVILL. Your request is granted.

[Ms. Freeman's statement follows:]

STATEMENT OF MARSHA FREEMAN

I would like to thank the chairman for the opportunity to testify before the subcommittee for the Fusion Energy Foundation on the fiscal year 1982 budget appropriations for the magnetic fusion program.

The Fusion Energy Foundation is a not-for-profit scientific foundation which has 16,000 members. The Foundation is the publisher of FUSION Magazine which is read widely throughout the United States and internationally, and has a current paid circulation of 200,000. FUSION is now also being published in German and Spanish.

Fusion energy is unlike any energy source that is on the horizon for the future. Fusion research lays at the frontier of basic science, new technology and holds in store for us revolutions in industrial production. The development of fusion as an energy source, through the Department of Energy program will greatly effect our national security and the rate of the Nation's economic recovery. Therefore, we trust that the most careful consideration will be given to this critical FY82 fusion budget request.

Last year the Congress passed the Magnetic Fusion Energy Engineering Act of 1980, which the President signed into law on October 7. The Act was the result of a series of reviews of the fusion program done for the Congress, the Department of Energy and the nuclear industry. All of the reviews agreed that fusion was technically ready to begin a large-scale engineering effort. The law authorized a 25% increase in the FY82 budget to get the program ready to build and operate a Fusion Engineering Device by 1990.

That level of funding, $525 million in FY82, would actually bring the fusion program up to the level of funding that the program enjoyed in FY77. In real dollars, the FY77 authorization of $316 million is

equivalent to the $525 million for FY82. The fusion budget has been essentially held flat in the past four years and so the 25% increase is needed to catch up.

By the turn of the century there will be over six billion people in the world. We have the responsibility to ensure that by the beginning of that next century fusion will be able to begin to provide the quality and amount of energy that the world's people require. But in addition to providing an unlimited, cheap and safe form of energy there are three additional reasons why we must proceed to the engineering stage in the fusion program at this time.

Economic Recovery

First, pushing ahead with fusion and the entire array of high-technology nuclear energy sources is the only way to guarantee a U.S. economic recovery. This will not take place through belt-tightening, budget-cutting or any other temporary measures. To return the U.S. to a competitive position internationally and reduce inflation, unemployment and industrial decay, the government must recommit itself to work with industry to introduce the most productive and energy-dense sources of energy production into the economy.

Increased productivity in industry and agriculture very much depends upon an abundant and affordable supply of energy, and an increasing rate of introduction of new technology. This new technology is directly dependent upon government support for basic research and investment in research and development.

It would be the height of irony to determine that the Nation could not "afford" to put enough support behind fusion, the breeder reactor, the high temperature nuclear reactor and other frontier technologies which are, in reality, the underpinning for the economic recovery which the budget cuts are supposed to accomplish. We will not recover to

a position of world leadership in industry and agriculture and hold on to that lead by undercutting tomorrow's technologies to save a few pennies today.

Recently even the country's leading high-technology export industries such as electronics and computers have voiced their fear that over the next decade the U.S. may be replaced in the international marketplace in the new technologies projected for the future. This situation should motivate us to reconsider the government's role in supporting basic research and development.

In addition to the plentiful electric power fusion will provide, fusion energy can be used for the economical production of synthetic fuels through the splitting of water to produce hydrogen. The heat from fusion can be used in industrial processing, desalination of water, space heating and for other purposes.

The spectrum of radiative energy produced in the nuclear fusion reaction can be applied to materials processing, recycling and processing of foodstuffs. It may well be the case that the use of fusion will more immediately be as a source for synthetic fuels and raw materials processing than electric power.

The technological spin-offs from fusion, which make their entrance into our industry considerably before fusion provides a large share of our basedoad electric power, include the development of superconducting magnets and materials, bulk power handling and conditioning techniques, high-temperature materials development and many others. Much like the technological spin-offs from the 1960's NASA Apollo project, which never itself produced a commercial product, fusion technology development will create whole new industries of the kind the Nation needs to recover its economic health.

National Security Implications

There are definite national security implications to the path of fusion development the Congress decides upon during the budget process this year. Certainly, our military strength depends upon the overall economic health of the Nation. No military production program could ever be sustained without a firm foundation in basic industry and frontier technology production.

Secondly, it is recognized by military experts that the character of strategic war-fighting will change qualitatively over the next 5-10 years. We are entering into a new military era where dependence on the basic ICBM system will be superceeded by whole new defensive capabilities, all of which depend upon the scientific research at the frontiers of current knowledge.

The development of beam weapons, made up of coherent beams of particles, deployed either on Earth or in space, will totally change the military-strategic picture. The basic research done in the fusion program in studying the behavior of plasmas and coherent particle beams produced in the fusion process will bear heavily on this military research.

Third, fusion research concentrates on questions dealing with the highest energy-dense processes available to man. Many of the technologies that will be developed to produce and handle energy-dense systems will be spun off the fusion effort. Many of these will be needed by the military for frontier weapons development. Though magnetic fusion is not a weapons-applicable technology itself, its contribution to these engineering and scientific frontiers is what keeps our military capability on par with the rest of the world.

There is no question that the fusion program is one of the most

publicly supported energy program in the Nation. Like the space program, it has captured the imaginations of many of our citizens in terms of its challenges and its potential for the future. This is also true internationally, where, at the present time, the Japanese government is spending more money per capita on fusion research than we are in the U.S.

Based on the excellent and encouraging results in fusion experiments both here and abroad, the European Community is now discussing up-grading and accelerating their Joint European Torus fusion tokamak program.

Many developing nations have expressed an interest in becoming involved in fusion research. Some realize they must be prepared to participate in the development of the major energy source of the twenty-first century.

So far the U.S. has maintained the lead internationally in fusion research. We will not maintain that lead if we continue to refuse to put the resources necessary into the program.

The Fusion Energy Foundation, which has worked tirelessly to educate the American public about the promise and challenge of fusion, is confident that the Congress will up-hold the mandate in the Fusion Act and the trust of the American people who supported that legislation by setting the Nation on a course which will ensure the development of commercial fusion energy.

Thank you for your attention.

Ms. FREEMAN. I would like to highlight two or three major points facing the magnetic fusion program at this time. The Fusion Energy Foundation is a nonprofit scientific foundation which has 16,000 members across the country and publishes FUSION Magazine, which has a paid circulation of 200,000, which I think is quite an extraordinary number of persons who are following the fusion program very closely.

What we are urging the committee to do is to fund the magnetic fusion program at the full level authorized in the Magnetic Fusion Energy Engineering Act of 1980, which would be a fiscal year 1982 level of $525 million. We feel that this is necessary to move into the engineering phases mandated in the bill, which is now law, and we feel that there are three very important reasons why this is necessary: international, military security and economic reasons.

I would like to summarize these. In terms of the economic impact of the fusion program, I think it is very clear that, unlike other energy sources, fusion is going to open up for the U.S. economy whole new areas of industrial technology, applications of plasma and other kinds of things coming from fusion, and getting the program moving in terms of the approximately $65 million which is now the lag between the DOE request and what was authorized in the bill. It is a small amount compared to what the economic payback will be from getting a technology for fusion moving as quickly as possible.

I think that the military security spinoffs affect an impact of how fast or slowly we develop fusion or having very severe international ramifications.

I wanted to bring to the subcommittee's attention two very important factors in the current situation. First, I have submitted with my testimony a telegram, which the Fusion Energy Foundation European subsidiary or affiliate circulated among scientists, industry people and labor leaders in and all throughout Western Europe. The telegram seriously questions the administration's attempt to cut back on basic science, the fusion program and some of the NASA efforts as well as science education.

Europeans state in the telegram to President Reagan and very straightforwardly they feel that the United States must maintain its international leadership in this program. As you can see, the telegram is signed by 30 very prominent scientists, industry and government people from France, West Germany, Italy, Switzerland and throughout Western Europe.

As a matter of fact, there has been a French scientist assigned by the government to specifically monitor the U.S. fusion budget situation, so there is a great deal of concern in Europe in terms of what they see as a retrenchment unless there is commitment to go ahead with fusion.

Secondly, I don't know if the subcommittee is aware because it has not been in the American press, but former Prime Minister Fukuda met with President Reagan last Friday, March 20, and he renewed his offer of three years ago to the United States to cooperate more agressively; that is, Japanese cooperation in magnetic fusion. This is something we are fully in support of. We feel this helps, of course, the financial situation in our expensing here, and

we have indications the Japanese are very committed to their fusion effort.

We feel there is a great deal of international concern on any possible retrenchment on the law that was passed last year. That concern has been voiced and it is in writing. We feel there are opened areas for international cooperation and that the time really is now at this point, with the mandate of the last from last year, to move forward on the engineeing aspect of the program.

Mr. BURGENER. Are you the folks who furnish the magazines in the airports?

Ms. FREEMAN. Yes.

Mr. BURGENER. Very aggressive.

Mr. BEVILL. Dr. Deen.

STATEMENT OF DR. STEPHEN DEEN

Dr. DEEN. I am Dr. Stephen Deen, President of Fusion Power Associates, a separate association from Ms. Freeman's. We represent the United States industries that started to get into fusion. I would just like to add to what she has said, which I agree with wholeheartedly. I am sure many of you have read the sereis that is appearing in TIME, Incorporated, magazines on American renewal, one of which deals with the fusion, in the March issue of DISCOVERY Magazine. I think you should really pay attention to those articles.

We have the potential here in this country to really start to move into a whole new phase of engineering technology and science. If we don't, the rest of the world is.

I think we need to jump on the fusion bandwagon, if you will, because this is the energy technology of the 21st century, and it is ready for engineering development and for the participation of United States industry in that development.

Mr. BEVILL. Thank you very much.

Mr. FAZIO. I think we need not jump off. We jumped on last year. Could we have for the record that international telegram?

Ms. FREEMAN. I did give copies to the staff.

[The telegram follows:]

FUSION
ENERGY
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Dr. Uwe Parpart
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PRESS RELEASE

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FEF to Testify for Full Funding of Fusion Program

March 19-- The Fusion Energy Foundation will testify in support of full funding-- $525 million in fiscal year 1982-- for the fusion program at hearings March 24 and 25 before the appropriations committees of the Senate and House.

The Office of Management and Budget has proposed cutting $65 million from the fiscal year 1982 fusion budget, which would make it impossible for the fusion program to begin the engineering phase mandated by the Magnetic Fusion Energy Engineering Act of 1980. This fusion legislation, passed with the overwhelming support of the House and Senate last year, commits the nation to build an engineering fusion device by 1990 and a commercial prototype reactor by the year 2000.

"This so-called cost-cutting will actually prove extremely costly," said Marsha Freeman, FEF Washington representative. To save $65 million this year, the Reagan administration is delaying work on a program that will provide the nation with a clean, unlimited, and inexpensive energy source."

Ms. Freeman's testimony will include the text of a telegram sent to President Reagan by 30 European scientists and engineers urging him to reverse "the ill-advised and dangerous policy of massive budget cuts in fusion research, in the NASA space program, in science education, and other vital areas of R&D.... Such a policy is particularly ill-advised at a time when the Soviet Union is committed to stepping up its already massive R&D programs, not least in the domain of fusion and most certainly in the field of revolutionary applications of fusion and other basic research."

Copies of the European telegram and signatories are available from the FEF.

Publishers of Fusion Magazine and the International Journal of Fusion Energy

Telegram to President Reagan

We Europeans have long admired the United States dedication to the development of science and technology, embodied in the Apollo landing of man on the Moon, and, more recently, in the admirable McCormack fusion bill for the rapid realization of controlled nuclear fusion as an unlimited energy source for mankind.

The well-being and security of the entire world depends on such a continuing commitment of the United States.

We therefore urge you to reverse the ill-advised and dangerous policy of massive budget cuts in fusion research, in the NASA space program, in science education, and other vital areas of R&D, proposed in the budget drawn up by Office of Management and Budget director David Stockman. Besides doing irreversible harm to U.S. scientific potential, these cuts will inevitably greatly undermine European research efforts in the same areas.

Such a policy is particularly ill-advised at a time when the Soviet Union, as revealed in the recent Soviet Party Congress, is committed to stepping up its already massive R&D programs--not least in the domain of fusion and most certainly in the field of revolutionary applications of fusion and other basic research. Adventurist forces in that country will not fail to read a reversal of decades of U.S. leadership in basic science research and advanced technology as a decisive sign of weakness.

Would not a reversal of the present high interest rate policy of Federal Reserve Chairman Volcker, which is costing the United States tens of billions in additional interest payments as well as seriously injuring our European economies, be a more prudent way of bringing the U.S. budget and economy into order?

Signatories:

Professor Walter Seifritz, Eidgencessisches Institut fuer Reaktorforschung, Wuerenlingen, Switzerland
Professor Hans Martin Klinkenberg, Director, Histroisches Institut, Technische Hochschule, Aachen, West Germany
Professor Ulrich Hanser, Director, Physikalisches Institut, Koeln Universitaet, Cologne, West Germany
Dr. Klaus D. Leuthaeuser, Director, Institut fuer Naturwissenschaftlich-Technische Trendanalysen, Euskirchen, West Germany
Professor Loeb, Institut fuer Weltraumforschung, Universitaet Giessen, West Germany
Professor Hermann Bothe, Botanisches Institut, Universitaet Koeln, Cologne, West Germany
Professor Christian Groeber, Physikalisches Institut, Universitaet Frankfurt, West Germany

Betriebsratsvorsitz Kurt Brunner, Hochtief Ag, Frankfurt, West Germany
Betriebsratsvorsitz Ave Marie, Holzmann Ag, Frankfurt, West Germany
Betriebsratsvorsitz Ditmann, Versuchsatomkraftwerk Kahl, Frankfurt, West Germany
Engineer Robert Sutcliffe, Hamburg, West Germany
Engineer Gerlach, Hamburg, West Germany
George Galauner, Hamburg, West Germany
Professor Marcel Felden, Director, Institute for Plasma Physics, University of Nancy, France
Professor Jean-Marie Arnaudies, Professor of Special Mathematics, Lycee Kleber, Strassbourg, France
Dr. Emmanuel Tremblay, Professor of Demography, Ecole des Hautes Etudes Sociales de Paris, National Chairman of Laissez-les Vivre, Paris, France
Engineer Philipe Goudal, Research Department, Electricite de France, Paris, France
Axel Casadesus, Mathematics Professor, Paris, France
Jacques Houbart, Editor, Industrie et Techniques, Paris, France
Dr. Ing. Franco Capetti, Executive, Studio C Industrial Consulting, Turin, Italy
Dr. Claudia Cattoretti, Milan, Italy
Dr. Giovanni Provasoli, Institute for Research on Macromolecules, Milano, Italy
Dr. Ing. Leonardo Caravaggi, Commercial Director, Innocenti S. Eustachio, Milano, Italy
Professor Camillo Gamba, Professor, Pedagogy of Science, Bari University, Milano, Italy
Dr. Professor Enzo Menapace, Comitato Nazionale Energia Nucleare, Bologna, Italy
Dr. Professor Giovanni Spada, Director, Institute for Technology and Studies of Outer Space Radiation, Bologna, Bologna, Italy
Dr. Cesare Guaita, President, Tradate Astronomical Group, Varese, Italy
Roberto Crippa, Vice President, Tradate Astronomical Group, Varese, Italy
Patrizia Gaiani, Secretary, Tradate Astronomical Group, Varese, Italy
Carlo Rivadossi, Manager, Rivadossi Designing Firm, Brescia, Italy

BARNWELL NUCLEAR FUEL PLANT

WITNESSES

BRIAN D. FORROW, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, ALLIED CHEMICAL CORP.

DR. JAMES A. BUCKHAM, EXECUTIVE VICE PRESIDENT, ALLIED-GENERAL NUCLEAR SERVICES

STATEMENT OF BRIAN FORROW

Mr. FORROW. Chairman Bevill and subcommittee members, my name is Brian D. Forrow. I am Senior Vice President and General Counsel of Allied Chemical Corporation. I am accompanied by Dr. James A. Buckham, Executive Vice President of AGNS. I will briefly summarize my written statement.

[Mr. Forrow's statement follows:]

STATEMENT SUBMITTED TO
THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
OF THE
COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES
ON
THE FUTURE ROLE OF THE BARNWELL NUCLEAR FUEL PLANT
MARCH 25, 1981
BY
BRIAN D. FORROW
SENIOR VICE PRESIDENT AND GENERAL COUNSEL
ALLIED CHEMICAL CORPORATION

Chairman Bevill and Subcommittee members, my name is Brian D. Forrow. I am Senior Vice President and General Counsel of Allied Chemical Corporation. I am also President of Allied Chemical Nuclear Products, Inc., a 50 percent owner of the Barnwell Nuclear Fuel Plant (BNFP). The General Atomic Company, through its partnership in Allied-General Nuclear Services (AGNS), owns the remaining 50 percent of the plant. I am accompanied by Dr. James A. Buckham, Executive Vice President of AGNS.

SUMMARY

The Barnwell Nuclear Fuel Plant (BNFP) is the nation's first large-scale commercial reprocessing plant. It was designed and built to reprocess spent light water reactor fuels and recycle the recovered fuel elements for commercial use. In April 1977 President Carter decided to defer commercial reprocessing indefinitely on non-proliferation grounds. That decision effectively eliminated Barnwell as a private commercial venture.

What exists today at Barnwell is the largest spent fuel reprocessing facility in the World. Since President Carter's decision, Barnwell has been on hold. Behind the leadership of this Subcommittee, Congress has supported a relatively modest but valuable research program. So far this program has preserved the nucleus of a unique technical staff and maintained the option of using Barnwell in the future.

A number of possible roles for Barnwell have been considered. Attention has centered in particular on using Barnwell for away-from-reactor storage of spent nuclear fuel or for reprocessing.

The new Administration has heightened interest in Barnwell. While definitive nuclear policies are still being formulated, the Administration has announced three budget decisions which have a direct bearing on Barnwell's future.

First, there are no funds for Barnwell in the Administration's FY'82 DOE budget.

Second, the DOE announced that it would not seek funds for the acquisition or construction of AFR storage capacity, apparently on the grounds that AFRs would be unnecessary if commercial reprocessing took place.

Third, the Administration announced that it would seek funds to continue construction of the Clinch River Breeder Reactor.

We believe that funding of the Barnwell R&D program should continue until a governmental decision is made on Barnwell's future. The alternative

is to shut the plant down and disperse the staff, and we believe that the Administration neither proposes nor intends that result. Nor do we.

The decision to fund Clinch River makes reprocessing at Barnwell essential, unless the Administration intends to import plutonium. We understand that present DOE planning has the CRBR coming on line about 1990 and that construction of a larger breeder reactor is being considered for operation in the 1990s. Reprocessing of LWR spent fuel at Barnwell is essential to satisfy plutonium feed requirements for this program. There is no other source for the feed and the feed should be ready in advance.

In testimony before the Senate Armed Services Committee on March 13, Secretary Edwards made clear that the President supports reprocessing but that he wants the reprocessing to be done commercially by private industry. The Administration rejected a specific proposal by the Department of Energy transition team that it acquire Barnwell as a government reprocessing facility.

The crucial question is whether reprocessing can take place commercially under private ownership. In our judgment, the answer to that question is no, not only for Barnwell's present owners but also for any other private investors.

President Carter's 1977 decision to defer commercial reprocessing ended the prospects for private investment in the backend of the nuclear fuel cycle for the foreseeable future, contrary to our own original nigh hopes and expectations, which were strongly encouraged by the Government. Government interests and policies in this area are transcendent and they are subject to change every Congress and every Administration and, perhaps even more often than that. The result has been a pattern of unpredictability which has made private planning and participation impossible. Furthermore, the vast licensing and regulatory problems for our customers, the utilities are a major deterrent to any private investment in nuclear energy, including reprocessing. All that must change. But it will take a new Government commitment and sufficient time to carry it out. Acquisition of Barnwell would be a good first step. In short, a policy of reprocessing under private ownership, is a policy of no reprocessing at all. And, unless the Administration's policy in that regard is reversed, Barnwell could be irretrievably lost as an integral part of the nation's nuclear industry.

The owners of Barnwell are convinced that the facility is a major national asset which should be acquired by the Federal government as soon as possible. Failure to maintain a minimum program at Barnwell until a final decision on acquisition is made by Congress may well foreclose the opportunity to use Barnwell's great potential for various important national purposes.

STATUS OF THE BARNWELL NUCLEAR FUEL PLANT

In April 1977 President Carter decided to defer indefinitely commercial reprocessing, the purpose for which the BNFP was originally designed and built. Notwithstanding this decision Congress has appropriated funds for research and development programs at the BNFP for the fiscal years 1978 through 1981. The R&D funds voted by Congress have: (1) produced valuable research results, (2) preserved the nucleus of a unique technical staff at Barnwell, and (3) maintained the option of using the Barnwell facility

for a number of purposes in the future.

What exists at Barnwell today is the largest modern spent fuel reprocessing facility in the world. The spent fuel pool is completed and can be available for storage with the installation of new racks, a security system, and other minor modifications. Storage tanks for liquid wastes and plutonium are also available which would allow the chemical separations facility to operate in the manner of existing Government plants for up to 18 months on high burnup Light Water Reactor (LWR) fuel and considerably longer with other fuels.

To operate the BNFP on a sustained basis in the originally intended mode will require the construction of plutonium and waste solidification facilities at the Barnwell site. We estimate that these additional facilities could cost as much as $500-750 million.

To maintain the existing facilities and staff at Barnwell requires approximately $18 million per year. This level of funding has been achieved for FY 1980 and FY 1981 by two mechanisms. First, Congress has provided a line item of $11.5 million in the Department of Energy (DOE) budget for a base R&D program at Barnwell for each year. Second, funding outside the base program has been sought out and secured at a level of $6-7 million in areas dealing with spent fuel transportation and storage and nuclear safeguards development and training.

For FY 1982, we have proposed that the Department undertake several program activities at Barnwell which would strengthen the option of using the facility for a number of purposes, including reprocessing of spent nuclear fuel as a prerequisite to the operation of demonstration reactors in the US Breeder Reactor Program.

We have proposed that an engineering evaluation be conducted of the additional facilities required for sustained operation of Barnwell. Processes and equipment for these additional facilities would be selected based on the current state of the technology and generic conceptual designs. Testing would be conducted on the separations facility to incorporate desirable refinements, and maintenance programs would be continued to assure future operational readiness.

Spent nuclear fuel cask and handling studies should also be continued at Barnwell to permit future utilization of the sophisticated safeguards systems that have been developed there.

POTENTIAL USES FOR THE BARNWELL NUCLEAR FUEL PLANT

Potential uses for the Barnwell Plant include the following:

Plutonium to Supply the U.S. Breeder Reactor Program - Implementation of a breeder reactor program in the United States for production of electric energy will require large quantities of plutonium. We understand that present DOE planning has the Clinch River Breeder Reactor (CRBR) coming on line about 1990 and that construction of a larger breeder reactor is being considered for operation in the 1990's. Reprocessing of LWR spent fuel at Barnwell no later than 1987 is essential to satisfy plutonium feed requirements for this program.

Breeder Fuel Reprocessing - An evaluation has been performed by the Oak Ridge National Laboratory (ORNL) and AGNS on utilization of the BNFP in support of the U.S. Breeder Reactor Reprocessing Program. The basic analyses in this evaluation are completed, and the report is being reviewed in preparation for publication. This evaluation showed that it is not technically feasible to reprocess breeder fuel in the existing BNFP if its capability for reprocessing LWR fuels is preserved. However, the evaluation showed that many of the BNFP facilities could be used in conjunction with a new facility at Barnwell for processing breeder fuels. This ORNL-AGNS evaluation concluded that the location of a breeder reprocessing capability at Barnwell could result in cost savings to the U.S. Government of hundreds of millions of dollars as compared to building it at another location.

Safeguards Research and Development and Training - The International Nuclear Fuel Cycle Evaluation stated that future chemical reprocessing throughout the world should incorporate additional safeguards measures. During the past three years, AGNS has been developing for the Department of Energy the world's most advanced system for safeguarding fuel cycle facilities, particularly nuclear fuel reprocessing plants.

Along with the continuation of safeguards development and demonstration activities, training in safeguards technology (including on-the-job training during testing exercises), could be conducted at BNFP.

Fuel Cycle Research and Development - Since the BNFP is not radiologically contaminated, it provides an ideal test bed for a large number of studies in the fuel cycle area. The facility is particularly well suited to test advanced ideas on proliferation-resistant modifications to the Purex process in a full-scale manner. Continuation of such studies is appropriate so that the United States will have a leadership position in emphasizing proliferation-resistance in activities throughout the world.

Fuel Disassembly and Encapsulation - Should delays develop in reprocessing LWR fuel for the U.S. Breeder Reactor Program, or should it become desirable to dispose of some spent fuel as waste without reprocessing, the BNFP is suitable for disassembly and encapsulation of spent LWR fuel. This capability has been demonstrated during special studies conducted for DOE the past two years at Barnwell, and its implementation would require only a modest capital investment in special equipment.

Backup for Defense Fuel Reprocessing - A number of studies performed during the past few years show that the BNFP is capable of processing many of the fuels currently processed in facilities owned by the Government. Therefore, the BNFP represents an ideal backup facility for the military production program should it be needed.

Interim Regional Storage of Spent Nuclear Fuel - According to recent DOE estimates, AFR storage capacity will initially be required by 1986, and 6480 tonnes of such capacity are estimated to be needed by 1995. Construction of a new facility would take too long to meet these needs. With respect to existing facilities, like Barnwell and Morris, decisions must be made this year if they are to be on line for regional interim storage in the 1986-1990 period.

ADEQUACY OF THE BARNWELL TECHNOLOGY

The BNFP embodies the time-proven Purex Process, which was first used in U.S. defense plants in the mid-1950s and has subsequently been used in virtually all reprocessing plants through the world. Plants currently being designed for overseas use will again use the Purex process. Thus, although completed six years ago, the BNFP clearly employs the best available process technology.

No basic improvements in Purex reprocessing technology have recently been made or can be expected with this mature technology. However, the International Nuclear Fuel Cycle Evaluation and related U.S. studies have demonstrated the need for advanced safeguards systems in future reprocessing and other fuel cycle plants. The advanced safeguards system developed during the past four years at BNFP is ready for installation. It would make the Barnwell Plant the only truly up-to-date plant in the world -- one capable of alleviating concerns about proliferation of weapons materials -- and also would provide improved operability and safety.

The BNFP has been extensively tested with non-radioactive chemicals. These tests show that the plant is capable of exceeding its daily design throughput rate of 5 tonnes/day of uranium. The plant utilizes remote maintenance and replacement techniques where experience indicates a need for any maintenance. Its operability and maintainability have been unanimously endorsed by an electric utility team of independent experts sponsored through the Electric Power Research Institute (EPRI). However, they recommended a follow-on evaluation to review the desirability of relocating specific pieces of equipment or providing remote replacement capabilities in areas where it seems desirable in light of more recent experience.

Thus, through the use of proven technology and improved maintenance practices and with the availability of advanced safeguards systems, the BNFP represents modern technology that is capable of reliably meeting future U.S. Government reprocessing needs.

THE NEED FOR FEDERAL OWNERSHIP OF BARNWELL

Whatever Barnwell's future role, it seems clear that Federal ownership is an essential prerequisite to further development of Barnwell.

It is worth recalling that until the mid-1970s, the reprocessing of spent nuclear fuel to recover the fuel value of the residual uranium and plutonium for recycle was accepted as an essential element in the development of nuclear power in the United States. The construction of Barnwell was approved by the Atomic Energy Commission in an environment that accepted commercial reprocessing as an integral part of nuclear power.

However, President Carter's 1977 decision to defer commercial reprocessing of spent fuel and the recycling of plutonium in the United States signalled the end to prospects of a viable role for private investment in these sectors of the nuclear fuel cycle. That decision and events since then demonstrate a uniqueness to this segment of the industry which has become increasingly apparent. Policies which have been subject to change every Congress and every Administration create unacceptable risks for private participation in reprocessing ventures.

Although Federal ownership of Barnwell is essential, it does not follow that the costs of developing and operating Barnwell would be borne solely by the Federal Government. To the extent that Barnwell is to be used for services

to the nuclear industry like reprocessing and spent fuel storage, appropriate fees would be charged to utilities to underwrite the cost of these services.

CONCLUSIONS

If Barnwell were to be used for reprocessing, as Secretary Edwards is recommending, it would not be expected to be available on a sustained basis before 1987 and possibly later. As outlined in this statement, any delay in this date would have a serious and possibly crippling effect on current planning for the breeder reactor demonstration program.

The owners of Barnwell remain convinced that the facility is a major national asset which should be acquired by the Federal Government as soon as possible. If Barnwell is to be used for reprocessing under Government ownership, we are ready to work with Congress and the Administration to allow the transfer of Barnwell to take place as expeditiously as possible.

While we welcome your support for the talented staff and R&D programs at Barnwell, the owners are not willing to continue this program indefinitely. We believe that final decisions about the future of Barnwell must be made soon. If decisions are not made in a timely fashion, the most likely result is that the Barnwell facility will be closed and the talented staff will be dispersed. This action, would, we believe, foreclose a number of options that are critical to the future of nuclear energy in the United States.

Mr. Chairman, this concludes my statement. Dr. Buckham and I would be pleased to answer any questions that the Subcommittee might have.

Mr. FORROW. Since President Carter's 1977 decision to indefinitely defer commercial reprocessing, Barnwell has been eliminated as a private commercial venture. Behind the leadership of this subcommittee, Congress has supported a relatively modest but valuable research program. So far this program has preserved the nucleus of a unique technical staff and maintained the option of using Barnwell in the future.

A number of possible roles for Barnwell have been considered. Attention has centered in particular on using Barnwell for away-from-reactor storage of spent nuclear fuel or for reprocessing.

The new administration has heightened interest in Barnwell. While nuclear policies are still being formulated, the administration has announced three budget decisions which have a direct bearing on Barnwell's future.

First, there are no funds for Barnwell in the administration's fiscal year 1982 DOE budget.

Second, the DOE announced that it would not seek funds for the acquisition or construction of AFR storage capacity, apparently on the assumption that AFRs would be unnecessary if commercial reprocessing took place.

Third, the administration announced that it would seek funds to continue construction of the Clinch River Breeder Reactor.

We believe that funding of the Barnwell R&D program should continue until a government decision is made on Barnwell's future. The alternative is to shut the plant down and disperse the staff, and we believe that the Administration neither proposes nor intends that result. Nor do we. But time is running out.

The decision to fund Clinch River makes reprocessing at Barnwell essential, unless the Administration intends to import plutonium. Reprocessing of LWR spent fuel at Barnwell is essential to satisfy plutonium feed requirements for this program. There is no other source for the feed, and the feed should be ready in advance.

In testimony before the Senate Armed Services Committee on March 13, Secretary Edwards made clear that the President supports reprocessing but that he wants the reprocessing to be done commercially by private industry. The Administration rejected a specific proposal by the Department of Energy transition team that it acquire Barnwell as a government reprocessing facility

The crucial question is whether reproceessing can take place commercially under private ownership. In our judgment, the answer to that question is no, not only for Barnwell's present owners, but also for any other private investors.

A policy of reprocessing under private ownership is a policy of no reprocessing at all. And, unless the administration's policy in that regard is reversed, Barnwell could be irretrievably lost as an integral part of the nation's nuclear industry.

The owners of Barnwell are convinced that the facility is a major national asset which should be acquired by the Federal Government as soon as possible. Failure to maintain a minimum program at Barnwell until a final decision on acquisition is made by Congress may well foreclose the opportunity to use Barnwell's great potential for various important national purposes. These purposes are outlined in my prepared statement.,

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Mr Chairman, this concludes my statement. Dr. Buckham and I would be pleased to answer any questions that the subcommittee might have.

Mr. BEVILL. Thank you.

ENERGY PROGRAMS

WITNESS

DR. FRANK PRINCE, DIRECTOR, VIRGIN ISLANDS ENERGY OFFICE

STATEMENT OF FRANK PRINCE

Mr. PRINCE. My name is Frank Prince. I would like to extend sincere greetings from Governor Juan Luis and the people of the Virgin Islands to you, the distinguished members of Congress.

Anyone who devises a national energy conservation program with the implementation of eight mandatory measures as a necessary criteria for program participation is overtly optimistic. Climatic, regional, legal, and institutional differences among States and Territories would guarantee that such an inflexible program result in less than a maximum achievable level of success. Such was the case with the State energy conservation program that was administered by the previous administration.

The complex, often varying rules for program participation, spending restrictions, necessary forms and reporting requirements were definitely anti-energy conservation since it meant that 34 to 40 percent of staff time was not available to unscrew a light bulb, or replace it with a 30 percent more energy-efficient fluorescent fixture.

Program emphasis should be shifted from standardized, detailed reporting, rule-compliance format to one of a realistic, hands-on approach to energy efficiency through the installation of energy-saving devices, and reducing the energy consumption of devices already installed. There should be fewer political science majors, and career bureaucrats among those hired as DOE program manages and State energy office personnel.

They should be replaced by engineers, and technicians who can comprehend and design programs for true energy efficiency and not merely shuffle paper to meet unrealistic and unnecessary deadlines.

In accordance with the President's economic recovery program, we agree that the funding for the State energy programs should be reduced, but not eliminated. Even at reduced levels of funding, far greater energy efficiency can be achieved by the States if the Federal bureaucracy is removed. It would be a waste to destroy an established system which could be extremely productive by simply changing its operations format.

The Virgin Islands has a relatively non-urbanized population, a non-industrial (with two exceptions on St. Croix) environment, the limiting geographic features of tropical islands, significant elevations and small land mass, low rainfall, limited groundwater and 100 percent dependency on imported petroleum. These localized

factors warrant different energy considerations from the continental USA.

Climatic conditions in the Virgin Islands offer several opportunities for the highly effective application of alternate energy technologies: low cloud cover, daily sunshine, intense sun rays, natural lighting, and persistent tradewinds.

The Virgin Islands have a number of characteristics that are different than most States on the mainland. The prominent characteristics are:

One, an extreme dependency on outside resources. We have no known indigenous oil, coal, natural gas, or uranium.

Two, the small size of the islands in geographic and population terms, accented by the fragmentation and divisions between the islands.

Three, the dependency of the islands on a single dominant industry, tourism.

Four, the extremely rapid population increase experienced in the past 25 years (30 to 100,000) resulting in high population densities and an expected increase in water and power demands.

Five, a level of income that is only 65 percent of the mainland average, compounded with a cost of living that is 30 percent higher.

Six, the highest electrical rates in the nation (21 cents per kilowatt, residential).

Seven, no interconnecting grid.

Eight, normal solutions to energy use and conservation problems are not often transferrable from (or to) other areas because of the small scale and special local conditions such as "left turn on red" to the current economic feasibility of known solar or wind energy technologies.

Nine, one of the lowest water consumption levels in the Territory (20 to 25 gallons per capita per day).

Ten, the greatest need, and most economically favorable conditions for the production of water and power via alternate energy technology (water, $9.50 per 1,000 gallons).

Continuous electrical generation is a major problem for our utility company because sufficient standby capacity is not available to permit a systematic program for removing major units from service for extended periods. Units are operated continuously until failure without periodic maintenance necessary to achieve peak operating efficiency. This situation exists in both power and water production installations, and substantial capital investment will be required for any type of solution. The capability of present equipment to attain rated capacities has been surpassed due to metal fatigue, excessive use, and lengthy abnormal operating conditions.

Because of poor plant efficiency (0.200), the number of Btu of fuel consumed per kilowatt of electricity produced is astronomical. Our utility spends about four million dollars a month (approximately 80,000 barrels) on diesel fuel to produce only 80 MW of electricity.

Renewable energy technologies would receive maximum utilization in territories such as the Virgin Islands with the knowledge of developments being used for future application in continental USA. Solar hot water heating, wind energy, low-temperature turbines, parabolics and photovoltaics can all reduce consumption of import-

ed oil and help the nation achieve its 1985 quota. In addition, a barrel of oil that was once used inefficiently in a rural area can be stretched further in an efficient, well-maintained industrial plant on the mainland.

Congressional Record H12212 of December 9, 1980, Section 604.(a) signed into law December 24, 1980, specifically charges the Congress of the United States with making the Caribbean and Pacific insular areas of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, the Federated States of Micronesia, the Marshall Islands, and Palau energy self-sufficient.

We believe that Congress can best achieve this goal by the following: Maintain funding level for territorial energy offices; Allow them freedom of progress selection without compromising fiscal responsiblity; and appropriate additional funding for the development of a comprehensive energy plan for the territories.

These programs will result in maximum utilization of a variety of renewable sources of energy which will alleviate the dependence of these insular areas on imported sources of energy, help relieve local fiscal burdens, and strengthen our base for polticial, social and economic development.

Our energy problems will not disappear at the same rate as the fiscal year 1981 funding is expected to. We urge your direct support for a few more years in order that energy self-sufficiency can be attained.

Less money could be authorized, yet more energy dollars would be available to the States if it came direct instead of being reduced through several layers of bureaucracy such as the Regional Solar Energy Centers.

The consensus of mind here is, if we were granted funding and the program resources to attain this enegy self-sufficiency through renewable resources by the funding of demonstration projects, that a barrel of crude oil which is often used inefficiently in the territories can now be used more efficiently on the mainland.

Mr. BEVILL. Mr. Prince, that is a very fine statement and it is very timely.

LIFE SCIENCES RESEARCH AND NUCLEAR MEDICINE

WITNESSES

DR. DONALD L. HOLMQUEST, PRESIDENT, HEALTH INTERNATIONAL, INC.

DR. OSCAR M. POWELL, JR., VICE PRESIDENT, SOCIETY OF NUCLEAR MEDICINE

MS. CAROL A. LIVELY, EXECUTIVE DIRECTOR, AMERICAN COLLEGE OF NUCLEAR PHYSICIANS

Mr. BEVILL. We are glad to have you with us, Doctor. Ms. Carol Lively is also with you, I understand.

Doctor, you may put your statement in the record and proceed as you wish.

[Dr. Holmquest's statement follows:]

RECOMMENDATIONS

DEPARTMENT OF ENERGY
OFFICE OF HEALTH AND ENVIRONMENTAL RESEARCH
HUMAN HEALTH STUDIES PROGRAM
IN
NUCLEAR MEDICINE RESEARCH

I. That the proposed Fiscal Year 1982 budget for Nuclear Medicine Research in the Human Health Studies Program of the Office of Health and Environmental Research of the Department of Energy be approved.

II. That research efforts be emphasized in

A. Expanded radioisotope production

B. Radiopharmaceutical research

C. Nuclear medicine instrumentation

III. That the Capital Expenditures Budget for Nuclear Medicine Research for Fiscal Year 1982 be approved.

Mr. Chairman, Members of the Subcommittee, I am Donald Holmquest, M.D., Chairman of the Government Affairs Committee of the American College of Nuclear Physicians and a member of the Society of Nuclear Medicine. With me is Dr. Oscar Powell, a past president of the College and presently an officer in the Society. We thank you for this opportunity to appear before you on behalf of these two organizations.

The American College of Nuclear Physicians is an organization representing more than 1200 physicians and scientists who actively practice nuclear medicine in this country. The Society of Nuclear Medicine represents almost 10,000 physicians, physicists, chemists, radiopharmacists, nuclear medicine technologists, and other professionals, all of whose career interests are in the diagnostic and therapeutic use of radioactive materials in medical applications. I am pleased to offer today the views of the American College and the Society which strongly endorse the proposed Fiscal 1982 budget for the support of Nuclear Medicine Research.

The College and the Society recognize that the constraints on the 1982 budget are severe, and that it is imperative that we justify why research activities should continue to be supported strongly and indicate how this research can be beneficial, both socially and economically. We believe that in nuclear medicine, it can be shown that the translation of basic research into productive clinical tools occurs more rapidly and that more benefits are returned to the American public than in almost any other field of health-related research.

WHAT IS NUCLEAR MEDICINE TODAY?

Nuclear medicine is the use of lowlevel radioactive materials in the diagnosis (and, in some instances, in the therapy) of disease in humans. Patients frequently come to their physician with signs and symptoms that can be related to two or more diseases, each of which requires a different treatment. Good diagnostic procedures are therefore essential if the physician is to direct the management of the patient in an appropriate manner and avoid costly (both in dollars, in physical pain, and mental anguish) delays in selecting the correct treatment. Nuclear medicine studies provide such diagnostic techniques in a unique manner.

In the most common type of nuclear medicine procedure, the in vivo study, a very small amount of a radioactive drug is administered to the patient, usually by injection. In most cases the drug is specifically designed to concentrate in a particular organ and, in a few instances, to be further metabolized or removed from the body by that organ. In some cases, the drug is designed to be concentrated only in the abnormality, such as a brain tumor or a myocardial infarct; in others the drug localizes only in the normal tissue. The radioactivity emitted from the internally trapped drug permits very sophisticated external instrumentation to record permanent dynamic images of the distribution of radioactivity in the organ selected for study. In some laboratories, the data derived from the examination are

processed by computer and the image reconstructed so that the overall spatial resolution and diagnostic accuracy of the study is further improved. Most major organ and tissue systems of the body can be examined in this fashion, including the brain and central nervous system, lungs, liver, kidneys, bone, thyroid, pancreas, and the cardiovascular system.

These studies provide extremely valuable information to the attending physician. If the study shows that no abnormality is present, the patient can be reassured and possibly discharged from the hospital or perhaps the physician can turn his attention to other problems. If the study discovers that disease is present, then the physician can turn quickly to the next diagnostic phase or perhaps begin therapy. In some situations, the information derived from the nuclear medicine study can be life saving. In others, at the very least, it assists the physician responsible for the care of the patient in providing the most efficient and best treatment possible under individualized circumstances. Further, it should be noted that nuclear medicine in vivo diagnostic procedures are noninvasive, safe, and essentially painless for the patient; the only sensation the patient feels is that occasioned by the needle stick when the drug is administered. Allergic reactions are rare because the amount of drug actually needed is extremely small compared to the amounts usually needed for a pharmacologic response.

Approximately 37 million people are admitted to hospitals in this country each year. It is estimated that more than 60 million nuclear medicine procedures are performed each year in hospitals and clinics in the U.S. When one considers that, on the average, a nuclear medicine procedure is performed on one out of every two people admitted to hospitals in the U.S. as well as on large numbers of outpatients, the impact of this unique medical science on health care delivery becomes apparent.

HOW EFFECTIVE ARE NUCLEAR MEDICINE PROCEDURES?

What benefits have been realized from the development and the utilization of nuclear medicine procedures, and why is more research likely to yield even further benefits? The College and the Society believe that nuclear medicine procedures, by improving and streamlining the diagnostic process (a) reduce the total treatment expense, hospital time, and patient suffering by directing therapy more rapidly towards the appropriate causes of the disease, and (b) provide, in many areas, more specific and clinically useful information on the patient's problems than that available from many other currently available diagnostic modalities. Because nuclear medicine procedures can study dynamic body functions, they can tell us what the body does (or does not do), as opposed to static radiologic procedures, which show merely what shadow is (or is not) present.

In addition, nuclear medicine procedures are a unique area where basic research in the chemical, biological, and physical sciences merge quickly and easily with clinical

research, allowing a rapid transfer of basic science findings from the research laboratory to clinical practice. A number of specific examples may be used to document these statements.

Example Nuclear Cardiology Imaging

One of the most dramatic examples of the rapid transfer of nuclear medicine research developments from the laboratory to the hospital is in the noninvasive study of coronary heart disease. Heart attacks kill approximately 700,000 people annually and are the leading cause of death in the United States. Almost 300,000 individuals suffer their first heart attack without prior knowledge of having coronary artery disease. Great strides have been made in treating this serious health problem once it has been identified. Nuclear diagnostic techniques that have been developed and applied in just the past three years are found to be significantly more sensitive in identifying individuals with diseased coronary arteries than previously used methods, such as electrocardiographic stress testing.

These important advances have been the result of research programs directed both towards developing improved nuclear detection instrumentation and identifying better radioactive trace substances necessary to study te natural history of the disease and the hemodynamic consequences of coronary artery narrowing on heart function. These newly developed nuclear cardiovascular diagnostic methods are being applied clinically with increasing frequency in outpatient facilities where men and women in certain high risk categories can be screened early for heart disease, and they are being used also to assess the extent of damage after heart attacks have occurred. The use of such procedures has resulted in significant savings in hospital costs since the hospitalization normally required for the more extensive diagnostic tests such as cardiac catheterization is no longer necessary.

Investigators in nuclear medicine working under the support of the Human Health Studies Program of the Department of Energy have made many of the most significant contributions to this field through their development of the advanced detection instrumentation needed in nuclear medicine to produce and test the necessary radioactive diagnostic agents. However, researchers have only begun to explore the full potential of these newer tests to detect latent heart disease and to evaluate the benefits of modern medical and surgical treatment.

We realistically anticipate that, with increased funding for research in this field, improved diagnostic procedures will become available to community practitioners. With these tools, they may more effectively deal with this devastating health problem which effects all citizens either by direct suffering or in terms of reduced national productivity.

Example - Cancer Studies

Another specific example is found in cancer-related studies. The major emphasis of nuclear medicine in the field of cancer has moved from the therapeutic use of radioactive

materials to the use of novel imaging modalities which permit the early detection and staging of cancers. We are now witnessing the growing use of nuclear medicine procedures in monitoring the therapy of cancer and in discovering recurrences. Although imaging procedures constitute a valuable adjunct to early diagnosis and staging, without which the practice of modern medical oncology could not be conducted, present technology cannot pinpoint very small lesions, and in some cases the results, while positive, are non-specific. We need to perfect and improve these techniques by obtaining more specific radioactive tracers, by pursuing more sophisticated immunologic and biochemical studies, and by developing instruments with better spatial resolution such as that offered by emission tomographic techniques. The detection in the patient of "tumor markers" using radio-immunoassay techniques now permits us to discover the presence of primary tumors and metastases before they have become evident clinically. These tests need to be expanded in scope and refined in specificity.

Research that would improve the sensitivity and specificity of these and other tumor detection assays promises to have a great impact on patient care. Early and accurate diagnosis is one of the most important factors that allows the medical oncologist to determine the proper course of treatment. An earlier and more accurate decision will reduce hospital stay and eliminate lengthy trials with unresponsive modes of treatment.

In addition, nuclear medicine procedures are a most important means of monitoring therapy in the cancer patient by providing information on progression or regression of the tumor. This information allows the clinician to continue or modify his treatment accordingly. Among the most serious problems in cancer chemotherapy are the serious side effects that antineoplastic agents cause. Again, such effects can often be most efficiently monitored by the use of nuclear medicine procedures. Inflammatory lesions in the lungs, complicating infections, and the cardiotoxic effects of adriamycin are among the many side effects that may be detected by the use of nuclear medicine procedures. These techniques are growing in use and are representative of how nuclear medicine methods enhance the field of cancer treatment.

Example - Pediatric Nuclear Medicine

A further example of how research and development of nuclear medicine techniques has improved health care and reduced costs is in the area of pediatric nuclear medicine. A nuclear bone scan is a most effective diagnostic technique in the early differentiation of cellulitis from osteomyelitis, and it allows the decision to be made between a short hospitalization for the patient with cellulitis and the several weeks of hospitalization and drug therapy for the patient with osteomyelitis. In addition to its cost effectiveness, the ability to make this decision early avoids, for the children as well as their families, the trauma of unnecessary hospitalization.

Example - Radioimmunoassay

The first Nobel Prize in Medicine to be awarded for research in Nuclear Medicine went in 1978 to an American, Dr. Roslynn Yalow. Dr. Yalow, then a researcher at the Veterans Administration, pioneered and developed the field of radioimmunoassay, an in vitro nuclear medicine test that is unique today in that it can detect readily, accurately, and inexpensively almost any substance present in biological samples at levels as low as a fraction of a billionth of a milligram! Over 50 companies in the United States now manufacture radioimmunoassay tests that permit us to detect the specific disease markers in patients, measure blood levels of critical but toxic drugs, and measure pollutants and toxic materials in the biological environment.

Many more examples could be drawn from research in progress in such important fields as mental health, lung disease, renal disease, and others. In essence, these examples all document one clear fact: nuclear medicine procedures are a prime example of rapid technology transfer, where research findings are applied to clinical problems in a very short time. These procedures are clinically useful, cost effective, and noninvasive.

PROMISING AREAS OF RESEARCH

What are some of the areas for which these research funds might properly be used? In addition to further developments and efforts in the areas described above, these funds should be utilized for research in the following areas:

(a) Expanded radioisotope production efforts that will provide new nuclides from accelerators and increase the supply of radionuclides for intramural and extramural radiopharmaceutical development and clinical feasibility studies.

(b) Radiopharmaceutical research to improve our understanding of pharmacodynamics and pharmacokinetics, to increase the specificity of tracer uptake, to measure the effects on biodistribution caused by changing functional chemical groups on radiopharmaceuticals and by drug interactions, to address problems related to biological effects of environmental pollutants, and to achieve patient dose reductions through development of labeled drugs having radionuclides with more desirable decay properties and/or biological half-lives.

(c) Nuclear medicine instrumentation research, particularly in areas of new detector research and emission tomography development.

These are merely a few examples. The American College of Nuclear Physicians and the Society of Nuclear Medicine would welcome the opportunity to assist you in further identifying research targets that will help us to capitalize on the federal dollars invested in research. We urge Congress

to continue its support of increased research in the basic and applied sciences that feed nuclear medicine applications development.

All of the public health benefits described are clearly supported by the administration's budget for Program and Capital Equipment. Many of the gains sought in clarity of image and reduced radiation dosage to patients will require specific improvements in the capital equipment available for use in the national laboratories. We support the proposed capital equipment budget pertaining to nuclear medicine research and urge its approval.

The problems we face in providing health care to the American public are enormous. But improved diagnostic procedures that are safe, cost-effective, and accurate will do much to move us forward in our effort to bring better health to all our citizens.

Thank you for the opportunity to present this testimony. I would be happy to answer any questions you might have.

Dr. HOLMQUEST. Thank you, Mr. Chairman and members of the subcommmittee. In the interests of time I would like to speak in very summary fashion. I sense from the testimony I hear before this subcommittee that you folks understand a very complex topic and I perhaps should not waste too much time explaining what nuclear medicine is. However, since we have this very small nuclear medicine line item in a very large Department of Energy budget, let me ask your indulgence and let me briefly explain in case you don't know.

Ours is a very small, very new medical specialty. There are perhaps 5,000 nuclear medicine physicians in this country. We are those doctors who use radioactive drugs in the practice of medicine. Probably 95 percent of what we do is diagnostic. We really are not so much those who treat cancer, although we do occasionally. We really take radioactive isotopes, we incorporate them into drugs specifically designed to do things we need them to do.

Much of what we do is in the business of imaging. We can take pictures of things in the human body that cannot be seen any other way, X-rays or any other technique.

Furthermore, we do not just look at structures, which is the province traditionally of radiology. With the drugs in our devices we can actually make your body function. We have a unique modality which has some benefits.

We recognize the budget is under severe constaints and we are not here asking for more. We would just like to say that we think we can get by on what has been requested. It will be tight but it will be adequate.

What we do we feel is extremely important in that we can move benefits from the research laboratory to the hospital very quickly. We are a high-technology profession. We have instruments in place and when we get a new isotype out of one of the national laboratories, after we can finally get it approved by the NRC, FDA and other people, we generally can move it right into the laboratory. And as soon as we are sure it is safe it can be used in the patient.

For example, in the area of cardiovascular nuclear medicine. As little as three years ago if you went to the hospital with chest pain, about your only alternative was to have a cardiac catherization and a coronary arteriogram. This involves hospitalization, a wire, a catheter, contrast media, into your heart. It's not comfortable, not always safe and certainly it is expensive.

Today, if you went to the hospital, most likely you would find yourself in front of a simulation camera with an intravenous injection of one of our isotypes, and without pain and danger we would have some very important answers as to whether you have heart disease.

If the decision is made to go on with surgery, no question, you may end up with an arteriogram so the surgeon can visualize in advance the blood vessels upon which he is going to operate.

Many times we can save that expense. What we do does not even require hospitalization. It may cost a third of what an arteriogram may cost.

We are critically dependent on research supported by the Department of Energy, research done in the major laboratories, Brookhaven, Oak Ridge, Los Alamos, to some extent Lawerence,

and we need operating funds for this research. We need capital equipment and some changes. We would just ask that you support us in this endeavor.

Most of what we do seems to reduce hospitalization. We think it reduces cost and certainly reduces pain and suffering in our patients, and we would certainly like your support.

Mr. BURGENER. I would like to offer myself as Exhibit A. I went through that business and therefore avoided all that business of getting into the veins. To put it in lay terms, the human being becomes the X-ray machine, emits the rays. It was very comfortable, very simple, and a lot simpler than spending two days in the hospital with an important but sometimes risky procedure.

Dr. HOLMQUEST. That is true, precisely.

Mr. MYERS. How about a nuclear-powered pacemaker; do you have that?

Dr. HOLMQUEST. Surprisingly enough, there is one.

Dr. POWELL. The cardioscleractic surgeons do insert nuclear-powered pacemakers to keep the heart functioning at a regular rate. Such items have been in use for four or five years.

Mr. BEVILL. You are all doing a great job. As you know, this committee has consistently supported your program. The administration has cut it, I understand, in their budget.

Dr. HOLMQUEST. Yes. It is not clear. The operating budget doesn't look reduced. The capital budget has shown a slight change but not all of it is just for nuclear medicine, so we cannot tell. We would like to have the full request if we could get it.

Mr. MYERS. Is it the same dollars you had last year?

Dr. HOLMQUEST. We would like the same dollars we have in the request. It may be a 7 percent increase. Less than inflation but a tiny bit more than last year. We will thank you all for your support.

Mr. BEVILL. Thank you very much.

NUCLEAR REGULATION

WITNESSES

WILFRED O. UHL, PRESIDENT, LONG ISLAND LIGHTING CO.
JOSEPH D. NOVARRO, PROJECT MANAGER, SHOREHAM NUCLEAR POWER STATION, LILCO

Mr. BEVILL. Our next witness is Wilfred O. Uhl, President, Long Island Lighting Company. We are pleased to have you, Mr. Uhl. You may proceed as you wish.

STATEMENT OF WILFRED O. UHL

Mr. UHL. Mr. Chairmnan, my name is Wilfred O. Uhl. I am President of the Long Island Lighting Company.

We certainly appreciate this opportunity to speak to you about nuclear licensing. We have become acutely aware of its frustrations and costs in the context of our Shoreham and Jamesport projects.

Let me begin with some good news.

I am delighted to report that the NRC staff is now taking steps to complete its Safety Evaluation Report on Shoreham. Issuance of

the SER is expected in early April. That document has been under preparation by the staff for over four years. The first of many staff deadlines for its appearance was missed in March 1977. Now it appears that the most recent deadline will actually be met.

Needless to say, we are very pleased with the NRC's recent efforts to complete the Shoreham SER. Those aspects of the staff's review of the plant not covered in the SER itself will be treated in an SER supplement scheduled for July 1981. The staff has assured us that the supplement's completion date is realistic.

Mr. BEVILL. The Nuclear Regulatory Commission submitted a realistic schedule?

Mr. UHL. That is right.

Mr. BURGENER. You might stipulate it is about four years late.

Mr. BEVILL. I didn't know they ever came out with a realistic schedule. I am glad to hear that.

Mr. UHL. It is the rule of this subcommittee in seeing to it they have done it and that has been outstanding in a way that was probably never equaled before. You demanded a systematic and consistent set of information from the Regulatory Commission, about its licensing plans and its capabilities and the Commission, when forced to examine their performance in the light of the pressure that you put on them, has really reached the conclusion that their paralysis has not been in the national interest. Their recent issuance of the LaSalle SER and their commitment to Shoreham—and I expect that commitment to Shoreham to be fulfilled by the end of next week—is evidence of the NRC's new mood.

In our judgment, without this subcommittee's insistence that the commission be accountable for its stewardship of the licensing process the disarray would still have been tolerated. It was crucial that the disarray end and this committee has been the driving force behind it and we express our sincere appreciation.

The role of this subcommittee in getting licensing moving has not been overlooked. In a way rarely if ever equalled before, this subcommittee has demanded systematic, consistent information from the Nuclear Regulatory Commission about its licensing plans and capabilities. When forced to provide this information, the commission was also forced to face the fact that its licensing process was in disarray.

Spurred by this subcommittee, the commission had to recognize that such disarray was not in the national interest. The result has been a new commitment by the NRC to lessen its licensing confusion and end its licensing paralysis. Two examples of this new commitment are the staff's recent issuance of the LaSalle SER and the staff's recent attention to the Shoreham SER after years of neglecting it.

In our judgment, without this subcommittee's insistence that the commission be accountable for its stewardship of the nuclear licensing process, no Shoreham SER would be imminent, and licensing disarray would still be tolerated by the commission. It was crucial to the public interest that the disarray end. This subcommittee was the driving force in ending it. You have the thanks of us all.

My company has become increasingly concerned that Shoreham, now 87 percent complete, will be physically ready to load fuel

before its operating license proceeding ends. When that proceeding does ultimately find that the plant meets all relevant requirements, as we believe it will, then pointless harm will have been done to national energy policy and to our customers if the plant had been kept off line simply because a licensing proceeding begun in March 1976 has yet to find its way to a conclusion.

It is critically important to the people of Long Island that Shoreham's licensing not lag behind its construction. Over seven years after the 1973 Arab oil embargo, our electric generating capacity remains totally oil-fired. The company continues to produce baseload as well as intermediate and peaking power with oil. As a result, our system is still exposed to the whims of international oil politics.

This country's balance of payments is worsened by the hundreds of millions of dollars that the company sends annually to foreign oil supplies, and our customers must pay for very expensive oil-fired electricity.

When Shoreham is physically and legally ready to operate, the situation will materially improve. Shoreham's 820 megawatts will displace eight million barrels of oil each year, saving our customers over $280 million in fuel costs annually at today's prices.

Almost three years ago, an NRC licensing board recognized just how crucial it is for Long Island to have new non-oil-fired power plants. The board stated:

> The need for providing protection against the partial or total loss of oil supply is especially acute on Long Island since all of LILCO's generating plants are oil-fired. There may well be differing opinions as to the probability of a loss of oil supply at some time during the projected lifetime of Jamesport. However, unless new generating capacity derived from some other fuel is added to the LILCO system, it is overwhelmingly clear on its face that the consequences on Long Island would be catastrophic. In such a situation, the benefits of having Jamesport available would be incalculable.

As indicated, the licensing board was talking about our proposed 2300-MWe Jamesport Nuclear Power Station, not Shoreham. The two Jamesport units received construction permits from the NRC in January 1979, but were later rejected by the New York State Siting Board. Shoreham, accordingly, has become all the more indispensable to help free Long Island from foreign oil.

Shoreham's NRC operating license proceeding began in spring 1976—five years ago. NRC staff review of Shoreham's Final Safety Analysis Report dates from late summer 1975. The licensing proceeding involves several parties who are hostile to the plant, represented by counsel and assisted by MHB Technical Associates of San Jose, California, and ERG, Inc., of Waltham, Massachusetts.

Immense effort has gone, and continues to go, into discovery, negotiation, stipulation, and summary disposition. As a result, there are fewer contentions still to be litigated than would otherwise have been the case, and those that remain after going through the discovery process are better particularized than usual. But when all is said and done, it is likely that there will still be numerous difficult issues that can be resolved only after bitterly contested hearings.

Irrespective of what may be true in most other parts of the country, nuclear hearings on Long Island take time. The AEC hearings on Shoreham's Construction Permit dragged on for 70 days over a 2½-year period. The NRC's evidentiary sessions on Jamesport's construction permits covered 44 days over a 10-month period in 1976-1977, while the companion New York State proceeding ran for 123 days from October 1974 to September 1977. There have probably been more nuclear hearing days on Long Island already than there ever have been or ever will be in any one place elsewhere on earth. And we still have the Shoreham Operating License hearings to go.

Against this background, we are understandably eager to get on with Shoreham's hearings as soon as possible after the SER appears. To the extent that our efforts can affect the outcome, we are determined that Shoreham will not sit idle simply because its operating license proceeding has yet to run its course. We are equally concerned that the NRC not fall back from its recent resolve to see that Shoreham's licensing process moves forward on a timely basis.

Among numerous possibilities, three potential roadblocks are particularly disturbing: first, an NRC tendency to permit individual licensing cases to be used to debate whether or not this country should have commercial nuclear power; second, a tendency to provide unusual leeway to intervenors, even though they usually represent narrow special interests; and third, a tendency to avoid rigorous decision-making schedules. Until the NRC pushes these roadblocks aside, timely licensing will rarely be possible in bitterly contested cases, no matter how many studies the staff does on ways to improve the licensing process and no matter how often the commission fiddles with its procedural rules.

Very briefly, it seems that the first roadblock could be cleared if the commission were to make absolutely clear to its staff and licensing boards that the only issues with which they may deal in licensing cases concern whether applicants have complied with NRC regulations, not whether commercial nuclear power ought to exist and not what the commission's rules ought to be—just, does the project comply with regulations.

Congress has already decided that this country is to have commercial nuclear power. Anyone unhappy with that decision should be told to try to change Congress' mind rather than being allowed to try to achieve before a regulatory body what they have failed to achieve in the political arena. The commission makes NRC rules via rulemakings. It should see that rules exist when needed. Anyone unhappy with them should be told to petition the commission for a new rule, not be allowed to turn licensing cases into closet rulemakings.

Whether nuclear power should exist and what the NRC's rules ought to be are not appropriate subjects for licensing cases. But in practice they are often entertained—frequently to placate intervenors by providing them leeway to "make their case." Intervenors, however, deserve leeway on neither this nor any other score. They are not the sole agents of the public interest. Quite the contrary, they rarely represent the general public as thoroughly as do the NRC and applicants.

The commission, its staff and boards exist expressly to represent the public, and they do. Most applicants, in turn, are charged by statute with providing the public with reliable, inexpensive and environmentally compatible electricity. We are building Shoreham precisely to do that. Under the circumstances, there is no "public interest" justification to end the rules to accommodate the procedural and substantive desires of intervenors. They should be treated just like any other party—no worse, but no better. The public interest is simply not served by giving special dispensations to special interests. Licensing confusion and paralysis, on the other hand, are well served by specially favoring such interests.

As to the third roadblock, the commission first needs to make up its own mind what the rules of the game are. That may be impossible until a new chairman and full commission are on hand. Both are badly needed.

Then the commission needs to insist that its staff apply the rules promptly in safety reviews, and that its licensing boards do the same in adjudicatory reviews. The commission must also renew its confidence in the staff's and licensing board's decisions, so that the commissioners feel no need to second guess their people—for instance, by suspending the immediate effectiveness rule.

If the staff and licensing boards come really to believe (1) that the commission's rules are clear, (2) that the commission itself wants timely licensing decisions, (3) that the commission will support its people when they make timely decisions, despite cries from those who prefer a slower pace, and (4) that sanctions will be imposed on NRC employees who do not resolve the issues before them promptly, then the staff and boards will respond, and rigorous decision-making schedules will result. In the absence of beliefs (1) to (4) on the part of the staff and boards, nothing much else will help.

Implicit in my comments is a conclusion that the most serious roadblocks to NRC licensing have been failures, not so much of substantive standards and procedural rules, as of attitudes and willpower. In short, it is vital to Shoreham and to commercial nuclear power as a whole that the NRC get on with its statutory duty to license reactors that comply with the commission's safety rules.

Mr. BEVILL. Eight million barrels a year is more than we are importing for the whole country each day, which is 6.2 million barrels. This eight million barrels could be saved simply by the Nuclear Regulatory Commission issuing a license, and also it would reduce the power bills?

Mr. UHL. Dramatically, yes, sir. The saving in oil will be $280 million per year. At today's oil prices, we think it will be at least $350 million a year when the plant goes in service.

Mr. MYERS. Mr. Uhl, our former colleague Jack Weidler has kept us apprised of your problems on several occasions. If you have further problems beyond April with NRC, will you let us know?

Mr. UHL. I certainly will.

[Testimony of Wilfred O. Uhl follows:]

77-001 O - 81 - (Part 9) - 52

Testimony of
Wilfred O. Uhl
before the
Subcommittee on Energy and
Water Development
of the
Committee on Appropriations
United States House of Representatives
March 25, 1981

Mr. Chairman, my name is Wilfred O. Uhl. I am President of the Long Island Lighting Company.

We certainly appreciate this opportunity to speak to you about nuclear licensing. We have become acutely aware of its frustrations and costs in the context of our Shoreham and Jamesport projects.

Let me begin with some good news.

I am delighted to report that the NRC Staff is now taking steps to complete its Safety Evaluation Report on Shoreham. Issuance of the SER is expected in early April. That document has been under preparation by the Staff for over four years. The first of many Staff deadlines for its appearance was missed in March 1977. Now it appears that the most recent deadline will actually be met.

Needless to say, we are very pleased with the NRC's recent efforts to complete the Shoreham SER. Those aspects of the Staff's review of the plant not covered in the SER itself will be treated in an SER Supplement scheduled for July 1981. The Staff has assured us that the supplement's completion date is realistic.

The role of this Subcommittee in getting licensing moving has not been overlooked. In a way rarely if ever equalled

before, this Subcommittee has demanded systematic, consistent information from the Nuclear Regulatory Commission about its licensing plans and capabilities. When forced to provide this information, the Commission was also forced to face the fact that its licensing process was in disarray. Spurred by this Subcommittee, the Commission had to recognize that such disarray was not in the national interest. The result has been a new commitment by the NRC to lessen its licensing confusion and end its licensing paralysis. Two examples of this new commitment are the Staff's recent issuance of the LaSalle SER and Staff's recent attention to the Shoreham SER after years of neglecting it.

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INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS

WITNESSES

ED GABRIEL, EXECUTIVE DIRECTOR, COUNCIL OF ENERGY RESOURCE TRIBES

LUCILLE A. ECHOTTAWK, DIRECTOR OF POLICY ANALYSIS, COUNCIL OF ENERGY RESOURCE TRIBES, WASHINGTON, D.C.

Mr. BEVILL. Next project is Ed Gabriel.

STATEMENT OF ED GABRIEL

Mr. GABRIEL. I would like to thank the committee for inviting us here today to testify.

Perhaps I could briefly describe CERT to you. The organization was formed five years ago by 26 energy tribes that own coal, oil, gas, uranium, geothermal, oil shale resources, with the purpose of providing better management, development and planning expertise to their member tribes so they could enhance their product possibilities.

I don't know if this committee knows it but the tribes who are mainly in the Western U.S. own about a third of the coal west of the Mississippi. It would be about 13 percent of the national resource; about 40 percent of the uranium resources in this country and about four percent of the oil and gas, excluding Alaska.

The potential for development on Indian land is great. As a matter of fact, they are the largest owners of energy resources in this country. Those tribes make up CERT, and own those resources.

I would just like to summarize by trying to focus on three elements we have heard a lot about in recent months which seem to be considered of priority nature by this Congress and also by the current Administration.

This Congress in 1972, passed the Self-Determination Act for Insiana and I think what these tribes are doing directly relates to that. We have heard a lot of talk in recent weeks about trying to get more decision making to the local level and less reliance on federal programs. I think this program speaks to that. And especially in national energy policy to which, I think, the Idnians could contribute probably the single biggest factor in this country in terms of production.

If we look at those and look at the possibility of how these tribes can respond to those three elements, I think you will see CERT and the tribes participating with DOE have probably provided what I would consider to be the most cost effective programs we will see in many years at DOE. The tribes alone have doubled their product. That is with the help of the federal incentive in the last two years. They are now producing one million barrels of oil equivalent from Indian land. That is oil, coal and uranium equivalent. That has been doubled in two years. We like to feel we are directly responsible, because of the help by the last Administration, and hopefully by the current Administration.

Now, these tribes which are really only five percent of the total tribes in the country represent 50 percent of the Indian population

so when we look at less reliance on the Federal Government I think we have a real ability to see the tribes help themselves.

The tribes now are the poorest sub-group of our population and I think if we don't help them to help themselves via their own energy development and revenues that can be gained to create their own economic base, we will be helping them later on through welfare and transfer payments.

The tribes don't want this. The tribes and especially those 25 tribes would like to see themselves become more selfsufficient.

This is an example, I think, in this country where we see the tribes are not only helping themselves but probably help all Americans in terms of domestic energy policy.

I would say also that because of the current help by the last Administration, which was under $10 million funded by DOE for feasibility studies, project design work and other assistance, technical assistance, the tribes will probably develop another quarter million barrels of oil equivalent within the next year and a half.

Let me end by focusing on certain obstacles. The tribes have to try to bring the point home on how the Federal Government can help. There are a couple of ways they have been very helpful and we would like to see that continued.

The tribes don't have the cash flow that industry has right now to put together the initial project design, the feasibility work, the permanent installation, to put the project in that position so that a bank would then start to finance it.

Companies don't want to participate until they see the deal come together so there is a pre-feasibility stage needed. Tribes don't have the seed monies up front to pull those together. An example is from 1966 to 1978 we saw hardly any production on Indian lands. From 1978 to the present we have seen a lot of production because Indians are getting the resources to put the project designs, to go make their own designs and move ahead.

It is no different than if I was asked to sign a lease for oil and gas or coal in my back yard. I would be hesitant unless I knew the facts and could get some good advice before I signed a legal document. There has been a reluctance in the past.

Add to that, history. The tribes have been developing oil and gas and coal and uranium for the last 20 or 30 years. They are getting the best rate right now, $1.78 a ton for coal. The United Mine Workers are getting more per ton for their pension fund than the owners of the resource are getting for profit for their own economic base. There is no reason to believe the tribes want to do that any more. I can't blame them personally.

I would hope though, with these new project designs where tribes participate as partners in the process they will be more willing to develop and I think the facts point to that.

We are here to hopefully ask for this committee's help to see that a very minor amount of funding be retained in DOE to help the tribes, help this country and help themselves.

Mr. BURGENER. I think the committee is very impressed with the magnitude of the ownership of the tribes of the energy potential. Are they at the mercy of the Department of the Interior to a large degree?

Mr. GABRIEL. That is why CERT got formed, sir. I think what was happening was they were pretty much being given fairly bad advice by the Department of the Interior and they were signing leases that were not to our benefit. Consequently, in the long term, we stopped developing, because of income cash flow problems to the tribes.

They then began to slowly get their own expertise and in 1975 they finally said, "We are not going to do it alone, let's form an organization that can help by having a group of technicians assist us through this organization, and represent policy perspectives." There has been a surge ahead now because of that.

Mr. BURGENER. While some elements are very worried about the new Department of Interior, others are not and I hope their view of your need to develop becomes more realistic.

Mr. GABRIEL. We testified before Congressman Yates and he has been very helpful in bringing that message across. We are hopeful about the appointments that have been made and we are looking forward to a strong relationship.

We feel that a participation by DOE with this organization and with the tribes is essential also.

Mr. MYERS. Is your organization funded by DOE?

Mr. GABRIEL. Half by DOE and half by the Department of the Interior.

Mr. MYERS. How many people have you associated with your organization?

Mr. GABRIEL. There are 60 employees. About one one-hundredth of the employees in Exxon but we still can do battle with them.

Mr. MYERS. Are you producing as much oil as Exxon is?

Mr. GABRIEL. We are producing a fair amount, about one million barrels of oil a day equivalent. We are pretty proud of it.

Mr. MYERS. You hardly need DOE help if you have that many barrels.

Mr. GABRIEL. Over the long run if the tribes are turning those deals around, they will be getting some revenue, but the $1.78 a ton and the enormous poverty problems they face, I think it will be sometime before we see the cash flow there, but that is the incentive.

Mr. BURGENER. Do you have to work your way through the labyrinth of the Bureau of Indian Affairs as well?

Mr. GABRIEL. Yes, and that is an obstacle and a barrier. They have been more of a disservice than a help.

Mr. BURGENER. I sympathize with you for that.

Mr. MYERS. Is it easier to get through DOE than it is BIA?

Mr. GABRIEL. Yes. I am a former employee of that Department.

Mr. MYERS. I didn't know the Indian service was that bad.

Mr. GABRIEL. It is about the worst I have seen.

Ms. ECHOTTAWK. The Department of Energy has helped.

Mr. MYERS. The first one. Let us put a mark on the wall.

Mr. GABRIEL. Ever since Frank Zarb.

Mr. BURGENER. Does BIA make DOE look good?

Ms. ECHOTTAWK. There has been tentatively less bureaucracy, bureaucratic obstacles in the Department of Energy, in terms of working with the CERT tribes, to realize how they could best benefit from their assets.

Mr. GABRIEL. I should just end by saying under the Nixon Administration, right through the Carter Administration, we have seen top support in DOE for those programs and it is because of that that it has succeeded and it is because of that we are looking at now a million barrels of oil a day.

Mr. BEVILL. Thank you very much.

[The information follows:]

TESTIMONY OF

COUNCIL OF ENERGY RESOURCE TRIBES

PRESENTED BY

EDWARD M. GABRIEL

EXECUTIVE DIRECTOR

BEFORE THE

HOUSE ENERGY AND WATER

DEVELOPMENT APPROPRIATIONS SUBCOMMITTEE

2362 RAYBURN BUILDING

MARCH 25, 1981

I appreciate the opportunity to appear before this Committee on behalf of the Council of Energy Resource Tribes (CERT), a non-profit coalition of 26 American Indian tribes which own substantial energy resources. I know that during the course of these hearings you are receiving many diverse viewpoints on the Department of Energy's budget, but I believe that the topic which I have come here to discuss is one which some of you may not be fully aware - the role of the American Indian in national energy policy.

Indian tribes own a substantial portion of the nation's energy resources. The tribes belonging to CERT own one-third of the strippable coal in the West, roughly 4 to 5 percent of the country's onshore oil and gas resources, some 40 percent of all privately owned uranium, and substantial quantities of oil shale, hydroelectric and geothermal resources. These tribes established CERT in 1975 in recognition of the great potential for using these resources as a base for economic development on their reservations, provided that the resources were developed with sound management practices and appropriate technical assistance. Substantial development progress has been made - over the past fiscal year production on CERT tribal lands has grown to a production level of nearly a million barrels per day of oil equivalent energy.

But this is only the beginning. Projects currently underway by these tribes have the potential to provide an additional 150 to 250 thousand barrels per day of energy over the next three years. And the outlook over the next ten to fifteen years shows that new production on Indian land could total three million barrels per day of oil equivalent energy.

This Committee should know that this progress is being made possible only because of much needed federal assistance - very modest technical and financial assistance, provided with minimal bureaucracy, designed to enable the tribes to better manage their own energy development. The total amount of DOE's current budget for FY '81 dedicated specifically to providing technical assistance to the tribes is $1.1 million. Additional funds were made available to individual tribes last year through DOE's alternative fuels and fossil energy programs to carry out project evaluations.

This money is being put to use right now by the tribes to carry out activities aimed at bringing new energy production on line. These expenditures are for projects that will produce new domestic energy in the near term, not for research and development efforts or abstract studies which by themselves do not result in one drop of new energy for the nation. In addition, when these projects are brought on line they will provide the jobs and income that the tribes need to develop their own economies, and thus to reduce the longstanding dependence on the federal government. Given this situation, the relatively small portion of DOE's budget used by the tribes can hardly be considered a waste of the taxpayer's money, or an undue strain on the Federal budget.

It is our understanding that President Reagan has proposed to rescind a substantial portion of the FY '81 appropriations for Indian programs, and to eliminate Indian programs altogether from DOE's budget for the next fiscal year. Let me emphasize, however, that we have received assurances from the Administration that the intent is not to drop support for the energy owning tribes; rather, funding could be channeled to them through other components of DOE's budget. Based on these assurances, I have not come to criticize the Administration's decision to eliminate budget authority for Indian programs outside of DOE's regular program structure. Rather, I am here today to stress the need for funding for these purposes by whatever means is considered the most effective. I am concerned that in the haste to cut the bulging Federal deficit, which all of us recognize must be done, the small amount of funding needed for Indian energy development may fall by the wayside out of a misunderstanding of its full significance. I am also very concerned that with the proposed major reductions in DOE's commercialization programs, tribes will be unable to obtain funds for project evaluations.

In the past there has been an inequitable, and frankly irrational, approach to the allocation of Federal funding for Indian energy development. Tribes are the largest non-federal owners of energy resources in the country, and have demonstrated their willingness to develop these resources. This is evidenced by their substantial current and planned production which I have already described. In fact, in terms of energy produced per dollar spent, Indian energy funding has proven to be one of the most cost-effective federal energy programs in existence. But the enormous potential of their resources is not anywhere near full realization because the tribes have not received the necessary support needed to overcome the huge obstacles standing in their way.

Perhaps the most serious of these obstacles is financing. Tribes are not asking the government to subsidize projects that the private sector is unwilling to finance. They know that their projects would be marketable -- if they had the up-front capital to prepare the development plans that the private sector requires to finance the projects. Tribes lack the working capital or equity to prepare these plans for several reasons. Due in part to the widespread poverty on Indian reservations, tribes do not have a tax base from which to generate revenues. Historically, tribes have not had access to capital markets for their public facilities, which means that they have no bond or credit rating. The few tribes that have developed their natural resources have received little in return, and what they have earned is earmarked for essential governmental services. Without funds to demonstrate the viability of these projects, the tribes will lose this important opportunity to become self-sufficient and break the unwanted cycle of federal dependence.

In this regard, an excellent example of how federal funds can be applied very cost-effectively toward resolving our energy problems as well as increasing tribal self-sufficiency is being set by the Crow

Tribe of Montana. The tribe was awarded funding last year under DOE's alternative fuels program to prepare a project evaluation plan for a major coal-based synthetic fuels facility. In addition, they were awarded funding to develop an evaluation plan for a 1,000 megawatt coal-fired electric generation plant. Already six utility companies have expressed strong interest in purchasing power produced by this facility, and the power plant could provide electricity for the synfuels plant. Lehman Brothers, one of the largest financial institutions in the nation, is structuring a financial package which will allow for these projects to move forward by drawing funds from the private capital market. The goal is to bring the private sector into the process as quickly as possible.

Provision of these funds to the Crow Tribe appeared to herald a new era for tribal energy development since it opened the possibility that other tribes with energy resources might be able to obtain up-front funding for planning their own major energy projects and thereby reduce their dependence on the federal government when these projects came to fruition. Yet now, with the proposed extinction of DOE's alternative fuels program and major cuts in other DOE commercialization programs, this hope may be shattered unless other means are developed for providing such badly needed project planning funds to the tribes.

In addition to capital problems, tribes face a major development obstacle in that most tribal governments currently lack the capacity to manage large-scale energy development. Tribes have to build this capacity so that they, not the federal government or outside interests, can make decisions about how energy development should proceed on their lands. Too often in the past decisions have been made by the government acting on behalf of the tribes which turned out to be very detrimental to tribal interests. Classic examples are the agreements negotiated by the Bureau of Indian Affairs in the late 1960's to lease coal on Navajo, Northern Cheyenne and Crow lands for $.17 per ton. Such government failures to protect tribal interests amply illustrate the need for tribal control of energy development, and tribal governments are moving in this direction. Yet for now, these governments are generally not readily equipped to deal fully with energy management responsibilities.

Finally, tribes currently lack technical abilities in a number of areas critical to energy development, including engineering, geology, economics and environmental and land use planning. As I stated earlier, technical assistance in these areas has been a major priority in the DOE Indian programs budget, and to a large degree has resulted in the recent increase in tribal energy ventures. An integral element of this assistance is training in energy disciplines and skills to enable tribes to become less dependent on outside assistance in these areas as their own expertise expands.

So this is my message today: with a small amount of Federal funding now, tribes can assist our nation in making major increases in domestic energy production in the very near future, and at the same time develop

productive economies. Without such support, tribes will not be able to overcome the obstacles to increased production and will not produce. Based on my experience, I would advocate funding specifically for technical assistance for tribal energy projects at levels commensurate with the tribes' abilities and potential to develop new energy reserves in this country. This would be a very modest portion of DOE's budget. In addition, activities eligible for funding in the program areas of DOE's budget should be expanded to include Indian energy activities and specific set asides provided so that tribes can obtain funds for vitally needed project evaluations. These program areas include fossil energy, conservation and renewable energy, nuclear energy and environmental programs.

How serious are we about President Reagan's commitment and priority emphasis on Indian self-determination, less reliance on the federal government and sound energy policy which actually puts new domestic energy resources on line? I believe that if we are serious, we will quickly realize the cost-effectiveness and worthiness of the needs and programs described here today. Injection of a small amount of Federal money now - and I emphasize that it is small - can go a long way toward breaking this dependency permanently as well as providing the nation with badly-needed energy. Are we really saving anything by cutting off this funding for productive activities now, with the result that the government will continue to pay out for Indian assistance programs indefinitely? I don't think that we are, and I am confident that after carefully examining this question you will not either.

In conclusion, let us not forget that federal government has a trust responsibility to American Indians which includes assurance that tribes reach their goal of self-sufficiency through self-determination.

I will now answer any questions you may have.

ENERGY PROGRAMS

WITNESS

EDGAR CADWALLADER, LICON, INC.

STATEMENT OF EDGAR CADWALLADER

Mr. CADWALLADER. I am very overwhelmed by all of the testimony I hear here today. The programs that are presented. I sometimes feel my program is quite small.

I represent a small firm in Pensacola, Florida called LICON. We engineer and manufacture equipment for saline water conversion, water pollution abatement and mineral recovery.

We have just concluded a contract with the Department of Energy to build a machine to recover chromium from the plating shops at the Naval Air Station. This contract has been partially supported by the Navy.

I think I am going to summarize my statement here for you today. You can read my testimony.

Mr. BEVILL. We will put your statement in the record.

Mr. CADWALLADER. The point I want to make here is, I have seen the DOE budget, the recission budget as well as the fiscal year 1982 budget, and particularly in regard to conservation. We feel that our work and our efforts in engineering and research has been in the field of conservation, and we feel that, as a small business, where we would like to have further government support—we haven't the resources of a large company like Exxon, General Electric or DuPont Chemicals to carry on our research and development.

We have been very successful. We have produced a machine, and many times in the government programs I have noticed they produce reports and oftentimes these reports repose on bureaucratic shelves and they do nobody any good.

The work we are doing has a wide application in the whole chemical industry. We even looked at the Three Mile Island problem with radioactive waste waters, and we have the technology to deal with that.

I would like to stress with the committee that they continue the programs in conservation in the Department of Energy that were promulgated under Public Law 93-577, 94-163 and 95-380. We think it is important to continue the conservation. The Department of Energy and the country have made great strides in this area. We think this is very important.

Mr. BEVILL. Thank you very much for a very fine statement.

[The information follows:]

LI·CON, Inc. (LIQUID CONDITIONERS)
P. O. BOX 10717 • PENSACOLA, FLORIDA 32504 • TEL. 904 / 477-0334

March 25th 1981

The Energy and Water Development Subcommittee

Mr. Chairman and members of the subcommittee:

I am Edgar Cadwallader, a registered chemical engineer, representing a small business firm, LICON of Pensacola, Florida. We engineer and manufacture equipment for saline water conversion, water pollution abatement, and mineral recovery. I am here this afternoon to speak to the committee about energy conservation and its importance to the nation's overall energy policies for energy independence. I am also speaking about the importance of small business firms and how much of the nation's innovative ideas come from them.

About eighteen months ago we entered into a contract with the Alternative Materials Utilization Branch of the Office of Industrial Programs in DOE to design and build energy efficient equipment for treating electroplating wastes. Because the Department of Defense has environmental problems in its electroplating shops, the Navy contributed about half of the funds for this development. We were highly successful for our machines not only solved an environmental problem, it saved energy and recovered expensive and strategic minerals such as chromium. The savings will result in a return of the capital investment in under three years. Our machine is now being installed at the Naval Air Station in Pensacola. As our nation's forces build up, there will be greater need and incentive to conserve energy and recover valuable minerals.

Mr. Chairman, let me emphasize one fact about the Government's R&D programs. There has been entirely too many "studies and reports" which repose on bureaucratic shelves and contribute little to advancing science and engineering. We produced

a machine to which the Government has rights and which in application will return the original investment many times over.

Today, our nation needs innovation and the small business firms across this country supply more than their proportionate share of ideas. However, small businesses do not always have the ready capital to invest. We are not like the DuPonts, the Dow Chemicals, the Exxons with enormous capital reserves. They dont need Government support. But the Government can step in and give qualified support to small businesses and the return to the taxpayer will be many fold.

The development program we have completed for the Department of Energy and the Navy points to an extension of the technology for application in the chemical and the nuclear industries. For this second phase, we have an industrial sponsor besides the military, and of course we wish to continue with DOE under policies promulgated by Public Laws 93-577, 94-163, and 95-580. We are convinced it is the way to continue. The energy factor is at the heart of the entire program.

In the past when our country has found itself in difficult circumstances, it has called on the engineer and the scientist for help. Do you remember the Manhattan program of the 1940s and the space program of the 1960s? Now we have the environmental and energy crises of the 1980s. Once again the government looks to us for help, and again that help is on the way, but dont cut it short when success is abounding. We recognize that budgets must be pared, but there are programs having high benefit-to-cost ratios which promise immediate returns on investment. Why waste the previous investments which have been made? I believe a respectable amount of financial support should continue. I specifically recommend a continuation of the many good programs exemplied by those in the Alternative Materials Utilization Branch of the Office of Industrial Programs. Thank you.

Respectfully submitted by

Edgar A. Cadwallader

Edgar A. Cadwallader, PE LICON Representative
4406 Mahan Rd
Silver Spring, Md 20906

CONTROLLED THERMONEUCLEAR FUSION AND ADVANCED NUCLEAR TECHNOLOGIES

WITNESS

SUSAN KOKINDA, WASHINGTON REPRESENTATIVE, NATIONAL DEMOCRATIC POLICY COMMITTEE

STATEMENT OF MS. SUSAN KOKINDA

Ms. KOKINDA. The National Democratic Committee is a multicandidate political action committee as well as being sort of a think tank for that moderate and conservative constituency base of the Democratic Party that has a pro-growth orientation.

This subcommittee has a very critical jurisdiction over energy and water. Those two areas perhaps, along with credit are the key areas in determining whether this nation will continue as the strongest industrial republic in the world, or whether we will be becoming a former industrialized nation.

It would be a tragedy to this nation and to the world if this subcommittee and this committee were forced into a position of having to trade a fusion program against a breeder program or the high temperature gas cooled reactor, or were forced to trade off such eastern water projects as Tenn-Tom against western water projects because of the budget balancing mania which is gripping Washington right now.

The end result of such an exercise would be David Stockman under the guise of balancing the budget would succeed where Ralph Nader has failed over the past 15 years. I say guise because it is our assessment that Mr. Stockman's budget policies are in reality an implementation of the no-growth orientation of the last Administration, especially summarized by the GLOBAL 2000 report promulgated in the waning months of the Carter Administration.

That report and a number of companions which have recently been put forth accept as inevitable a Malthusian resource crisis and on that basis, the fact that we are stuck with not enough resources and we are going to have to adopt a policy goal of reducing the world's population by over two billion people between now and the year 2000.

It is obvious this is not the policy orientation of President Reagan, but I think it is a policy orientation of critical members of the Administration at this point, with Mr. Stockman and Mr. Haig being two of the key representatives of that.

The crux of GLOBAL 2000 is that it is a horrifying self-fulfilling prophesy. Its advocates view economic growth and critical components such as energy and water as breeders of population.

I would like to quote John B. Ochs, former Senior Editor of the New York Times, who in a recent interview stated: "If Tenn-Tom were stopped there would be no further industrial development along the Tennessee Valley, which would reduce energy consumption and there would be no further increase in population on the Northern Mississippi. This would help."

I think this is the policy orientation of the Stockman budget cuts at this point. I think Mr. Stockman is an advocate of the post-

industrial society. I have a number of quotes in my testimony which bolster that.

I would like to point out a rather frightening irony which occurred this weekend. Abby Hoffman, a member of the Yippies, was at a water conference here in Washington, D.C. where he and other members of this conference, avowedly environmentalist, avowedly no-growth, embraced David Stockman and the conservatives in Congress who were about to cut the budget for projects.

The next day, Mr. Hoffman went up to a conference in New York where he called for destabilizing the Reagan Administration.

The alleged excuse of balancing the budget I think is ridiculous. One does not balance a budget by chopping out the productive role of the Federal Government. Admittedly our Federal Government has fostered a great deal of overhead, or services sector parasitism, over the past decade, but we are not going to save the economy, just as one wouldn't save an overhead-besotted industrial firm by closing down its assembly line because it costs too much to run them.

Our economy showed its only real economic growth in terms of productivity in the 1960s as a result of the targeted tax program and as a result of the productivity surges into the economy by the NASA program. Today's NASA program is the fusion program as embodied by the McCormick Fusion Energy Engineering Act of 1980. We feel that should be funded at its full $525 million.

Fusion is not just another nice alternative energy source, it represents a qualitative change in the energy efficiency of our economy in a whole array of technologies which our economy must experience or inevitably regret.

In closing, I would simply like to say that I hope the Congress begins to reject this budget balancing mania and look at it for what it is. The Federal Government has a valuable and necessary role to play in areas such as advanced research and development, infrastructural development, such as water projects.

We hope that this Congress does not fall under the so-called arguments of Mr. Stockman and turn this country into a "formerly industrialized nation."

Thank you.

Mr. BURGENER. Mr. Chairman, I wish we had about three hours. You have the most interesting mix of ideas I have run across. I am truly intrigued. Perhaps you could speak at some future time.

Mr. BEVILL. You are with the National Democratic Policy Committee. How do you get that position?

Ms. KOKINDA. We took that title when we founded ourselves in August of last year. We are not affiliated with the Democratic National Committee.

Mr. BURGENER. The National Democratic Party has nothing to do with what you said?

Ms. KOKINDA. No, they don't. I think the problem with the Democratic National Committee is that they wouldn't know policy if it hit them in the head.

Mr. MYERS. I was about ready to walk out. I thought perhaps I wasn't welcome here, that you have a clandestine party caucus or something.

Mr. BEVILL. You work with Mr. LaRouch?

Ms. KOKINDA. Mr. LaRouch is our Advisory Committee chairman.

Mr. BEVILL. Mr. LaRouch is the gentleman—and he is a gentleman—who has been running for president for several years?

Ms. KOKINDA. Yes, he has. And he probably will again.

Mr. MYERS. Dave Stockman isn't on your board either, is he?

Ms. KOKINDA. No, he isn't.

Mr. MYERS. And won't be, I presume.

Ms. KOKINDA. I don't think so.

[The following was submitted for the record:]

National Democratic Policy Committee

Lyndon H. LaRouche, Jr.
Chairman
Advisory Council
Warren Hamerman
Chairman
Ken Dallo
Executive Director
Barbara Boyd
Treasurer

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Testimony of Susan Kokinda
For the National Democratic Policy Committee
Before the Subcommittee on Energy and Water
House Appropriations Committee
March 25, 1981

The National Democratic Policy Committee is a multi-candidate political action committee and policy-formulating body established in August, 1980. Representing the traditional moderate and conservative constituency base of the Democratic Party, the NDPC is committed to a policy of bipartisan cooperation with the Reagan Administration in furtherance of the overwhelming mandate for growth delivered in November 1980.

That mandate was delivered not by some radical libertarian upsurge nor by some mystical fundraising and media machine, but by the traditional Republican AND Democratic machines which saw in Ronald Reagan a chance to restore this nation to industrial greatness. A minimal exercise of true political leadership, which we unfortunately have yet to see from the Administration, will rapidly prove that Americans will rally behind a nation-building perspective.

Nation-building means that this nation be on the frontiers of research and development -- of fusion development, of advanced nuclear technologies, of space exploration, and of necessary industrial infrastruction such as the water projects that are under the jurisdiction of this subcommittee. Under the guise of budget-cutting, David Stockman may succeed in turning this nation into a post-industrial society, where Ralph Nader and Jimmy Carter have so far failed. I say "guise", because it is the assessment of the NDPC that Mr. Stockman's budget policies are, in reality, an implementation of the policies of the last Administration's "Global 2000" report.

The NDPC urges this subcommittee and the Congress to examine closely that report, promulgated during the waning months of the Carter Administration. That report and its companions, "Global Future" and a "Time for Action", accept as inevitable a Malthusian resource crisis, and -- on that assumption -- commit the United States to a policy goal of reducing the world's population by over 2 billion people between now and the year 2000. For the first time a major nation has adopted the global goals of population control as its policy -- for economic and national security reasons.

Despite the obvious antagonism that President Reagan must evince personally to the policy outlook of Global 2000, key institutions, such as the State Department's Office of Population Affairs, continue to exist and push such policies, and key individuals such as David Stockman and Alexander Haig are advocates of such policies.

The crux of Global 2000 is that it is a horrifying, self-fulfilling prophecy. It's advocates view economic growth, and especially such critical components as energy and water development, as "breeders" of population. They restrict

that growth and then wring their hands as 2 billion people die through starvation, plague and economic-instability-fostered warfare. On February 17, 1981, John B. Oakes, former senior editor for the New York Times, showed graphically how this works. In an Op-Ed in the Times, Oakes called for major cutbacks or terminations of funding for such projects as Tennessee-Tombigbee, the Red River project, Lock and Dam 26, and the Central Arizona Project. In a subsequent interview, Mr. Oakes confirmed that he took most of his ideas from the Global 2000 report and continued, "I haven't asked Stockman about Global 2000, but I understand that he is sympathetic to that as well . . . If Tenn-Tom were stopped today, there would be no further industrial development along the Tennessee Valley, which would reduce energy consumption. And there would be no further increase in population growth on the northern Mississippi. This woud help."

The nature of the cuts that Mr. Stockman has proposed, especially in the areas of fusion research, space exploration, science education and the threatened cuts or changes in water development and waterway usage policy can have only one economic rationale -- curtailment of industrial and population growth in the United States.

The alleged excuse of "balancing the budget" is ridiculous. One does not balance a budget by chopping out the productive role of the federal government. Admittedly, our federal government has fostered a great deal of "overhead" or "service sector" parasitism over the past decade or so -- unproductive overhead which should be cut on principal. But one does not save an "overhead-bloated" industrial firm by closing down its assembly line because it costs too much to run. While parring down overhead will help, the actual solution is obviously investment and innovation in the producing side of the firm.

Our economy showed its only real growth, measured in actual, substantial productivity increases for productively-employed operatives, during the mid to late 1960's. Two policies spurred that growth -- a targetted tax policy and the federal commitment to the NASA program and what that meant in terms of technological advances surged back into the private sector. NASA must be continued and expanded, but today's version of the NASA program is the full implementation of the McCormack bill -- the Magnetic Fusion Energy Engineering Act of 1980 at full funding of $525 million. Fusion is not just another, nice alternative energy source. It represents the qualitative change in the energy efficiency of our economy in a whole array of technologies which an economy must experience or inevitably regress.

However, as Mr. Oakes and the Global 2000 advocates evince, there are those who wish us to regress -- at the cost of 2 billion lives in the developing sector by the year 2000. Mr. Stockman, we believe, is of this same mind and it is time that someone announced that the emperor has no clothes. Indeed, if Mr. Stockman were serious about cutting the budget, he would do something about the high interest rate policies of the Federal Reserve Board which are adding $20 billion to the federal deficit in debt service payments alone.

But Mr. Stockman's goal is not a balanced budget as Professor Daniel Bell, a former professor of Stockman's and author of the 1973 book, "The Coming of the Post-Industrial Society," recently told an interviewer: "Stockman has maintained a consistent outlook dating from his student days . . . as a believer in the post industrial thesis. Stockman's idea is to remove all government impediment to the post-industrial society, and let market forces take care of the rest. . . . Unfortunately, David Stockman cannot talk openly

about these ideas in his current environment. But we have done pretty well. . . . A particular post-industrial barometer is Stockman's cuts in internal improvements and related programs . . . This gives industry the message that the free ride is over. It will force investment into areas that are profitable, such as high technology electronics and the service industry."

Prof. Bell is not alone in his assessment of Mr. Stockman's programs. This past weekend, here in Washington, a conferences entitled "Water Policy in the Reagan Administration" was sponsored under the auspices of the Environmental Policy Center. A spokesman for the EPC exulted that the environmentalists were in good shape on water policy because of the conservatives in the Administration and the Congress. He praised Stockman's "insistance on waterway user charges . . . We ought to support the budget cutters and encourage them." The keynote speaker at the event was Yippie Abbie Hoffman. From attending this conference which embraced David Stockman on Saturday, Hoffman traveled to New York City on Sunday to a Yippie conference which planned direct actions to foment social disturbances in opposition to the Reagan Administration.

President Reagan is about to be "Hooverized" by the Global 2000 advocates in his Administration. This subcommittee has jurisdiction over two components of national policy -- energy and water -- which stand at the center of the fight between the Global 2000 advocates and the nation-builders. You have an enormous responsibility to the nation and to the world. We urge you to reject the foolish trap of playing fusion appropriations off against nuclear appropriations or water appropriations off against fusion appropriations or to feel bound to a ridiculous notion of "across-the-board cuts." Fusion and advanced nuclear technologies such as the High Temperature Gas Cooled Reactor must be funded to the fullest extent, as must continued and accelerated development of our water resources.

At this point, I would like to insert two written addenda to the hearing record: a statement by our Advisory Council Chairman, Lyndon H. LaRouche, Jr. entitled "Administration Energy Budget Policy-Has Wrong Bias;" and an article from the Executive Intelligence Review entitled, "Stockman's Global 2000 Approach."

Thank you.

ALABAMA SOLAR ENERGY CENTER

WITNESSES

JACK RAVAN, DIRECTOR, ALABAMA DEPARTMENT OF ENERGY
BERNARD J. SCHROER, DIRECTOR, JOHNSON ENVIRONMENTAL AND ENERGY CENTER, UNIVERSITY OF ALABAMA, HUNTSVILLE, ALA.
GERALD R. GUINN, DIRECTOR, ALABAMA SOLAR ENERGY CENTER, UNIVERSITY OF ALABAMA, HUNTSVILLE, ALA.

Mr. BEVILL. Is John Wright here?

Mr. RAVAN. My name is Jack E. Ravan. I am representing Dr. Wright.

Mr. BEVILL. We are pleased to have you, Jack.

STATEMENT OF JACK RAVAN

Mr. RAVAN. Mr. Chairman, members of the committee, I have with me Dr. Bernard Schroer to my right, and to my left is Dr. Gerald Guinn.

Mr. BEVILL. We are delighted to have each of you gentlemen.

Mr. RAVAN. Mr. Chairman and members of the committee, the bottom line is simply this: Solar energy promises a new hope for the future. Our commitment in the State of Alabama so far has allowed the manufacturing element of the solar energy to grow in Alabama to 15th size in the Nation. At the present time, we are manufacturing 123,000 square feet of solar panels in Alabama.

As you know, the University of Alabama in Huntsville is supported by an engineering technical community deeply committed to this university since 1940.

Also located in Huntsville is a very large and productive Federal establishment known as NASA, as well as the Missile Command. Elements of these families need the kind of institution that has been put in place in Huntsville. We would like to continue that into the 1980's and 1990's with establishment of the Solar Center.

Let me tell you a little about that. The Center works directly with private industry. Some of the research projects include the Alabama Poultry and Egg Association on methane production from chicken litter, Gold Kist on the use of soybean oil as a diesel fuel, and over 50 industries in developing consumer information for driving vehicles more efficiently. The Center has also evaluated various energy devices for over 25 companies.

The State does not come to you with hat in hand. The State is committed to a 20,000 square feet building, and we are asking you to support us with a like amount, $1 million, for the total cost of $2 million.

As you know, if something of this nature is not institutionalized in brick and mortar, we are not going to see the results in solar energy that I think all of us want.

Finally, Mr. Chairman, the support for this project is in fact State-wide. We are not asking for a nice little piece of pie for the Huntsville community or the University of Alabama. Governor James supports this project, other members of the community and indeed it is community-wide all over the State of Alabama. A number of key elected officials, State officials also.

We hope you will see it as we do and provide this $1 million in this community budget.

In conclusion, Mr. Chairman, I want to thank you, especially members of your committee, for the fine work you have done on the Tennessee Tombigbee and want you to know how vital that waterway is to our State and surrounding States—not just a waterway. It is a vital energy artery for the southern part of the United States—and for your commitment to the nuclear industry which is so vital to the Nation. Let's not give that option up.

Mr. BEVILL. We are pleased to have you, and I thank you for a very fine statement.

Your title is Director of Energy?

Mr. RAVAN. Director of the State Department of Energy of Alabama.

Mr. BEVILL. Your office is in Montgomery?

Mr. RAVAN. Yes, sir.

Mr. BEVILL. I just wanted to get that into the record.

We are pleased to have each of you gentlemen and we will certainly work with you in every way we can.

[The statement of Mr. Ravan follows:]

STATE OF ALABAMA
DEPARTMENT OF ENERGY
25 WASHINGTON AVENUE
MONTGOMERY, ALABAMA 36130
(205) 832-5010

FOB JAMES
GOVERNOR

JACK E. RAVAN
DIRECTOR

TESTIMONY BEFORE THE
SUBCOMMITTEE FOR ENERGY AND WATER DEVELOPMENT
APPROPRIATIONS COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES
Washington, D.C.

Jack E. Ravan, Director
Alabama Department of Energy

Bernard J. Schroer, Director
Johnson Environmental & Energy Center
University of Alabama in Huntsville

SUMMARY

The State of Alabama is requesting matching funds of $1M to construct a permanent building to house the Alabama Solar Energy Center on the University of Alabama in Huntsville campus.

I appreciate the opportunity to appear before the Subcommittee on Energy and Water Development and to present the State of Alabama's request for matching funds to construct permanent facilities for the Alabama Solar Energy Center on the campus of The University of Alabama in Huntsville.

I am Director of the Alabama Department of Energy. Accompanying me is Dr. Bernard J. Schroer, Director of the Johnson Environmental and Energy Center at The University of Alabama in Huntsville (UAH). The Johnson Center operates for the State the Alabama Solar Energy Center.

The State of Alabama is committed to making Alabama and the nation energy independent. I would like to briefly highlight several activities in the State supporting this commitment.

First, the 1980 Legislature passed legislation creating the Alabama Department of Energy. This bill charged the Department to develop and promulgate a state energy policy; to formulate a comprehensive state energy management plan; to formulate a contingency plan to provide for adequate energy supplies during shortages; to serve as the State's clearinghouse for energy data; and to encourage and coordinate energy research, development, and demonstration projects.

Second, legislation has been introduced in this session to provide incentives for homeowners to install solar energy systems. This will complement existing energy legislation permitting right turns on red, tax incentives for homeowners to install wood stoves, and energy codes for public funded buildings.

Third, Alabama was one of five pilot states selected to participate in the U.S. DOE Energy Extension Services Program. Alabama's extension program has been used as a model by other states in establishing their programs. Just this last year the State received the presidential award for energy conservation.

Fourth, the Governor signed in 1977 Executive Order 82 designating the Johnson Environmental and Energy Center of The University of Alabama in Huntsville as the Alabama Solar Energy Center with broad research, testing, and instruction responsibilities. The mission of the Solar Center is to conduct research aimed at encouraging the use of solar energy in Alabama. Already the State has a solar industry manufacturing 120,000 sq.ft. of panels (15th largest manufacturer in nation).

Fifth, in just the past several months the State has made a major financial commitment to a joint university/industry proposal for location of the Southeast Residential Experiment Station in Alabama. This experiment station will be one of three regional photovoltaics research, development, and demonstration centers for the U.S. Department of Energy.

To understand The University of Alabama in Huntsville of today and some of its current objectives, one has to look at the University's beginnings. From the start the University has been largely shaped by two divergent and sometimes competing interests--the immediate cultural and intellectual needs of the community and the graduate education and research requirements of the space and missile industries.

During the 1940's a group of local Huntsville citizens worked toward establishing an extension center of the University of Alabama. As a result of their efforts the Huntsville Center was established in 1950.

The second stimulus came from the Army Missile Command at Redstone Arsenal during the early and middle 1950's and later during the 1960's when the demand for both education and research from the Army and from NASA's Marshall Space Flight Center put additional pressure on the University for graduate science and engineering programs.

Through the push of the community on one hand and the federal agencies and space-industry contractors on the other, a foundation was laid that would promote a school with strong programs in engineering, physical sciences, mathematics, and related research and also provide equally high quality programs in the humanities, fine arts, and behavioral sciences.

The strong interest in the sciences and engineering created the Research Institute, a project promoted by Dr. Wernher von Braun and others that led to a legislative bond issue in 1960 and the first state funding of a University facility. On the south end of the campus, one can find a wealth of laboratories and complex equipment first used in aerospace and missile research during the sixties.

The University of Alabama in Huntsville Johnson Environmental and Energy Center is in its ninth year of conducting research for the State of Alabama. The Johnson Center operates the Alabama Solar Energy Center. In general the Center's research thrusts include:

- Environmental research with emphasis on hazardous waste and waste reclamation.
- Transportation research with emphasis on electric vehicles and use of alternate fuels including ethanol and vegetable oils.
- Energy conservation research with emphasis on consumer awareness and education.
- Biomass research with emphasis on ethanol production and use in vehicles, and methane production from animal litter.
- Solar energy research with emphasis on residential hot water, space heating and air conditioning, photovoltaics, and technical assistance to business and industry.

The Center works directly with private industry. Some of the research projects include the Alabama Poultry and Egg Association on methane production from chicken litter, Gold Kist on the use of soybean oil as a diesel fuel, and over 50 industries in developing consumer information for driving vehicles more efficiently. The Center has also evaluated various energy devices for over 25 companies.

The Alabama Solar Energy Center is structured to meet the needs of institutions, industry, and consumers for research, information, and technical assistance in the solar energy technologies. The Solar Center works closely with the State's legislative and administrative bodies to identify needed initiatives and define specific legislation. The Center has developed tax credit legislation for active and passive systems and has conducted studies of consumer protection requirements for solar energy equipment.

The Center maintains an extensive testing facilities to demonstrate solar energy technologies and to support the research and development needs of industry. The Center has on display a demonstration of six commercially available water heating systems to illustrate commercialized technologies to the public.

The Center conducts numerous outreach projects to present the benefits of solar energy to the public. A toll free Solar Hotline produces over about 200 requests monthly for free solar energy literature. Center personnel conduct numerous lectures, short courses, seminars and demonstrations of solar energy technologies. In cooperation with the State Department of Education, the Center is developing a solar technician's curriculum for secondary vocational schools.

The Center interfaces with a number of organizations within the state to expand the utilization of solar energy. The Center was instrumental in the formation of the Alabama Solar Energy Industries Association and supports the programs of various solar related technical societies. It is also developing cooperative programs with the Alabama Institute of Real Estate Appraisers and the Alabama Institute of Architects.

For every dollar the State has provided the Center since its beginning in 1971 the Center has been able to match it with four dollars of federal and private funds. As a result, the Center's current total operating budget is in excess of $2M annually.

With this thrust on research, in addition to the education and public service component of the University of Alabama in Huntsville, combined with a rapidly expanding student body, an acute lack of facilities to house the Center staff and research laboratories has developed. UAH is the most rapidly growing university in the State. UAH's students increased by 20% during the past two years while the State enrollment as a whole was essentially level. This growth is expected to continue at a rate far in excess of the rest of the State. While this student growth is helpful in providing human resources which are crucial to dealing with our energy needs, it is causing problems related to the amount of available space. Most of our solar energy work already is being conducted in temporary energy inefficient structures. A facility is needed and dedicated to solar energy work that can allow the University to play a full role in dealing with the nation's energy problems.

Currently, the staff is housed in a portable 18 x 24 metal building, three trailers, and scattered in two other buildings on campus. In addition, much of the solar testing is being done in three trailers. The NASA Marshall Space Flight Center has donated an indoor solar simulator which cannot be erected because of a lack of space.

The State is requesting support from this committee to assist in the construction of a $2M, 20,000 sq.ft., building to house the Alabama Solar Energy Center. The State has agreed to provide $1M for the building. The State is requesting a match of $1M from the Federal Government.

With the assistance of Sizemore Associates, an energy planner, architect, and engineering firm in Atlanta, GA, the University has developed a master planning document for the Solar Center building. In this master plan, the following project goals of the Solar Center building have been identified:

- Establish a center of excellence for research, development, demonstration, and commercialization of solar energy in Alabama.
- Convey a confidence in solar energy.
- Demonstrate commercialized solar energy technology in Alabama.
- Provide visible evidence of the University's commitment to solving the nation's energy problems.
- Demonstrate the application of solar energy (both active and passive) and energy conservation.
- Establish a center for solar energy activities in Alabama.

- Develop closer relationships between the many diverse solar energy activities of the Center by common housing.
- Provide a solar resource center for students, staff, professionals, and the public.
- Provide for future demonstration sites for solar projects.
- Provide classrooms for education and training.
- Provide work areas for students and co-ops involved in solar energy activities.
- Provide laboratory facilities for research, education, and training.

The proposed facility will satisfy the following needs of the Solar Center:

- Permanency and consolidation of administrative offices adjacent to present outside research facilities.
- The solar simulator from NASA/MSFC has not been erected because of lack of facilities. An operational simulator would allow controlled testing of solar hot water systems and photovoltaic systems and a laboratory for training students.
- Consolidation of solar materials, reports, periodicals, and literature into a solar resource room. Presently, these materials are in several places on campus. There is a great demand for these materials by business and industries, as well as private researchers, students, and the public. The Statewide toll free telephone would be located in this room.
- Classrooms for educating and training students including not only college students but also technical school students and high school vocational students.
- A facility for adults to come to educate themselves on solar by using the resource room, viewing the test, research, and demonstration activities and attending adult education classes.
- Demonstrate the "now and here" solar technologies in a facility where the public can view and ask questions. At the same time, the demonstration would serve as an educational, training, and research facility.

Support for this project is statewide. The Governor's Office and the Alabama Department of Energy are committed to the project. The University of Alabama System is committed to the project. A number of key elected and state officials, industrialists, businessmen, and private citizens have written to their congressmen in support of the project.

Your support for funds to construct permanent facilities for the Alabama Solar Energy Center -- a center dedicated to making the nation energy independent through private industry -- is solicited.

ALCOHOL FUELS AND BIOMASS ENERGY PROGRAMS

WITNESS

DAVID E. HALLBERG, PRESIDENT, RENEWABLE FUELS ASSOCIATION

STATEMENT OF DAVID E. HALLBERG

Mr. HALLBERG. Thank you, Mr. Chairman.

I know you have been here a long while this afternoon. I will keep my remarks brief. The committee has a copy of my oral summation of the testimony which will follow.

I will also give a few words of testimony of Reta Allen McKannan of the Amerhol Corporation.

Basically I would like to explain a little. We started this about two months ago. Members of our board include Blyth Eastman, Paine Webber, Boeing Engineering and Construction Company, Ultra System and Transfirst Corporation, a variety of firms that are interested in promoting the development of renewable energy technologies.

Our objective is to make this happen as quickly as possible with a minimum of Federal Government assistance. However, when the President came out with the rescission program, we polled private sector sponsors and representatives of the financial community and I have some details of that in the written testimony.

We have found that the loan guarantee program, which is slated for rescission for the alcohol fuels program, is essential for the construction of the first generation facilities, without which, we will not get the production of alcohol fuels on loan.

I would like to make a few points about why it is a unique program. First of all, we can make some pretty strong arguments that the rescission of the alcohol fuels program would actually mean some near-term budgetary revenues would not occur. In the National Energy Security Act, each of these firms that receives a loan guarantee has to pay a point up front. They also have to pay back any feasibility study or cooperative agreement which they have assumed.

In an attachment to my written testimony I have gone through a plant in South Carolina which, just from the first two, the payment of its feasibility study and the one point fee to the Secretary, would result in over $650 million directly into the Treasury. So we feel as though there is an argument for the budgetary impacts.

Second, the program has a definite sunset and will expire at the end of 1982. We will not ask for any further capital assistance after that time.

A third argument is that the retroactive rescission of the program will cause some serious economic injury to many small business sponsors. One of which is the Amerhol project.

I would like to read a couple of lines from Mrs. McKannan's letter:

> I Reta Allen McKannan, Business Manager for Amerhol Corporation, Huntsville, Alabama, would like to thank the Energy and Water Development Subcommittee for the opportunity to present the plight of Amerhol Corporation, and request the consideration of this committee.

Amerhol Corporation is a small, minority-owned business which was formed early in 1980 and answered the government's solicitation for proposals for feasibility studies for ethanol alcohol plants. Our proposal concerned a 50 million gallon per year ethanol alcohol plant to be constructed in the waste heat park at the new Watts Bar Nuclear Plant in Rhea County, Tennessee. The park is the first of its kind and is constructed such that plants such as ours can use the waste heat to process energy, and in our case, produce alcohol. The corporation worked for over a year developing the ideas and plans for a plant of this kind, and on December 10, 1980, one of our congressmen called to inform us that we had been awarded one of the grants by the Department of Energy. On that basis, we increased our efforts in preparing to conduct this feasibility study. Almost $50,000 was spent in the knowledge that we would receive the grant, because we felt it necessary to proceed with gathering data as soon as possible, so as to be on the schedule set forth by the Department of Energy in filing for loan guarantees, signing our contract, et cetera. We, as a corporation, felt patriotic and useful knowing that we were going to contribute to this nation's energy independence, as well as its further defense by providing a means of alternative liquid fuel which would loosen the grip of the OPEC nations on our country.

This plant would provide 150 on-site jobs to the people of Rhea County, as well as 100 support jobs for transporting products and by-products. In addition, thousands of farmers would be employed to supply feedstock for the plant. It does not seem logical that this administration, so intent on strengthening the nation's economy, would want to cripple its own people financially by bankrupting small businesses and preventing hundreds of people from having jobs and paying taxes. We speak today only as an example of hundreds of people who have committed themselves to this industry only to have the government withdraw from it.

Mrs. McKannan says she would lose her job and her husband would lose his.

Mr. BEVILL. Were they promised money from the Department of Energy?

Mr. HALLBERG. Yes, sir, the $50,000 feasibility study grant.

Mr. BEVILL. Did they get it?

Mr. HALLBERG. No. This is part of the rescission proposal and they were called about two months ago and told that the rescission covered their money and they would not receive it.

Mr. BEVILL. Had they made other commitments based on that $50,000?

Mr. HALLBERG. Yes. My understanding is that they have gone into some other arrangements with financial groups. I don't know the extent of their liability.

Mr. BEVILL. Are there any questions?

Thank you.

[The statement of Mr. Hallberg follows:]

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THE IMPACT OF PROPOSED RETROACTIVE ELIMINATION OF THE FEDERAL BIOMASS ENERGY AND ALCOHOL FUELS PROGRAM

STATEMENT OF

DAVID E. HALLBERG

PRESIDENT, RENEWABLE FUELS ASSOCIATION

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER
COMMITTEE ON APPROPRIATIONS

U. S. HOUSE OF REPRESENTATIVES

WEDNESDAY, MARCH 25, 1981

Thank you very much, Mr. Chairman.

On behalf of the membership of the Renewable Fuels Association, I would first like to commend you and the members of your Committee for your decision to consider in an in-depth way what the impacts of the new Administration's proposed rescission of the biomass energy and alcohol fuels program will be in terms of private sector participation, the attainment of national energy security and anti-inflation objectives, and the stimulation of competition in the Nation's alternative fuels industry. Especially when one recognizes the fact that biomass energy and alcohol fuels from renewable resources are the only energy alternatives capable of providing this country with significant quantities of alternative fuels — especially high-grade liquid fuels — in the near term, it is particular important that federal policy toward the fledgling industry is well-conceived and conducive of the maximum degree of private sector participation.

I should briefly explain what the Renewable Fuels Association is, and what its objectives are. The association was just recently formed as a non-profit corporation to represent the interests of the renewable fuels industry in Washington, D. C., and its board includes representatives from such well-known firms as Blyth Eastman Paine Webber, Boeing Engineering and Construction Co., Publicker Industries, Inc., and Transfirst Corp., just to name a few. The Association's membership spans the entire spectrum of the industry, from production to marketing to end use, from the Farmers Union to Brown and Root Construction Company. The term "renewable fuels" is meant to include a broad range of renewable energy technologies, including the production and use of ethanol, methanol, methane, and butanol, as well as the integration with other non-traditional energy forms, including the use of geothermal, co-generation, refuse-derived fuels, and solar technologies.

The Association's objectives are to create the sort of environment at the federal level that will induce the maximum level of participation by the private sector

in commercializing renewable fuel technologies, thereby necessitating the minimum amount of federal government involvement.

I think it is especially appropriate that your Committee is holding this hearing today to assess the impacts of the new Administration's rescission proposals on the biomass energy and alcohol fuels industry. Last week, the Congressional Alcohol Fuels Caucus sponsored a meeting where OMB Director David Stockman attempted to defend his contentions that retroactive elimination of the biomass energy and alcohol fuels program in both USDA and DOE is justified from a budgetary and energy security point of view. The Association also has as its stated objective to bring the renewable fuels industry to the point where federal government support, especially in the area of capital formation, is unnecessary. However, after careful analysis, including surveying dozens of project sponsors and financial community representatives, we have concluded that retroactive elimination of the biomass energy/alcohol fuels program would not only seriously compromise the near-term orderly development of a badly needed national alternative energy program, it would also impose significant costs upon the Nation's taxpayers by adversely affecting our budgetary, energy security, and economic objectives.

THE NEED FOR THE PROGRAM: AGRICULTURAL SECTOR ENERGY VULNERABILITY

Mr. Chairman, I know that you and many of the members of your Subcommittee are very familiar with the history of the biomass energy/alcohol fuels program in USDA and DOE since it was the House Agriculture Committee which first acted on HR 3905 in October of 1979, a bill which was largely incorporated into the Energy Security Act as

Title II. The capital formation assistance that the Committee provided in that legislation is needed as badly now as it was then. It is clear that, contrary to OMB claims, loan guarantees are necessary in order to gain financial community debt support for the "first generation" of facilities. Once these are constructed and in operation, the private sector can and will take on the capital formation needs of the industry without the need for federal government involvement.

I should stress that a crucial requirement of this program is that it be implemented as quickly as possible. Perhaps one of the greatest advantages of the alcohol fuels and biomass energy technologies is that they can provide significant quantities of high-grade fuel in the near-term, something none of the other energy supply options other than conservation can do. As the Agriculture Committee noted in its report on HR 3905 in October of 1979:

"...The price of oil is expected to rise in the months ahead and despite any conservation efforts undertaken in the U.S., imported oil will continue to have a serious adverse effect on this through the use of substitutes but most would require a decade or more before they would be available to the public. One effective way of reducing oil imports at an early date is by a large expansion of the production of alcohols from biomass, and the substitution of these for petroleum-based products now used as fuels and for industrial purposes."[1]

Perhaps even more important than the price of imported oil is the question of its availability. Recent events have underlined the volatility of the world's major oil-producing regions, and this Nation's tenuous dependence upon an uninterrupted flow of oil from these areas is becoming increasingly dangerous and foolhardy. It is critically important that, when assessing the energy policy responses that should be taken to the

[1]Rept. 96-515, Part 1, National Alcohols and Alcohol Fuel and Farm Commodity Production Act of 1979, October 12, 1979, p. 9.

threat of oil-supply interruptions, U.S. policymakers recognize the distinction between near-term and long-term actions. All too often, inordinate emphasis is placed on the pursuit of mid- to long-term strategies for alternative energy production that depend upon highly centralized, capital-intensive technologies with long construction lead times and potentially severe environmental problems. Ironically, however, the national security threat is just as real in the near-term, and strategies are badly needed to address the various scenarios that could develop in the one- to ten-year time frame.

The next oil supply interruption is sure to impact heavily on the Nation's agricultural sector. Agricultural production derives 93 percent of the total energy it uses from petroleum, as opposed to 74 percent for the economy as a whole. American agriculture consumed 7.6 billion gallons of petroleum last year in producing and harvesting crops. What is most disturbing about this extensive dependence upon petroleum is the realization that even a mild supply interruption of short duration, if it occurred at a crucial stage in agricultural season, could result in substantial shortfalls in food production, with subsequent increases in consumer prices and possible food-aid cutoffs.

The need for the U.S. agricultural sector to wean itself away from dependence on petroleum as soon as possible is made even more pressing by the fact that decontrol of crude oil has indirectly led to an even greater degree of energy supply and price vulnerability for rural area energy consumers. One of decontrol's effects has been to open the door to the departure of major oil companies from low-profit rural areas, and in the absence of allocation requirement for crude oil, crude-short agricultural cooperatives (which now supply nearly half of rural American's petroleum needs) are

being forced into the world oil spot market where they are paying $10 to $15 per barrel premiums per barrel of crude. It should be remembered that such premiums are occurring at a time when record oil inventories exist worldwide and the demand market for product is "soft." Were shortages or cutoffs to occur, farmers and rural residents would suffer greatly for their petroleum "habit," and urban food consumers would quickly feel the sting.

Fortunately, the Nation's rural areas are perfectly situated to benefit from the commercialization of renewable technologies like alcohol fuels, methane, and solar. Not only would their energy security be enhanced in the near-term, but the "economics of integration" involved when these various technologies are combined can make such projects profitable in a very short time. For instance, there are thousands of communities across the nation that could support an energy/food/feed complex consisting of the following:

(1) an alcohol fuel facility, or gasifier, which utilizes abundant feedstocks from the area (e.g., corn in Iowa, sugar beets in Idaho, forestry wastes in Oregon, potato culls in Maine, fruit and vegetable wastes in California);

(2) a methane digestion unit linked to the alcohol fuel facility to process process heat, the methane to be derived from animal wastes from a nearby feedlot. The livestock would be fed a ration that would draw heavily on the high-protein co-product generated by the ethanol facility;

(3) An enclosed vegetable greenhouse into which can be pumped the high-quality CO_2 which is also a valuable co-product of the ethanol production process, as well as waste heat in order to promote faster growth of the produce;

(4) A fish or shrimp pond in the greenhouse which could benefit from the

"tropical" environment and be nurtured by the nutrients in the waste stream from the ethanol and methane units;

(5) Application of the residue from the methane digestion unit as either a high-quality fertilizer or for use in livestock rations for its high-protein value; and

(6) The use of straight, "wet" (less than 200 proof) alcohol in vehicles and farm equipment in the surrounding community.

The above scheme is not a utopian dream. The technologies are well-known, and there are numerous communities and farms around the country that are well on their way to incorporating all or part of such a system into their operations. However, the rescission of already appropriated Energy Security Act funds, especially those for the Department of Agriculture, which has authority over facilities of 15 million gallons or less, would severely damage the prospects for near-term commercialization of these integrated technologies, and unwisely delay the day when the U.S. agricultural sector could safely weather an oil supply interruption. Especially for rural communities and small-business entrepreneurs, there is a strong need for up-front capital formation assistance for innovative alternative energy projects like these. In addition, the federal government should help to catalyze private-sector involvement by stimulating R&D in critical areas, providing for integrated model facility demonstrations in selected parts of the country, and perhaps even supporting the creation of "strategic alcohol reserves."

In many ways, the support of a viable renewable fuels industry in the U.S. could be viewed as an innovative civil defense program, as well. While the Nation's military planners are preparing to spend tens of billions of dollars on a mobile MX missile program to reduce the vulnerability of U.S. land-based ICBMs to a Soviet first strike, nothing is being done to address the dangerous vulnerability of the centralized

U.S. energy infrastructure to similar contingencies. A recent report by the Office of Technology Assessment concluded that, under one possible nuclear attack scenario, only 10 Soviet SS-18s, with eight warheads apiece, could destroy nearly 75% of the U.S. oil refining and distribution capacity.

While this is admittedly a worst-case scenario, it underlines the significant vulnerability we have due to the highly centralized nature of our conventional energy system. Obviously, the risks of the present system would be greatly reduced if we were to pursue an energy policy that would promote, in a gradual and cost-effective way, the dispersal and decentralization of our energy production facilities. A recent analysis done for the Federal Emergency Management Agency entitled, "Energy, Vulnerability, and War," gave ethanol from biomass the only 10 ranking out of a host of other fuel alternatives on the basis of its dispersal and short lead-time qualities.

In summary, then, federal incentives for alcohol fuel production should be viewed not only as beneficial to the nation's economy and energy supply, but also a key element of a needed national security policy.

POSITIVE, NOT NEGATIVE BUDGETARY IMPACTS

Administration budget-cutters have rationalized their retroactive elimination of the biomass energy/alcohol fuels program on the grounds that such action would help to reduce the federal budget deficit and thereby help to bring inflation under control. In reality, if this program is rescinded, the federal government will suffer a near-term budgetary loss, and inflation will be worsened, since the benefits of billions of gallons of high-grade liquid fuel production will be forfeited. As the Agriculture Committee noted in reporting out HR 3905 in the last Congress:

"...the Committee is of the opinion that HR 3905...is anti-inflationary in nature. The legislation will involve relatively small amounts of government funds, while at the same time it will encourage the manufacture and use of important substitutes for petroleum. As a result, the United States will find it necessary to import less petroleum and natural gas, thus improving our balance-of-payments position, decreasing our dependence on imported petroleum, and increasing the total supplies of available fuel. The legislation will, therefore, have a positive impact on our economy."[2] (Emphasis added.)

BUDGETARY GAINS

As the attachment points out in greater detail, the implementation of the loan guarantee program would actually generate additional revenues for the federal government which it would otherwise forfeit if the program is rescinded. As required by Title II of the Energy Security Act, each project awarded a federal loan guarantee must make an immediate payment to the Secretary equivalent to "one point" of the guarantee (ESA, Title II, Sec. 217(g)(2). Such payment will cover the administration costs and other possible liabilities. In addition, projects awarded loan guarantees must repay any federal feasibility study or cooperative agreement assistance they may have received. Several of the projects now awaiting conditional awards from the DOE fall into this category, and it should be stressed that if these projects are not commercialized, the monies will be classified as grants, and the taxpayers will never see repayment. The Congress in structuring this program was also careful to include other statutory requirements to safeguard the taxpayers' interests. In short, it is not rescission, but expeditious implementation of the biomass energy/alcohol fuels program as

[2] Ibid. P. 40

authorized and appropriated by the 96th Congress that will contribute to improving the federal budget and alleviating the spiraling inflation rate.

SUNSET PROVISION

It should also be pointed out that the biomass energy/alcohol fuels program is unique from others in the sense that it has a definite termination date written into the law — the end of FY 1982. It is the belief of this Association that were the program as authorized and appropriated by the 96th Congress to be properly implemented, the industry will not need to ask for any further capital formation assistance beyond this point. Thus, we are not asking for any new assistance, simply that which was promised only a few short months ago.

EQUITY, GOVERNMENT CREDIBILITY, AND PRIVATE SECTOR PARTICIPATION

The Reagan Administration has asserted that one of its primary objectives is to effect the maximization private-sector involvement in alternate energy development, thus allowing the reduction of federal government involvement. The Association, and the industry it represents, heartily endorses this goal. However, the retroactive elimination of this program, which was set in place only a few short months ago, would in fact produce just the opposite sort of reaction, since dozens of private-sector sponsors — the vast majority of whom are small businessmen — will suffer serious economic damage and loss of their projects, many of which are just one step away from construction.

Mr. Chairman, I have provided all the members of your Committee with copies of some of the surveys filled out by project sponsors who are affected by the

Administration's rescission proposals. As you can see, Mr. Chairman, all of these projects share some of the same general characteristics. First, they have all spent considerable sums of their own money, most hundreds of thousands of dollars. Second, they would not have done so but for the solicition of the federal government. Third, while their projects are well developed, and could be commercialized with loan guarantees, all except one (which has only slim hopes) state definitively that their projects will collapse.

Mr. Chairman, it may be that some of the others testifying here today will be able to address this matter in more personal terms. I personally know numerous individuals who have put up huge sums of their money in response to the Energy Security Act program. One of the members of my board, Harold Britten, has spent nearly $1.5 million of his own money in his quest for a DOE loan guarantee, without which the financial community is not willing to back his project. I maintain that those people down at OMB who contend that this program is unnecessary have not taken the time to carefully study the industry. It is indeed ironic that, after having provided the oil industry with subsidies totaling $123.57 billion and the nuclear industry with tens of billions more in its short history, that suddenly the renewable alternatives are being told that they can compete and penetrate the traditional marketplace without even so much as a two-year start-up program. The equity of that position escapes me. It is even more confusing to hear Administration officials say that loan guarantees are reasonable for the large, capital intensive, and much riskier synthetic fuel technologies, but they cannot be extended to alcohol fuel and biomass energy facilities. It is small wonder that people are beginning to question the rationale of the energy program we are being offered.

"FOOD VS FUEL": THE PROGRAM'S EXPANSIVENESS

Mr. Chairman, while I know that this Committee has successfully resolved its questions with regard to the role of a national alcohol fuels program and its impact on the "food vs. fuel" question, I would like to make just a few brief comments in this regard.

First, there is a growing body of evidence to suggest that the feed value of the traditional high-protein byproduct from the fermentation of grains for fuel is even greater than originally expected. In a recent letter to Congressman Berkley Bedell, Dr. Terry Klopfenstein of the University of Nebraska - Lincoln had this to say about the conclusions he had gleaned from their intensive studies:

"...soybean acres can be converted to corn production with little decrease in protein production and the starch from the corn is available for alcohol production. Cattle, both beef and dairy, are ruminants and can utilize roughages as their primary feedstuffs.... Therefore, the starch from the corn crop can be fermented to alcohol and the remaining protein (distiller's grains) and fiber (residues) can be used to produce at least as much beef as is presently produced."

In addition, it is well known that firms such as ADM and CHEMAPEC have processes capable of producing multiple co-products that are suitable for human consumption. CHEMAPEC's process, for instance, extracts the following products from one bushel of corn prior to fermentation to full alcohol: 5.39 lbs. of corn germ; nearly 1 lb. of corn oil; 3.5 lbs. of corn bran; 5.67 lbs. corn gluten meal, and nearly 1 lb. of fodder yeast. Again, it is the abundant starch that is transformed into ethanol, while the nutritious portions of the grain remain.

Finally, it should be stressed that alcohol fuel advocates have never contended that all the fuel alcohol that will be produced will come from agricultural products. As you well know, Mr. Chairman, there is vast potential for producing liquid fuel and other types of energy from a wide variety of feedstocks, including forestry residues, urban and food processing wastes, such as cheese whey, and energy crops like algae. In fact, if the biomass energy/alcohol fuels program funding is rescinded, valuable progress will be lost in terms of utilizing these untraditional feedstocks. Specifically, the second round of feasibility study and cooperative agreement awards from DOE include the following projects:

— a proposal by Sealaska Corp. in Juneau, Alaska to do a feasibility study for a plant to produce 50 million gallons of ethanol annually from wood waste using the Gulf enzymatic hydrolysis process;

— a proposal by the City of Miami, Florida, to study the feasibility of utilizing cellulosic trash to produce ethanol;

— a proposal by Rocket Research Company in Redmond, Washington, to study the feasibility of producing 10 million gals./yr. of ethanol from potato wastes and potato culls;

— a proposal by J. M. Haber Corp. of Portland, Maine to study the feasibility of producing 453 barrels of oil equivalent (BOE daily) by the fluid bed gasification of wood wastes;

— a proposal by Pollio Dairy Products Corp. of Port Washington, New York, to study the feasibility of producing 170 BOE/D by the production of methane from cheese whey.

— a proposal by Burgwin, Pasley & Associates, Inc., in Topeka, Kansas to do a

feasibility study to produce 200 BOE/D by pelletizing forest wastes and residues for home and small industrial heating.

It should be clear then that the biomass energy and alcohol fuels program is far more than simply the production of ethanol from corn. The program is badly needed to stimulate the near-term commercialization of not just the more traditional fermentation facilities, but also those that utilize a wide range of feedstocks, including forestry residues, urban and food processing wastes, and energy crops, and produce varied types of fuel, including methane and directly combustible pellets. The authorities granted by the 96th Congress under this program include all of the various renewable energy technologies, and they are needed if they are to make the substantial contributions to the Nation's energy needs of which they are capable.

In conclusion, Mr. Chairman, the biomass energy/alcohol fuels program deserves full and expeditious implementation. It is needed as badly now as it was when it was enacted by the 96th Congress. I would respectfully urge that the Congress oppose the Administration's proposed rescission in light of the adverse impacts it would have on the Nation's budgetary, energy security, and economic objectives.

Thank you, Mr. Chairman.

# # #

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MEMORANDUM

The following data taken from the proposal submitted by Energy Conversion Corporation for it's 20 million gallon per year ethanol alcohol project at Miley, South Carolina, recaps the net direct cash-flow benefits accruing to the U.S. Government during the assumed project life of 20 years:

A.	Initial Cash-flow to U.S. Government:	
1.	Reimbursement by applicant to U.S. Government for feasibility Study Grant (not reimbursed if plant not built)	$ 162,181.00
2.	Government's fee for Guaranteeing Loan	491,500.00
	Total Initial Cash-flow to Fed. Gov't.	$ 653,681.00
B.	Federal Income Tax Scheduled to be paid:	
1.	Federal Tax for first 10 years of operations (1981 through 1990)	$ 44,700,000.00
2.	Federal Tax for second 10 years of operations (1991 through 2000)	199,683,000.00
	Total Income Tax Scheduled to be paid during Projected life of the plant	$244,383,000.00
	Grand Total Cash-flow Benefits to the U.S. Government from this plant	$245,036,681.00

As the recap above represents, the net cash-flow benefits from only one of the sixteen (16) plants now being considered for loan guarantees by the DOE, the total cash-flow to the Federal Government from all sixteen (16) would be in the range of $5,520,576,000.00.

Additionally, it should be pointed out that it takes approximately 1.47 gallons of crude oil to produce for utilization one (1) gallon of usuable gasoline. to meet sea and surface transportation requirements when the energy required for refining is considered. Of course, there are no further refining requirements for ethyl alcohol, and consequently, a plant which produces 20 million gallons of ethanol per year replaces 29,400,000 gallons of imported crude oil. At forty (40) gallons per barrel, this replaces 735,000 barrels of crude oil per year. Currently, the sales price of crude oil is $36.00 per barrel. We have experienced a price increase of 41.25% per year in crude oil in the past eight (8) years. Assuming that we will have a continued price increase of at least 15% per year, crude oil will sell for $54.75 per barrel in 1983 and $62.96 per barrel in 1984.

Based on the above crude oil purchase prices, a plant replacing 735,000 barrels of crude in 1983 would result in $40,241,250.00 staying in the U.S.A. rather than being exported.

The following table demonstrates the savings in dollars to the economy of the U.S.A. over a period of 20 years:

YEAR		SAVINGS TO U.S. ECONOMY
1983		$ 40,241,000.00
1984		46,277,000.00
1985		53,219,000.00
1986		61,201,000.00
1987		70,382,000.00
1988		80,939,000.00
1989		93,080,000.00
1990		107,042,000.00
1991		123,097,000.00
1992		141,562,000.00
	10 year total	$ 817,040,000.00
	20 year total	$3,305,381,000.00

We and our partners plan to make a $12,000,000 cash investment in this plant, and we are asking for a $51,000,000 loan guarantee. Essentially, what we are talking about is the Department of Energy guaranteeing a $51,000,000 loan at this time in order to save the U.S. economy 3.3 billion dollars over the next 20 years.

We believe the above to be an investment in America which the American people can ill afford to lose.

Sincerely,

ENERGY CONVERSION CORPORATION

Roy B. Jeffcoat
President

Renewable Fuels Association
499 South Capitol Street, SW
Suite 420
Washington, D.C. 20003
(202) 484-9320

Daniel S. Hallberg
President / Chief Executive Officer
Cindy Thelken
Administrative Assistant

In February, the Reagan Administration proposed that the entire federal alcohol fuels program be rescinded except for existing tax incentive programs.* The rescission, if accepted, would mean the near-term loss of billions of gallons of high grade alcohol fuel production, and the loss of hundreds of thousands of dollars in expenditures made by small business project sponsors. A general breakdown of the proposed cuts in the alcohol fuels program follows.

Energy Security Act Loan Guarantees.

Title II of the Energy Security Act (P.L. 96-294) authorized $600 million for both the Department of Energy and the Department of Agriculture biomass energy programs. However, in P.L. 96-304, the FY 1980 Supplemental Appropriations, a maximum amount of $1.27 billion was appropriated, to be allocated as follows: USDA: $525 million; DOE: $525 million for Part A (all biomass except municipal waste); and DOE: $200 million for Part B (municipal waste).

With the passage of the FY 1981 Interior and Related Agencies Appropriations Act the loan guarantee levels for biomass energy in both departments were leveraged at a ratio of 3:1. However, because these are ["off-budget"] loan guarantees, only the original budget authority figures show up on the OMB tables.

Reagan Administration proposal: Total rescission.

Arguments Against: There are numerous reasons why this proposal should be strongly opposed, but the leading arguments are:

1) Funded through loan guarantees this program does not contribute to the budget deficit. In fact, it can be argued that immediate budgetary benefits would accrue from the implementation of the program due to the fact that: (a) projects are required by law to make a payment to the Treasury of "one point" of the loan; (b) feasibility study and cooperative agreements grants must be repaid; (c) significant tax revenues would result.

2) This program has a "sunset", and will expire at the end of 1982.

* The 4c federal excise tax exemption, the energy investment tax credit, and the producers'/blenders' tax exemption

3) Alcohol fuel is the only high grade liquid alternative available now to the Nation, and the retroactive elimination of this program will cost the Nation billions of gallons of fuel alcohol production in the near term. This is true because the financial community requires loan guarantees for the "first generation" of alcohol fuel facilities, and their loss will cause all numerous projects that are nearly ready to begin construction to unravel.

4) The project sponsors are, for the most part, small businessmen who have committed hundreds of thousands of dollars to the development of these projects in response to the federal government solicitations. Unlike large synthetic fuel project sponsors, who can readily absorb the loss of already expended funds, the collapse of these well-advanced alcohol fuel projects would cause severe economic damage to their small business sponsors and their communities, and thus deter the increased participation of the private sector in the industry without government support.

Feasibility Study and Cooperative Agreements.

Unlike Energy Security Act loan guarantees, the awards made under these programs were direct outlays. However, as in the case with loan guarantees, project sponsors have already expended significant amounts of money as a result of federal government notification of their awards. Thus, rescission of funds would result in great losses to small business sponsors.

The 1980 Interior and Related Agencies Appropriations Act (P.L. 126) provided $200 million for feasibility studies and cooperative agreements under authorities contained in the Federal Non-Nuclear Research and Development Act. (Coop agreements are grants; feasibility studies are grants which are converted to loans if the study demonstrates the project is feasible.)

Under the solicitation from this Act, alcohol fuel facilities received $21 million worth of feasibility study awards for 42 projects, and two cooperative agreement awards for a total of nearly $35 million.

The Congress appropriated an additional $300 million for cooperative agreements and feasibility study awards under the FY 1981 Interior and Related Agenices Appropriation Act. Under this second round, 19 alcohol fuel projects were chosen. Five of these were cooperative agreements for a total of approximately $63 million, and rest were feasibility study awards of nearly $7 million.

Reagan Administration Proposal: Total Elimination.

It should be noted that each of these projects has spent most of the money promised in the individual awards, although in most cases the payment from the Federal Government has not been received in full. The rescission of these funds retroactively raises a host of legal and ethical questions, and would raise harmful doubts about the commitment of the U.S. government to alternative energy development.

It is imperative, if the Nation is to develop a meaningful alternative energy industry, that there be some continuity in federal government policy from Congress to Congress and Administration to Administration. The Association supports the goal of maximizing private sector involvement and reducing the federal government role, but a retroactive elimination of 96th Congress funding will only delay the day that will be possible.

plants started. Get the plants built and get the banks interested," he said.

One would-be fermentation ethanol producer sees a more important market for ethanol in the chemical-pharmaceutical industries than in the fuel industry. "I see problems in trying to market my product to the oil industry people who are trying to cut my throat in the first place," he said.

Looking at ethylene prices, he noted that they were 14¢ per lb f.o.b. the Gulf of Mexico in 1979; now they are 24-26¢ "and with oil deregulation they may be 27-30¢ per lb." When the prices reach 45¢ per lb, and with corn feedstock at $3 per bushel, "we are in business," he said.

MEETINGS CALENDAR . . .

March-April-May. Seminars on Commercial-Scale Ethanol Production and Financing. Solar Energy Research Institute. Cecil Jones (303) 231-7014. **March 31,** Radisson-Muehleback Hotel, Kansas City, MO; **April 8,** Peachtree Plaza Hotel, Atlanta, GA; **April 16,** Hyatt-Regency Hotel, San Francisco, CA; **April 21,** Denver Hilton Hotel, Denver, CO; **April 29,** Drake Hotel, Chicago, IL; and **May 6,** Plaza Hotel, New York, NY.

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The survey work was performed March 2 by officials of the Renewable Fuels Association at an alcohol fuels roundtable luncheon held in Washington, D. C. and attended by approximately 100 industry representatives. A partial set of responses to the association's one-page questionnaire was obtained by Alcohol Week (See box).

The survey suggests that many large commercial ethanol plants proposed for the U.S. hinge on the availability of federal loan guarantees. The loan guarantee program is targeted for extinction by the Reagan Administration.

The largest single private outlay or obligation to date among the 10 projects is Publicker Industries' proposed Bigler Street Plant in Philadelphia, according to the survey. Publicker reported outlays to date of $2.99-million.

Publicker reported that the plant's future was highly uncertain without a federal loan guarantee. "Project would be discontinued or possibly be carried forward at about one-third of the projected capacity if financing can be secured," according to Publicker.

The project calls for refitting an existing building in Philadelphia to house a 60-million gallons/year fuel ethanol plant. Total project cost is estimated at $56-million.

Also reporting large expenditures was New Energy Corp. of Indiana, which proposes to construct a 50-million gallons/year ethanol plant in South Bend, IN at a total cost of $141-million. The company already has received $1.77-million in DOE feasibility study grant money awarded for the project last July 9. New Energy Corp. lists on the questionnaire project outlays to date of $2.2-million. The project, according to the survey, "would not proceed" without loan guarantee programs. The company was one of 16 applicants approved by DOE last year for final negotiations for loan guarantees. The group has been halted in getting guarantees by the Administration's proposed rescissions.

Minnesota Alcohol Producers of Minneapolis, also named tentatively for a guarantee before the DOE program was frozen, reported expenditures of $1.053-million. The corporation is proposing a 15-million gallons/year, $45-million ethanol plant for Mankato, MN.

"Based on our nearly two years experience of trying to finance the project without a loan guarantee, we believe that the project financing will be extremely difficult to put in place," stated a company official for the survey. "We will try but we are not very confident that the lenders will cooperate."

The 10 projects reported receiving a total of $2.044-million in federal funding to date. The bulk of that total went to the New Energy Corp.

RFA QUESTIONNAIRE RESULTS

Corporation	Funds expended or obligated by project sponsor	Funds received from government	What will happen if all DOE and FmHA fuel alcohol programs are terminated?
Biosynthetics Inc.	$125,000	$0	Project will be terminated.
Sodak Resources Ltd.	$150,000	$118,400	If we do not receive a loan guarantee there is a real question whether our $55-million project can be funded as a small business enterprise.
Sasecol Corp.	$963,000	$0	Complete financial demise. Prior to being solicitated by DOE, I was a small and disadvantaged minority business. If the U.S. government reneges on its commitments, as made through grant contract, I will be forced to join the welfare lines.
Agri Power Alcohol Inc.	$300,000	$0	We are not able to get financing without a fed. loan guarantee. Therefore, without it our company will die.
D. W. Small & Sons Inc.	$400,000	$156,400	We will attempt to finance with guarantee. If unsuccessful we will terminate the project.
Amerhol Corp.	$48,000	$0	1) We'd have trouble getting investors committed. 2) We can't recover funds already spent & can't hope to build the 50-million gal/yr plant. 3) (Bottom line bankruptcy).
New Energy Corp. of Indiana	$2.2-million	$1.77-million	Would not proceed.
Rural Agri-energy Products Co.	$300,000	$0	We do not believe that the project will go ahead. Project financing is not available without the loan guarantee.
Publicker Industries/ Bigler Street Plant	$2.99-million	$0	Project would be discontinued or possibly be carried forward at about one-third of the projected capacity if financing can be secured.
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Minnesota Alcohol Producers	$1.035-million	$0	Based on our nearly two years of experience of trying to finance the project without a loan guarantee, we believe that the project financing will be extremely difficult to put in place. We will try but we are not very confident that the lenders will cooperate.
Total	$9.036-million	$2.044-million	

NEW GASOHOL PRESIDENT EMPHASIZES PRODUCTION FROM SMALLER DISTILLERIES

Dean Shelor, president-elect of the National Gasohol Commission, says he plans to emphasize development of relatively small, on-farm or community-sized fuel alcohol distilling operations in the U.S. The commission should promote the utility and economic potential of community-sized plants, he told Alcohol Week.

Shelor, owner of a 3,000-acre wheat and cattle farm in Minneola, KS, and a former Kansas state representative, was elected commission president earlier this month at the organization's annual meeting in Washington, D. C. (Alcohol Week, 16 March, 7). His term begins July 1.

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TESTIMONY OF RETA ALLEN McKANNAN,
AMERHOL CORPORATION

I, Reta Allen McKannan, Business Manager for Amerhol Corporation, Huntsville, Alabama, would like to thank the Energy and Water Development Subcommittee for the opportunity to present the plight of Amerhol Corporation, and request the consideration of this committee.

Amerhol Corporation is a small, minority-owned business which was formed early in 1980 and answered the government's solicitation for proposals for feasibility studies for ethanol alcohol plants. Our proposal concerned a 50 million gallon per year ethanol alcohol plant to be constructed in the waste heat park at the new Watts Bar Nuclear Plant in Rhea County, TN. The park is the first of its kind and is constructed such that plants such as ours can use the waste heat to process energy, and in our case, produce alcohol. The corporation worked for over a year developing the ideas and plans for a plant of this kind, and on December 10, 1980, one of our congressmen called to inform us that we had been awarded one of the grants by the Department of Energy. On that basis we increased our efforts in preparing to conduct this feasibility study. Almost $50,000.00 was spent in the knowledge that we would receive the grant, because we felt it necessary to proceed with gathering data as soon as possible, so as to be on the schedule set forth by the Department of Energy in filing for loan guarantees, signing our contract, etc. We, as a corporation, felt patriotic and useful knowing that we were going to contribute to this nation's energy independence, as well as its further defense by providing a means of alternative liquid fuel which would loosen the grip of the OPEC nations on our country.

In early February, we were informed by telephone that our grant was on hold and would possibly be withdrawn by the new administration. We feel that this is not only a breach of faith on the part of our government, but also a mistake financially, since the federal government stands to gain greatly with the inception of the new alcohol industry. Our grant, as do all the others, has a clause which requires payback, and is shown in attached Appendix A. This plant would provide 150 on-site jobs to the people of Rhea County, as well as 100 support jobs for transporting products and by-products. In addition, thousands of farmers would be employed to supply feedstock for the plant. It does not seem logical that this administration, so intent on strengthening the nation's economy, would want to cripple its own people financially by bankrupting small businesses and preventing hundreds of people from having jobs and paying taxes. We speak today only as an example of hundreds of people who have committed themselves to this industry only to have the government withdraw from it.

Others will probably argue for us that corn used for these plants will not prevent anyone from eating, and that technology has improved such that five times as much energy is produced by alcohol as it takes to make it, but we do want to admonish this committee to consider the possibility of bankrupting many small businesses in this country with a vote in the name of budget cuts.

I personally will lost my job if we are unable to continue this effort. We believed in December that the government meant what it said, and my husband and I both quit jobs and moved to another city to see that this business received the attention it deserved. Now, my husband has been forced to seek other employment so that we personally might stay afloat, and while others are still working part-time at the project, I, too, will have to find another job if we do not receive the assistance we were awarded. The reason Mr. Hallberg is presenting this testimony today is that Amerhol can better use the money for an airline ticket to continue our design efforts.

Thank you for your consideration and your time, and on behalf of all those who are so vitally interested in this industry, we appreciate the opportunity to present our story.

TESTIMONY OF AMERHOL CORPORATION, HUNTSVILLE, ALABAMA

Amerhol Corporation is a small, minority-owned business in Huntsville, Alabama, composed of eight people who agreed to give of their time and experience to begin a business in the alcohol industry. It was awarded a feasibility study grant in December, 1980, which was appropriated in FY-81 funds.

Amerhol took the government at its word and increased its efforts in gathering data for the feasibility study in late December, 1980, after a year of study and research, with the understanding that a contract would be signed in January, 1981.

The corporation has plans for a 50 million gallon per year ethanol alcohol plant to be constructed near the Watts Bar Nuclear Plant in Rhea County, TN. The plant would be in a waste heat park adjacent to the nuclear plant, the first park of its kind in the country. The alcohol plant would employ 150 people. Additionally, the plant would require at least 100 outside support jobs and many farmers providing corn or milo as feedstock for the plant.

The government originally solicited grass roots help for the alcohol industry for several reasons. The main reason was to provide national security by means of an alternative liquid fuel made domestically. This fuel would help remove threats of embargo as a foreign control over the United States, as well as remove price controls placed on this country by the OPEC nations.

There are two major criticisms which the government had to deal with concerning the alcohol industry and they have since been disproven. The first concerned the argument that the alcohol plants will use energy, but the fact is, alcohol plants will provide five times more energy than it takes to run them. In response to the food versus fuel argument, there is enough corn in this country to feed the people and provide fuels, and further, the corn by-products that our particular plant will produce will be nutritious food supplements for both man and animal.

The government announced the awarding of grants and loan guarantees knowing these were economically feasible and would provide additional income for the country, as well as jobs for its people. The feasibility studies were meant as seed money, with a payback clause in each, aiding new businesses in getting started. Loan guarantees encouraged investors to provide private funds for new businesses and loans would be profitable to the investor, at the same time aiding the businesses at no cost to the government.

The alcohol businesses would of course, pay income taxes, as well as provide new jobs for thousands of taxpayers, which would aid the government financially.

We feel the government is reneging on commitments to its people, and at the same time, hurting its own intent to strengthen a failing economy.

The new administration has kept prior commitments to foreign countries, such as Iran, and should keep its commitments of temporary aid to its own people. The money was committed, appropriated and should be dispersed.

The concerns of energy independence and national defense in the prior administration have not changed from 1980 to 1981, and they should be dealt with by the present administration.

The fledgling alcohol industry can, by repaying its grants and providing jobs and tax revenue, help this nation's economy immensely.

At this point I would like to explain my personal position as it relates to this committee.

After a year of working on this project voluntarily, my husband and I committed in December, 1980, to go to work full-time for Amerhol Corporation, on the word of our government. We quit jobs and moved to another city to see that the gathering of data for our feasibility study received the attention it deserved.

We felt we were beginning a business not for ourselves only, but for the good of this great nation, and we were proud of that.

Now, if this sub-committee and this Congress rescinds the grants which we, and numerous others were awarded, our corporation, and others, will go bankrupt. We have spent as much of our own money as we can ($50,000) with no means of recovering it. My husband has had to find other employment to keep us afloat personally, and I will lose my job if we are not given the assistance we were awarded. We, like you, have to pay bills, and the reason I could not appear today is because we can better spend the money for an airline ticket on the data gathering effort.

In conclusion, I would like to thank you for the opportunity to share with you the plight of Amerhol Corporation and myself.

We feel very strongly that we supported the government in good faith and do not deserve bankruptcy in the name of budget cuts.

If this is the case, however, we believe we should be awarded some form of termination costs because of the personal expense we as a corporation have suffered.

We would appreciate your consideration of the facts presented to you in the light of the current situation, as well as that of thousands of others in the alcohol industry. We trust that you will see, as we do, that energy independence and financial viability are good reasons to keep the alcohol industry alive.

Reta Allen McKannan
Business Manager
Amerhol Corporation
Huntsville, Alabama

APPENDIX A

DOE Grant No.: DE-FG07-81ID12280
Exhibit 1

Special Provisions

The following Special Provisions are applicable to all recipients:

1. Repayment Criteria

Public Law 96-126 and Public Law 96-304 provide that the Secretary of Energy may require repayment of the feasibility study assistance funds under specified circumstances.

If an alternative fuel facility is constructed and commerces startup, the design of which is based substantially upon the work performed under this feasibility study, the repayment provisions are as follows:

1. If the amount of the feasibility study grant exceeds one (1) percent of the capital cost of the facility, repayment shall be made from facility revenues, spread evenly over a five-year period, commencing with plant startup.

2. If the amount of the feasibility study grant is less than one (1) percent of the capital cost of the facility, repayment shall be made in full within one year after facility startup.

If construction has not ben initiated within five years of the date of award of the grant, repayment will not be required.

The Secretary is authorized to waive repayment. Waiver will be considered where repayment would significantly weaken the project's financial condition. Where repayment is required the interest rate will be five (5) percent compounded annually from the date of award of the grant.

NUCLEAR PROGRAMS

WITNESSES

JOHN T. CONWAY, PRESIDENT, AMERICAN NUCLEAR ENERGY COUNCIL
LYN R. McINTOSH, DIRECTOR, LEGISLATIVE PROGRAMS, AMERICAN NUCLEAR COUNCIL

STATEMENT OF JOHN T. CONWAY

Mr. CONWAY. Thank you, Mr. Chairman. I am accompanied by Lyn McIntosh, also on the staff.

I will submit my statement, with your permission, as if read. And recognizing you have been sitting all day, I will keep my oral statement to a minimum.

Mr. BEVILL. It is so ordered.

[The statement of Mr. Conway follows:]

STATEMENT

BY

JOHN T. CONWAY

PRESIDENT

AMERICAN NUCLEAR ENERGY COUNCIL

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE APPROPRIATIONS COMMITTEE

March 25, 1981

Mr. Chairman and Subcommittee Members, I am John T. Conway, President of the American Nuclear Energy Council, and I am pleased to return before you to discuss the nuclear industry's view of the DoE FY82 Nuclear Budget.

I. The Need for Nuclear Power

As of March 1981, there are 71 civilian nuclear power plants in operation in the United States with a capacity of about 53,000 MW(e). In addition, two plants, 1000 MW(e) each, are licensed for low power testing; 82 plants, 91,000 MW(e), are under construction; and 11 plants, 14,000 MW(e), are under construction review. In total, this amounts to 166 plants representing approximately 160,000 MW(e).[1]

Nuclear power is currently producing 11 percent of the Nation's electrical requirements. This contribution will dramatically increase as nuclear power plants currently being constructed are brought into commercial operation. By 1989, nuclear power plants should be producing 26 percent of the Nation's electricity. Beyond 1990, nuclear's contribution increases to over 30 percent by the year 2000, depending on assumptions related to economic and energy growth.

The contribution of nuclear power to the reduction of U.S. foreign oil dependence cannot be overlooked. Last year nuclear power provided the equivalent of 1.3 million barrels per day of oil equivalent (bde). This generation is roughly the energy equivalent to the current Alaskan oil production level and is also equivalent to our total imports from Saudi Arabia. To establish a reference point, it should be noted that the 1973-1974 Arab oil embargo resulted in the loss of less than 500,000 barrels of oil per day, but it put over one million people out of work and cost some $40 billion in the gross national product. Each new 1000

1. This data excludes: Dresden 1 - 200 MW(e); Humbolt Bay - 65 MW(e); TMI 2 - 906 MW(e) closed indefinitely; and Indian Point I - 265 MW(e) with decommissioning plans underway.

MW(e) reactor in commercial service will additionally offset the equivalent of 30,000 barrels per day (bde). If the 93 plants under construction or on order are completed during this decade, the nuclear contribution is expected to be 4 to 4.5 million barrels of oil per day of oil equivalent (bde).

However, even with the planned capacity additions, both coal and nuclear, the Electric Power Research Institute[2] projects shortfalls in electrical capacity in the year 2000 by about 100 gigawatts (1 gigawatt equals 1000 megawatts or equals approximately one hundred nuclear plants) for both low and intermediate growth projection. This shortfall can only be made up by increased nuclear and coal capacity additions. Whether these additions materialize depends on whether the constraints slowing the growth of nuclear capacity are removed.

II. Impact of Licensing Delays on the U.S. Electrical Generating Capacity

As indicated by the GAO in a study of "Electric Power Plant Cancellation and Delays",[3] the U.S. electric utility industry has cancelled plans for 184 generating units (80 nuclear and 84 coal-fired plants) from 1974 to 1978 -- almost as many units as were put into operation during the same period.

Of the 184 new power plants that were brought on-line between 1974 and 1978, 79 percent of them experienced delays roughly from under 6 months for 41 plants to 3 years or more for 23 plants. Eighty-one percent of the 330 new power plants projected to be completed by the early 1990's have already been delayed an average of 40 months. Average delays for nuclear units are the highest amongst fuel types, averaging 52.7 months of delay per plant.

"Continued cancellations and delays may contribute to increased oil consumption, greater dependence on foreign oil, greater potential for electrical service interruptions and higher electricity rates for consumers", the GAO report found.

In the nuclear area, we want to thank this Subcommittee for its strong role in examining the delays caused by the Nuclear Regulatory Commission's cumbersome licensing process. Your leadership in this area has encouraged other Committees of Congress with jurisdiction over the NRC to join in voicing their serious concern.

As noted in NRC's monthly report to the Committee, the Commission's licensing operations have come to a virtual standstill. For plants scheduled to be brought into commercial operation in 1981-1982:

- construction will have been completed on 13 plants a total of 90 months before operating licenses will be issued;

2. Electric Power Research Institute "1981-1985 Overview and Strategy" Executive Summary, October 1980.
3. GAO Report to the Congress of the United States, EMD-81-25, December 1980.

- the cost increases to utilities and their ratepayers associated with these delays is already between $2 and $3 billion and growing each day. In other words, each month of delay adds $30-40 million to the cost of a typical generating station;

- due to these delays, the electric utilities constructing these plants will, according to DoE, consume 42 million barrels of oil more than they might have otherwise consumed.

The impact of rapidly escalating oil costs, the cost of capital and escalating construction costs, exacerbated by licensing delays, have dealt a devastating blow to consumers and to the financial capability of the utility industry. There is no doubt that this is the most serious issue influencing the adequacy, reliability and cost of electric power supply in the 1980's and beyond.

III. Nuclear Power Budget

The Carter Administration virtually brought to a halt work to close the back end of the fuel cycle. From the standpoint of domestic economics, national security and international prestige, the FY82 DoE budget must reflect the recognition that coal and nuclear power are the only economic alternatives for large-scale application in the remainder of the century.

A review of the nuclear budget over the past several years clearly shows that in relation to the overall DoE budget and the funding afforded other energy research, development and demonstration programs, nuclear program funding has declined. According to the Attachment appended to my testimony, the nuclear fission budget has declined by 15.4 percent since 1977 in terms of year of budget dollars. In real terms, taking inflation into account, the reduction of nuclear funding is even more dramatic, amounting to a 42 percent reduction in constant FY81 dollars.

The opponents of nuclear power have adopted the strategy for FY82 of attacking the nuclear energy budget by projecting it as a disproportionate share of the total DoE budget. This is accomplished by adding to the nuclear energy total, funding for military applications, nuclear science applications and the uranium enrichment program. Clearly military and science applications have no bearing on the nuclear energy component. Nor should uranium enrichment program funding be included because the program is operated, as required by law, on a 10-year campaign full-cost recovery basis.

The nuclear energy component of President Reagan's FY82 Budget for DoE amounts to $1,247 million. Even this amount for nuclear funding includes costs incurred by the government for the commercial waste management and spent fuel storage programs which will be returned in the form of fees paid by the utilities for the utilization of such services once the programs have become operational.

The $1,247 million represents only nine percent of the total DoE Budget of $13.7 billion. Moreover, the $288 million increase in funding in the Reagan budget for nuclear research and development over the Carter sumittal was more than offset by a decrease of $355 million in the

overall enrichment budget. The Reagan nuclear budget must be maintained and certain programs increased if the downward trend in nuclear program funding is to be turned around and if nuclear power is to contribute its full potential to establishing energy security for the United States.

A number of programs warrant attention. In 1977, when President Carter announced that the reprocessing of spent fuel elements from civilian nuclear plants would be "indefinitely deferred", he automatically caused work on the privately owned Barnwell Reprocessing Facility in South Carolina to come to a standstill. The Allied Chemical and General Atomic companies, that had been encouraged by previous Democratic and Republican Administrations to enter this field, were left "high and dry". Utilities that had expected to ship their spent fuel to such a facility no longer had that option. President Carter recognized the problem his new policy would cause to these utilities and thus he proposed that a federal away-from-reactor (AFR) spent fuel storage facility would be established, the full cost to be borne by the utilities using the facility.

We believe it is important that away-from-reactor spent fuel storage capacity be acquired to aid those utilities whose on-site storage capacity has reached their limits. We also believe that the budget should provide for regional AFR facilities. With respect to the Barnwell Spent Fuel Reprocessing Facility in South Carolina, funds need to be provided to continue the research and development program which could be focused on using Barnwell for AFR storage and reprocessing.

We must push forward with demonstration of a fully closed fuel cycle that includes reprocessing, the Clinch River Breeder Reactor and high-level geologic waste disposal - all under an acceptable level of safeguards and at funding levels that provide for economically viable programs. Additionally, the waste solidification program authorized by the Congress last year at West Valley, New York should be continued.

It is necessary to move rapidly to restructure and complete the Nuclear Regulatory Commission's Generic Environmental Impact Statement on Mixed Oxide Fuel or some other programmatic approach to examining the environmental impacts and establishing standards to deal with the plutonium fuel cycle.

Furthermore, it is critical that the Gas Centrifuge Enrichment Program be funded to maintain its current schedule. This project will utilize only 5 percent of the energy needed to run equivalent capacity of the 40 year old gaseous diffusion facilities and will allow for phasing out of these old, costly facilities.

Work must also continue on programs such as the High Temperature Gas Cooled Reactor to provide an alternative form of nuclear generation. The HTGR-Steam Cycle/Cogeneration system, for example, can generate electricity or process steam at relatively high efficiencies. The HTGR will, we believe, provide an important nuclear heat source for synthetic fuels and industrial process heat production.

Mr. Chairman, this concludes my statement. I thank you for the opportunity to appear before your Subcommittee.

ATTACHMENT

ERDA/DOE TOTAL BUDGET AUTHORITY
(Millions of Dollars)

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					7,205	4,240.5
6,389	10,283	10,799	11,675	13,594	112.8%	45.3%

ENERGY RESEARCH, DEVELOPMENT AND DEMONSTRATION

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					947	-449.6
3,010	2,696	3,625	3,730	3,957	31.5%	-10.2%

CONSERVATION RESEARCH AND DEVELOPMENT

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					656.1	581.44
160.9	692	671	815	817	407.8%	246.8%

FOSSIL ENERGY DEVELOPMENT

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					647.8	423.59
483.2	702	791	897	1,131	134.1%	59.9%

SOLAR ENERGY DEVELOPMENT

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					285.6	150.9
290.4	303.0	528	602	576	98.3%	35.5%

GEOTHERMAL ENERGY DEVELOPMENT

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
		130			144.3	64.2
54.7	106		145	199	263.8%	148.4%

NUCLEAR FISSION

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					-181.7	730.93
1,183.7	1,062	1,204	1,182	1,002	-15.4%	-42%

FUSION POWER RESEARCH AND DEVELOPMENT

1977	1978	1979	1980	1981	Inc. Thru. FY81 Year Of Budget Dollars	Constant FY81 Dollars
					-21.9	214.9
415.9	325	356	356	394	-5.3%	-35.3%

Mr. CONWAY. I would like to thank the committee for your efforts last year in the appropriation bill for the NRC. When you put that requirement on the commission to make monthly records as to their procedures and what they are doing in the licensing, you, for the first time, helped us focus on the real problem we have been facing. I can't thank this committee enough, because from your efforts we are finally getting the message across to the commission.

Mr. BEVILL. The committee has been very concerned, and I am glad to see we seem to be making some progress.

Mr. CONWAY. You are, sir.

On page 3 of my statement, I call attention to the attachment in which I have attempted to put the nuclear budget in perspective with other energy research development projects.

I feel with the new Administration coming out strongly supporting both fossil and nuclear that I feel like the boy on Christmas after a long period of years, I finally got my bicycle under the tree. But when I take the bike out on the street, none of the other kids have a bike and they are trying to take my bike away.

In the last four years, we have seem a diminution in the support for nuclear of over 15 percent. If you just take the numbers themselves, we are over 40 percent having gone down where many other projects have been going up.

Mr. MYERS. You are saying there is not really an increase in constant dollars?

Mr. CONWAY. Yes. Putting it in perspective and recognizing in the last four years there has been tremendous increase in other forms of energy—and rightly so, I am no way trying to detract from that—I do want to put it in perspective.

Many of those who are attacking the nuclear budget as being disproportionate, when you actually analyze their figures, you find they are counting the nuclear Navy and weapons which shouldn't be counted against industrial power programs.

I hope you will be able to recognize we are not getting a disproportionate amount of money.

Mr. BEVILL. That is a very good point. Thank you so much for your fine presentation.

Are there any questions?

Mr. RUDD. Did I understand that you are talking about budget funding in dollars from the government decreased 15 percent? How about nuclear energy overall? Has the use of nuclear increased or decreased?

Mr. CONWAY. We have been going up. The actual use of the electricity being generated is running about 11 percent of all the electricity generated in the United States today from nuclear power.

If we can get the 90-odd plants currently in the pipeline completed and on the line, we are going to see over 25 percent of the electricity in this country coming from nuclear in the near future.

Mr. BEVILL. Has that 11 percent usage increased?

Mr. CONWAY. Actually it has been somewhat of a decrease. In 1978, 13 percent came on, but after Three Mile Island, a number of plants were shut down to incorporate so-called "lessons learned."

What has resulted is the capacity factors of the nuclear have not been great in the last two years. With all the engineering safeguards that will be installed from the "lessons learned," we will see it above 13 percent again.

Mr. MYERS. Speaking for myself, I am very pleased you have attended to provide us with this statement and your information on nuclear energy.

I would like to say also that your reason and logic in this field has been very instrumental in promoting to the extent that it is for the best interests of the country and welfare of the country, because we can't get along, in my opinion, without nuclear energy, without funds to complete the center. I would not say this if I were not extremely well informed on your background.

I thank you for being here.

Mr. BEVILL. We do appreciate the fine work you are doing and certainly you have the support of this entire committee, as you know.

DOE PROGRAMS

WITNESSES

LEON SHOHET, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

WILIAM G. HERROLD, MANAGER, PUBLIC AFFAIRS PROGRAMS AND SECRETARY TO THE ENERGY AND RESEARCH AND DEVELOPMENT COMMITTEES OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

Mr. BEVILL. We are pleased to have you. You are from the Institute of Electrical and Electronics Engineers. You may summarize your statement, if you wish.

STATEMENT OF LEON SHOHET

Mr. SHOHET. I am Leon Shohet, and I am a professor in the College of Engineering at the University of Wisconsin, and I am also the Director of the Torastron/Stellarator Laboratory, a magnetic fusion research facility. It is my pleasure to appear before you today on behalf of the Committee on Research and Development of the Institute fo Electrical and Electronics Engineers [IEEE] which has more than 200,000 members worldwide.

Electrical energy meets many human needs, as I am sure you all realize. We all get it by conversion from other forms of energy. We sent it to where it is needed through a set of networks. Research in this area requires substantial investment in new knowledge and technology. We do appreciate the necessity for the spending containment goals as well as the problems you must encounter considering the income side of the budget as well.

We agree with the philosophy expressed in the Administration budget for DOE, namely that DOE should support those items that are long term, high risk, and have high potential payoff.

The IEEE R&D Committee was pleased to learn of increases or only moderate cuts in the submission of the DOE program to the Budget Committee by the Subcommittee on Energy Research and

Production. In particular, we note that the subcommittee recommended a higher authorization level for electrical energy systems, for energy storage systems, and for magnetic fusion. We support these recommendations.

We will focus our comments on the areas of magnetic fusion, nuclear fission, solar electric systems, energy storage, and basic energy sciences.

The Magnetic Fusion Energy Engineering Act of 1980 was a very significant policy statement which set forth the objective of demonstrating the viability of fusion as an energy source. We welcomed the passage of this Act.

We strongly support the continued pursuit of the main-line fusion concepts and the development of the Center for Fusion Engineering. However, as mandated by the 1980 Act, it is also imperative that various alternate concepts be developed.

As an example, I draw your attention to the torsatron/stellarator concept. The viability of this concept as a reactor has been shown to be most attractive. Torsatron/stellarators have achieved physics parameters that match those of equivalently sized tokamaks. Thus, it is now appropriate to develop this concept. At least one proposed device has been favorably reviewed and is now ready for an in-depth design and cost analysis.

In February, 10 distinguished scientists and engineers wrote to DOE stating that "the concept has not progressed to the point where it should become a key and significant part of the U.S. fusion program." A copy of this letter, along with recent newspaper articles, are included as a supplementary material.

I now turn to nuclear fission. The IEEE R&D Committee is pleased to learn of the plans to develop the breeder reactor program. It is important to do so in order to acquire engineering as well as manufacturing experience and plant component performance data to develop a U.S. liquid metal fast breeder reactor. But we do not yet endorse a commitment to full-scale commercial development.

In the solar area, the IEEE R&D Committee requests that attention be given to restoring some of the severe cuts done by the subcommittee in this area. In particular, I would like to draw your attention to two areas. First, photovoltaic devices and system development are not sufficiently understood. Second, thermal processes require a strong development program for the designs of components as well as for integrated architectural and engineering designs of systems.

In the area of electric energy systems and high voltage transmission research, we favor the proposal for the following reasons: First, this is the only part of DOE that is concerned with the delivery of electrical energy once it is generated. Second, DOE has, for many years, been the only source of funding for such studies. It must be noted that solutions to today's problems may often generate new ones in this very unexplored area.

In the energy storage area, DOE support has focused on mechanical, magnetic and underground energy storage. We endorse the support of those concepts and processes. Superconducting magnetic energy storage is an example of a concept which offers high efficiency, quick response and a favorable environmental impact. It

is urged that adequate and sustained funding be provided to insure the timely development of this and all of the more promising storage concepts under consideration.

Finally, I turn to the area of basic energy sciences. This work provided an important foundation for the more applied programs throughout DOE and has been responsible for many important discoveries. It is always tempting to defer and delay this program, but such an action could result in very serious deficiencies in our knowledge base. We in IEEE strongly support it.

In closing, first, if there is any additional information that you may require concerning this statement, I would be glad to provide it to you.

Finally, I would like to tell you that I appreciate the difficulty of the process you are going through. I have confidence in your judgment.

Thank you very much.

Mr. MYERS. I see you have your electric engineering degree from Purdue. We have faith in your judgment, too.

Mr. SHOHET. Thank you, Congressman.

Mr. BEVILL. Thank you very much. It is a very fine statement.

[The statement of Mr. Shohet follows:]

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
UNITED STATES ACTIVITIES BOARD
RESEARCH AND DEVELOPMENT COMMITTEE

STATEMENT OF

DR. J. LEON SHOHET

COMMITTEE ON RESEARCH AND DEVELOPMENT

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HOUSE COMMITTEE ON APPROPRIATIONS

ON

THE DEPARTMENT OF ENERGY FY 1982 BUDGET

Summary

The Institute of Electrical and Electronics Engineers Committee on Research and Development supports the basic philosophy expressed in the DOE Budget Request -- support of high-risk, long-term, high-payoff programs. Six specific programs are discussed, and we urge the Subcommittee to provide adequate funding to the following activities:

1. Magnetic Fusion - support the main-line programs, establish and develop the Center for Fusion Engineering, and develop torsatron/stellarator as a viable alternate concept.
2. Nuclear Fission - support development, but not yet commercialization of the liquid metal fast breeder reactor.
3. Solar - increase funding in photo-voltaics and thermal systems.
4. Electric Energy Systems - increase funding in systems analysis and high voltage transmission.
5. Energy Storage - support energy storage programs including superconducting magnetic energy storage.
6. Basic Energy Sciences - support ongoing programs.

I am Leon Shohet, and I am a Professor in the College of Engineering at the University of Wisconsin, and I am also the Director of the Torsatron/Stellarator Laboratory, a magnetic fusion research facility at the University. I am speaking to you today on behalf of the Committee on Research and Development of the Institute of Electrical and Electronics Engineers (IEEE). The Institute, founded in 1884, is the world's largest technical professional engineering society, with a membership of 165,000 in the United States and a total of more than 210,000 worldwide. Our members are volunteers with expertise in the engineering aspects of power, energy, communications, transportation, biomedicine and computers, as well as numerous related fields. I am a Fellow of the Institute and the Past President of the Nuclear and Plasma Sciences Society of the IEEE. As Chairman of the subcommittee on the Department of Energy of the IEEE's Committee on Research and Development, it is my pleasure to have the opportunity to appear and make a brief statement on behalf of this committee before the Energy and Water Development Subcommittee of the House Committee on Appropriations.

In our energy future, electrical energy is destined to play an increasingly important role and will be critical to the achievement of energy independence. It meets many human needs, as I am sure you all realize. How do we obtain electrical energy? Basically, we depend upon conversion processes from other forms of energy for almost all of our electricity. We then must send it to where it is needed through a complex and interconnected set of distribution networks. We believe that effective Federal involvement in research in this area requires a substantial investment in new knowledge and technology development. We do appreciate the necessity for the spending containment goals as well as the problems that you must encounter in considering the income side of the budget, such as tax cuts or tax incentives which could promote industrial development. These are really two sides of the same coin, since in the last analysis it is the taxpayers' money that must be used.

We strongly agree with the philosophy expressed in the Reagan budget for the Department of Energy, namely that DOE should support those items that are long term, high risk and with high potential payoff. By high risk we mean in an economic, not a safety sense, and by high payoff we mean those projects that offer a substantial advantage in economics, safety and environmental factors.

The IEEE R&D Committee was pleased to learn of increases or only moderate cuts in the submission of the DOE program to the House Budget Committee by the Subcommittee on Energy Research and Production. In particular, we note that the Subcommittee recommended a higher authorization level for electrical energy systems and for energy storage systems. We are also happy to see that the Energy Research and Production Subcommittee increased the Reagan request for magnetic fusion from $460 million to $475 million. We support these recommendations.

Because of time limitations and the amount of technical information at our command, the IEEE R&D Committee has decided that the interests of all concerned would best be served by a discussion of several specific

budget issues and projects. We plan to focus our comments on six areas. They are: magnetic fusion, nuclear fission, solar, electric systems, energy storage and basic energy sciences. I shall discuss them in this order.

The Magnetic Fusion Energy Engineering Act of 1980 was a very significant policy statement which set forth the objective of demonstrating the viability of fusion as an energy source, perhaps as early as the mid-1990s. We have enthusiatically welcomed the passage of this act, and we believe that the spirit of this act should be reflected in the present Department of Energy budget. We believe that fusion represents a program that is entirely consistent with the philosophy of the Reagan DOE budget -- it is high risk, long term and high payoff.

As a natural consequence of the successes in this field, the size and cost of fusion experiments are increasing. The numbers of trained personnel required to staff them can only be supplied by the training of students in the use of modern fusion facilities in our nation's colleges and universities. This manpower development must be achieved in meaningful ways, which requires a substantial and broad, long-range commitment to ongoing programs at these institutions.

We strongly support the continued pursuit of the main-line fusion concepts such as TFTR, MFTF-B and the Elmo Bumpy Torus. We also support the formation and development of the Center for Fusion Engineering. However, as mandated by the 1980 Fusion Act, we believe that it is imperative that various alternate concepts be appropriately developed, as their potential becomes known, through a broadly based program, in order to have an impact of the progress toward the goal of this Act.

As an example, I draw your attention to the torsatron/stellarator concept. Recent research efforts in the Soviet Union, the United Kingdom, West Germany and Japan have shown dramatic physics results. Ongoing studies of the viability of the concept as a reactor at the Los Alamos National Laboratory and at the University of Wisconsin have shown that this concept is most attractive from many viewpoints, including steady-state operation, low recirculating power and energy storage, and fully ignited operation. Torsatron/stellarators have achieved physics parameters that match those of equivalently sized tokamaks. Thus, it is appropriate to advance this concept. At least one proposed device has been favorably reviewed and is now ready for an in-depth design and cost analysis.

As you may note, I am personally interested in this concept. However, I would like to point out that in February of this year, a group of ten distinguished scientists and engineers sent a letter to Edwin Kintner, the Associate Director for Fusion Energy of the Office of Energy Research of the Department of Energy, suggesting that the "concept has now progressed to the point where it should become a key and significant part of the U. S. fusion program, both because of its intrinsic promise and because it will broaden and strengthen the U. S. toroidal confinement program." A copy of this letter, along with a recent article from the New York Times and Physics Today are included with this statement as supplementary material.

In summary, then, the IEEE R&D Committee supports the recommendation of the Subcommittee on Energy Research and Production to increase the magnetic fusion budget.

I now turn to nuclear fission. The IEEE R&D Committee supports the plans to develop the breeder reactor program. It is important to do so in order to acquire engineering as well as manufacturing experience and plant component performance data needed to develop a U. S. liquid metal fast breeder reactor (LMFBR). We do not yet endorse a commitment to full-scale commercial development of the LMFBR fuel cycle prior to resolving the issues of reprocessing, waste management, safety and security. We support the exploration of alternative fuel cycles or strategies which may offer certain advantages over the LMFBR.

In the area of solar energy, the IEEE R&D Committee is concerned about the severity of cuts in programs in this area. While we recognize that some solar technology may be near demonstration and/or commercialization and that industry may be prepared to move these technologies, there are other solar technologies for which this is not the case. As a consequence, attention should be given to restoring some of the severe cuts, as has been recommended by the Subcommittee on Energy Development and Applications. In particular, I would like to draw your attention to two areas.

First, photo-voltaic device and system development is very likely to represent long-term and high-risk commitments. In particular, materials development and systems integration are not sufficiently understood. Second, thermal processes, which are especially applicable to hot water heating, air conditioning and space heating for both residential and commercial buildings, offer the potential for substantial impact on energy supply and conservation of non-renewable sources. There is a strong need for the development of designs for collectors, covers and storage as well as for integrated architectural and engineering designs of passive and hybrid solar systems. If DOE could support the base of the technology, it will be possible for both solar system manufacturers and the building industry to develop more rational and cost effective designs.

In the area of electric energy systems, the IEEE R&D Committee wishes to again support the proposed increase in funding by the Energy Research and Production Subcommittee. We favor this for the following reasons. First, this is the only part of the Department of Energy that is concerned with the delivery of electrical energy once it is generated. The Department of Energy is in a unique position to apply a system analysis approach to maximize the efficiency of all of the components making up the system. Second, DOE has, for many years, been the only source of funding for such system studies.

Electric energy must be generated economically, reliably, safely and in an environmentally acceptable way. And, it must also be transmitted so that it meets all of these same four criteria. Presently, electric power systems in the U. S. deliver alternating current (ac) power at voltages up to 765,000 volts. The efficiencies of high voltage

ac transmission are well known. Industry is now considering high voltage transmission systems at 1,200,000 volts. The commercial use of such transmission is projected beyond 1990. Today there is renewed interest in using direct current (dc) in such systems, and in fact, 21 such systems are operational worldwide, with four of them being in the United States. High voltage dc (HVDC) is an important adjunct to ac power transmission and has several advantages: economics for long-distance overhead or intermediate-distance cable systems, asynchronous connections, which are important when considering the exportation or importation of energy from Canada and Mexico, power controllability, low short-circuit currents, and reliability.

The solutions to the problems do not simply derive from extrapolation of today's technology but require R&D in areas where solutions may generate new problems. For example, a 1,200,000 volt line may carry the entire output from one power generating plant. What happens to the power system if the line fails, even momentarily? Is a 1,200,000 volt line safe for persons exposed to the electric and magnetic fields it creates? Thus, since much of the electric energy system research program is long term, high risk and high payoff, we believe that the $25 million recommended by the Subcommittee on Energy Research and Production is justified.

In the energy storage area, DOE support has focused on mechanical, magnetic and underground energy storage. We endorse the support of those concepts and processes which require longer-term, high-risk and high-payoff technologies in energy storage. Superconducting magnetic energy storage is an example of such a concept which offers high efficiency (electric utility ac is converted to dc and stored with 95 percent efficiency), is applicable to both daily and weekly storage, provides quick response to load changes and offers a favorable environmental impact. Conceptual designs have now been established, and there is a strong need to move the concept through a component research and development and engineering design phase to establish the economic basis for decision making on future prototypes and demonstration phases. It is urged that adequate and sustained funding be provided to insure the timely development of all of the more promising storage concepts under consideration.

Finally, I turn to the area of basic energy sciences. This work provided an important foundation for the more applied programs throughout the Department of Energy and has been responsible for many important discoveries as related to energy matters through the years. It is always tempting to defer and delay this particular aspect of the Department's programs, but such an action could result in very serious deficiencies in our knowledge base further in the future. It is encouraging to note that the Reagan budget modification for the Department of Energy reflects continuing strong support for basic energy science efforts, a position that we in IEEE strongly support.

In closing, first, if there is any additional information that you may require concerning this statement, I would be glad to provide it to you. Finally, I would like to tell you that I appreciate the difficulty of the process you are going through. I have confidence in your judgment. Thank you very much.

DR. J. LEON SHOHET

Dr. J. Leon Shohet is Professor of Electrical and Computer Engineering at the University of Wisconsin-Madison. He received his B.S. degree in electrical engineering from Purdue University in 1958 and the M.S. and Ph.D. degrees in electrical engineering from Carnegie-Mellon University in 1960 and 1961, respectively.

Honors include: Frederick Emmons Terman Award of the American Society for Engineering Education; Merit Award of the Nuclear and Plasma Sciences Society of the Institute of Electrical and Electronics Engineers; Fellow of the American Physical Society; Fellow of the Institute of Electrical and Electronics Engineers; Distinguished Student at Purdue University; Membership in Eta Kappa Nu and Tau Beta Pi.

Dr. Shohet is the author of a major textbook in the field of plasma and fusion science and has written a chapter on stellarators for a forthcoming book on fusion edited by Edward Teller. He is the Chairman of the Coordinating Committee on Plasmas at the University of Wisconsin and director of the University's torsatron/stellarator laboratory. In addition, he is the author of over 200 publications on plasma physics, magnetic and inertial fusion, and biophysics.

He is a member of the U. S. Department of Energy stellarator advisory committee and also a member of the DOE-EURATOM steering committee on stellarators. He is a member of several professional organizations, including the Institute of Electrical and Electronics Engineers (in which he has served as president of the Nuclear and Plasma Sciences Society and a member of the IEEE Technical Activities Board and is currently the chairman of the subcommittee on the Department of Energy of the IEEE Research and Development Committee), the American Physical Society and the American Association for the Advancement of Science. In 1973 Dr. Shohet founded the Institute of Electrical and Electronics Engineers' publication Transactions on Plasma Science, which was the first engineering publication devoted to the area of plasma physics and fusion. Dr. Shohet has served as consultant to numerous U. S. National Laboratories and industries.

He is listed in Who's Who in the Midwest and in American Men and Women of Science.

SUPPLEMENTARY MATERIAL ATTACHED

1. Letter from ten scientists and engineers, dated February 24, 1981, to Edwin E. Kintner, Associate Director for Fusion Energy of the Office of Energy Research, regarding the need for an aggressive U. S. program in the area of torsatron/stellarators.

2. Article by Walter Sullivan from the New York Times of June 1, 1980, describing the dramatic results achieved by the West German stellarator in which they are described as the "most important development in fusion energy in more than a decade."

3. Article from Physics Today, August 1980 issue, describing the same results with a general survey of the work done with this concept.

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February 24, 1981

Dr. E. E. Kintner, Director
Office of Fusion Energy
Department of Energy
Washington, D.C. 20545

Dear Ed:

Enclosed you will find the final, formal copy of a statement by the Stellarator Advisory Committee* on the "Immediate Need for an Aggressive U.S. Stellarator Program." This version contains minor corrections from the draft I sent you on January 19. Thus, you should replace the previous draft with this one.

The Stellarator Advisory Committee looks forward to the development of an aggressive U.S. program in stellarators, which have recently made tremendous progress and become a leading, alternate concept. The Committee would welcome further discussion with you and your staff on this increasingly important component of the U.S fusion program.

Sincerely,

James D. Callen
Professor of Nuclear Engineering
and Physics

CC: J. F. Clarke

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* Stellarator Advisory Committee:
J. D. Callen, University of Wisconsin
T. Jensen, General Atomic
J. L. Johnson, Princeton Plasma Physics Laboratory
R. A. Krakowski, Los Alamos Scientific Laboratory
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February 24, 1981

Immediate Need For An Aggressive U.S. Stellarator* Program

The worldwide stellarator program has made tremendous progress in the last couple of years. The stellarator concept has now progressed to the point where it should become a key and significant part of the U.S. fusion program, both because of its intrinsic promise and because it will broaden and strengthen the U.S. toroidal confinement program. In particular, the Stellarator Advisory Committee feels that it is important to establish, expeditiously, a vigorous, broad-based U.S. stellarator research program that can noticeably impact the field in the near future and evolve to a leadership position in it over the next decade. The Committee feels that a key element in this expanded program is that one or more innovative, significant stellarator experiments be constructed in the U.S. as soon as practicable, with appropriate design studies being initiated immediately. This brief summary of the Stellarator Advisory Committee's views and recommendations is amplified upon in the succeeding paragraphs.

Notable progress in the stellarator program has been made recently in:

1) Experimental parameters -- the W-VIIA experiment at Garching has achieved $n\tau_E > 10^{12}$ sec-cm^{-3}, $T_i > 0.7$ keV (a level second only to that of tokamaks in nearness to fusion feasibility requirements) in a current- and disruption-free plasma powered by 635 kW of neutral beam injection.
2) Modular/simplified coil designs -- much better computational tools for analyzing stellarator configurations have been developed; both modestly deformed toroidal field coils and multiple coil groups with internal windbacks have been shown to give stellarator configurations with no toroidally continuous windings.
3) Particle orbits and transport -- drift orbits of energetic particles are found numerically to be better contained than simple analytic predictions;

---

* The word stellarator is used here to describe all toroidal plasma confinement devices of the stellarator or torsatron type in which there is little or no externally driven current in the plasma.

the results of new Monte Carlo type computer simulations of neoclassical transport scaling to reactor conditions seem more optimistic than predictions of analytic theory and are forcing a re-examination of it; at modestly large aspect ratio, drift orbits can be well contained and neoclassical transport made comparable to that in an equivalent tokamak.

4) Maximum stable β -- three-dimensional numerical calculations by the NYU group have indicated that the large Japanese Heliotron-E experiment, whose configuration was not designed for optimum β, has for low mode numbers a maximum stable average β in excess of 5%.

5) Optimization -- inventive work has been initiated by the theory group at Garching aimed at reducing the toroidicity-induced secondary current, thereby increasing the equilibrium β and reducing the neoclassical transport; optimization for one or several specific purposes is feasible even within a single stellarator experiment because different equilibria can be produced through external control of the harmonic content of the magnetic surfaces, the rotational transform profile, and plasma position.

A synthesis of recent results from major stellarator experiments throughout the world -- W-VIIA at Garching, CLEO at Culham, L-2 at Lebedev, Heliotron-E at Kyoto and JIPPT-II at Nagoya -- indicates that:

1) Stellarators can operate disruption-free (and apparently free from MHD fluctuations of all types) for $\iota^* > 0.14$ (with ohmic heating) and $\iota > 0.5$ (with neutral beam heating).

2) Essentially current-free operation (i.e., a true stellarator configuration) is possible with auxiliary heating either by neutral beams (W-VIIA) or electron cyclotron heating (CLEO).

3) The energy confinement in current-free operation is at least as good as in discharges with ohmic heating, and may be several times better. With ohmic heating the energy confinement is about the same as in a comparable tokamak.

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* $\iota \equiv \iota/2\pi = 1/q$ is the rotational transform of the magnetic field (q is the safety factor of tokamak literature).

4) The β achieved in W-VIIA ($\beta_{max} \sim 1\%$) is in the range of the theoretical limit (0.5-1% -- so low because of the lack of shear and high aspect ratio) for the onset of ballooning modes in this device and no deleterious effects are observed.

Taken together, these results support the viability of the stellarator concept for current- and disruption-free (and hence presumably steady-state) operation with good stability and confinement properties.

Some of the potential advantages of a stellarator configuration as a fusion reactor concept, which are currently being investigated in reactor design studies, are:

1) Steady-state magnetic field system that does not require separate control windings or pulsed fields.
2) Segmented, truly modular construction.
3) Current- and disruption-free plasma operation.
4) Startup on vacuum flux surfaces, which should reduce plasma-wall interactions during startup.
5) Divertors built in as a natural consequence of the magnetic configuration.
6) Possibility for high Q, or ignited, moderate power systems if β is sufficiently high (> 5%).

During the coming year further progress in the stellarator program is anticipated in:

1) Experiments -- the W-VIIA device (small rotational transform, nearly vanishing shear, weak magnetic well) at Garching is continually being better diagnosed and utilized for new stellarator experiments (higher density operation, pellet injection, doubled neutral beam power, etc.); the Heliotron-E experiment (high rotational transform and shear, no magnetic well) at Kyoto has begun operation and will commence high power neutral beam heating experiments this year; the Kyoto group has also begun construction of Heliotron R, a device exclusively devoted to RF heating.
2) Theory -- stellarator equilibrium, stability, transport, and heating studies utilizing both analytic and computational methods are receiving increased attention in the U.S., Germany, Japan, and the U.S.S.R.

3) Reactor concepts -- stellarator reactor studies are currently underway in the U.S. at LASL/PPPL and the University of Wisconsin. A reactor study based on the heliotron concept has been initiated at Kyushu University in Japan, in cooperation with the group at Kyoto.
4) Stellarator concepts elucidation -- A joint U.S.-EURATOM "Report on Stellarators" is being prepared.

During the past decade the stellarator program has benefited substantially in some critical areas from the larger and more advanced tokamak program, because a stellarator that is heated primarily by a current in the plasma is similar to a tokamak. However, in stellarators as joule heating is replaced by more powerful auxiliary heating, the stellarator concept becomes quite distinct from that of the tokamak. Thus, it is not possible to advance further our understanding of stellarator physics by simple extrapolation from tokamak experiments. Rather, current-free stellarator experiments with strong auxiliary heating will be required. Nonetheless, given the similarities in a number of toroidal confinement, stability and heating issues, and the fact that investigations of fully three-dimensional stellarator configurations help elucidate the underlying physics of "two-dimensional" tokamaks, a vigorous U.S. stellarator research program will broaden and strengthen the overall toroidal confinement program and may significantly accelerate development of the mainline tokamak program. An example of this latter point is the finding that disruptions can be controlled in ohmically heated stellarators by the addition of a weak rotational transform -- $\iota > 0.14$, although W-VIIA results indicate $\iota > 0.5$ may be required when there is strong auxiliary heating. Thus, the stellarator program has experimentally demonstrated one possible means for ameliorating a key tokamak concern -- disruption control. The tokamak program may well want to exploit this encouraging development by adding some stellarator windings to a tokamak for disruption control.

The present direction and limited pace of the U.S. stellarator program was set after the "Proof-of-Principle Alternate Concept Review" in October, 1978 (cf., DOE/ET-0085, March, 1979). At that time operational stellarator experiments were all ohmically heated and not obviously different from comparable tokamaks. Significant questions were raised in the review concerning

neoclassical transport, β limits and engineering feasibility. Some small programs were initiated in the U.S. to address these issues and, as indicated above, considerable progress has been made toward their positive resolution. In view of these developments, the recent experimental successes, and the potential reactor advantages, stellarators are emerging as a key alternate concept, perhaps second only to the mainline tokamaks. Thus, the Stellarator Advisory Committee feels that the U.S. should develop, expeditiously, a much more aggressive stellarator program.

There are several reasons why the U.S. needs to upgrade its stellarator program now:

1) Stellarators have recently achieved what seem to be the best plasma parameters ($n\tau_E > 10^{12}$, $T_i > 0.7$ keV) of any alternate concept and their attractiveness as a reactor candidate has continually improved. Since stellarators seem capable of steady-state, disruption-free operation with built-in divertors and moderate aspect ratio, they may provide solutions to some of the key concerns of tokamaks and thus may be the ultimate natural evolution of the tokamak concept. Scientifically, the U.S. should have a much more vigorous program in this "machine of the future," leading alternate concept area.
2) The U.S., as the leading fusion program in the world, has unique and extensive scientific expertise and technology that it can bring to bear to advance the worldwide stellarator program at a much more rapid pace. Also, as the world fusion leader and originator of the concept, the U.S. has a special responsibility because other countries look to it for guidance on the future of stellarators. This leadership role will be questioned if other countries percieve the U.S. as not seriously supporting what we urge them to do.

3) The addition of a vigorous stellarator research effort will help provide the U.S. fusion research program and in particular the toroidal confinement area with a breadth it is perceived as needing presently. The benefits of a broader research program are not just as insurance against future difficulties with the front runner, but also that of the likelihood

that a broader program may significantly accelerate the development of the front runner, as discussed above.

4) Further delays in upgrading the U.S. stellarator research program make it increasingly difficult and costly to participate significantly in this promising and rapidly developing field. Recent advances have already established the scientific viability of the stellarator concept and further delay can only reduce the cost effectiveness of the overall U.S. fusion program.

It is not the purpose of this document to spell out a detailed U.S. stellarator program. However, it is considered essential that a commitment be made to undertake an aggressive program that will be able to contribute significantly to the field in the near future and evolve to a leadership position in it over the next decade. The aggressive stellarator program which the Stellarator Advisory Committee feels necessary has the following key elements:

1) Vigorous, broad-based theory program -- the present diverse, small theoretical and conceptual efforts should be strengthened and expanded. Key areas to be strengthened include: MHD equilibrium and stability, drift orbits, neoclassical transport, and magnetic field configurations. Some of the areas that need to be added include: transport simulation, resistive MHD, and non-ohmic heating.
2) Expanded reactor studies -- the initial reactor studies should be continued and expanded.
3) Significant experimental program -- at present the only stellarator experiments in the U.S. are the small ($a \sim 5$ cm) PROTO-CLEO stellarator and torsatron devices at the University of Wisconsin. There are a number of configurational and operational options in stellarator designs (W-VIIA and Heliotron-E represent two limiting cases in shear strength), which should be tested on some modest scale devices that are at least large enough to not be dominated by atomic physics effects. In view of the worldwide stellarator program, these experiments should be large enough (up to PLT in size) and flexible enough to explore a range of high-temperature, current-free stellarator parameters. They should test energetic particle confinement, transport scaling, beta limits and modes of operation, there-

by elucidating the appropriateness of various configurations. Design studies should be initiated immediately to flesh out the various options and develop reliable cost estimates so that innovative, significant U.S. stellarator experiments can be commissioned as soon as funds become available. It is important to realize that an aggressive U.S. stellarator program must include one or more significant U.S. stellarator experiments. Otherwise, key U.S. scientists will be unwilling to work in the program, we will not be intimately knowledgeable in this area, and other countries will question our seriousness and potential for making significant contributions, and thus may be less interested in collaborating with us.

4) Proof-of-principle experiment -- since some of the plasma parameters achieved in W-VIIA are fairly close, but not quite up to those usually associated with a "proof-of-principle" (POP) experiment, the next major step in the stellarator program should be a scaled, full "proof-of-principle" device. Such a device should simultaneously seek reactor-relevant plasma parameters in density, temperature, confinement, and β, and be large enough to have an impact somewhere in the range between PLT and TFTR. The U.S. should initiate, perhaps with international collaboration, an exploration of the various design options for this device. Further, the U.S. fusion program should begin very soon the process leading to a decision to undertake this full POP stellarator, particularly if it becomes clear that such a device is not going to be built elsewhere in the world.

In summary, the Stellarator Advisory Committee feels that stellarators have become a leading alternate concept that could become the principal toroidal confinement approach. It is now critical and urgent for the U.S. fusion program to develop an aggressive stellarator program, which should include one or more innovative, significant stellarator experiments, as soon as possible.

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THE NEW YORK TIMES, SUNDAY, JUNE 1, 1980

New Fusion Device Hailed for Its Energy Potential

By WALTER SULLIVAN

A fusion device newly developed at an institute near Munich is being hailed by specialists in the field as a revival of an almost abandoned but now promising approach to harnessing the process that makes the sun shine.

It has encouraged hope for development of a continuously running fusion reactor. The giant, costly and complex Tokamak reactors now being built in this country, Britain, Japan and the Soviet Union will operate in pulses, a less efficient mode.

The new device, at the Max Planck Institute for Plasma Physics in Garching, a Munich suburb, is a modified version of the Stellarator, designed by Dr. Lyman Spitzer of Princeton University in the 1950's, when fusion energy research was in its infancy.

According to Dr. Harold P. Furth, research director at Princeton's Plasma Physics Laboratory, the German design is the most important development in fusion energy in more than a decade.

Like the Tokamaks, Stellarators magnetically confine and squeeze a very hot gas, or plasma, within a chamber shaped like a doughnut or pretzel. The goal is to create conditions sufficiently like those in the core of the sun for deuterium and tritium, two heavy forms of hydrogen, to fuse into helium, releasing energy.

It is partly in the novel arrangement of its magnetic coils that the West German machine, known as Wendelstein VII-A, differs from Tokamaks and earlier Stellarators. In both types of machine the problem is to generate magnetic fields configured to keep the very fast-moving plasma particles from striking the chamber walls.

In the original Stellarators this was done by wrapping the doughnut with wires and twisting it into a figure eight. In this configuration, however, particles and heat were lost from the confinement chamber at an alarming rate. It appeared that the problem would become even more severe in larger-scale devices. The Stellerator approach therefore dropped from favor.

An alternative design, known by its Russian term as the Tokamak, seemed more attractive. It produced a magnetic field spiraling around the inner walls of the chamber through a combination of two effects.

One effect was magnetism generated by coils wrapped around the chamber. The other was magnetism generated by driving an electric current around the central axis of the doughnut-shaped plasma.

Instabilities develop in plasmas confined in this manner, causing the particles to strike the chamber walls. Through tests with increasingly larger Tokamaks, however, the amount of instability has been reduced. Some such losses of particles would be acceptable in a pulsed machine that "started over again" every few seconds.

The new West German machine combines elements of both the Stellarator and Tokamak. It is doughnut-shaped and wrapped in magnetic coils designed so that an axial current is needed only for initial heating of the plasma. After that, heating is achieved by a process known as neutral beam injection.

This process had already been developed for the newer Tokamaks, notably at Princeton. The beam fires electrically neutral particles into the confinement chamber, increasing the plasma density and temperature.

In Wendelstein VII-A, the electric current of 20,000 amperes required for initial heating is only one-tenth that needed in Tokamaks and does not have to be cycled in the manner that limits present Tokamaks to pulsed operation. The machine generates relatively high plasma pressures with modest levels of magnetic confinement, an important test of its effectiveness.

search & discovery

Garching shows stellarators may be good after all

Stellarators appear to be back in business. After a series of consistently disappointing results in the 1960's, Lyman Spitzer's scheme for plasma confinement in a toroidal fusion device was generally abandoned in the last decade by American magnetic-confinement researchers, in favor of the more promising tokamak concept.

But now a group at the Max Planck Institute for Plasma Physics in Garching, near Munich, seems to have demonstrated the equilibrium and confinement capability of the basic stellarator configuration. Günther Grieger, Hermann Renner and their colleagues reported last month at the biennial International Conference on Plasma Physics and Controlled Nuclear Fusion in Brussels that their "Wendelstein VIIA" stellarator had successfully confined a plasma by external magnetic field coils alone—without requiring a circulation current in the plasma itself. Their stellarator not only maintained plasma confinement but also exhibited a fourfold improvement in energy confinement time when its ohmic heating current was shut off in favor of neutral-beam heating and a poloidal magnetic field generated by the helical coils characteristic of the stellarator design.

The revitalization of the stellarator scheme quickens the prospect of a toroidal fusion reactor that can operate in a steady-state mode without external power input.

In toroidal fusion reactors, the basic toroidal magnetic field is not sufficient to confine the plasma. The confining field must have a poloidal component, adding a helical twist to the primary toroidal field. The tokamak achieves this poloidal field component by inducing a toroidally circulating current in the plasma. The ohmic heating generated by this plasma current also helps to raise the temperature of the plasma toward the 10 keV needed for deuterium-tritium ignition.

The stellarator configuration, first attempted at Princeton in the 1950's, relies on helical coils wound around the torus rather than the ohmic plasma current to provide the necessary twist in the toroidal field. In the ensuing decade, stellarators of increasing size were built at Princeton and elsewhere—but they exhibited a puzzling and disheartening trend. First of all, one couldn't get the plasma very hot; the stellarators of that generation never exceed a plasma temperature of 200 eV. Furthermore, in contrast to the expectation of classical theory, the plasma confinement in these devices got worse with increasing plasma temperature. When it began to appear in the late 1960's that the early Russian tokamaks were producing much higher temperatures and pressures, Princeton converted its "Model C," the largest stellarator of its generation, into a tokamak.

The Wendelstein VII A stellarator at Garching (near Munich) has demonstrated the equilibrium and confinement capability of the stellarator configuration in the absence of any ohmic plasma current, with helical magnetic coils. The three large rectangular enclosures house three of the four high-energy neutral-beam injectors that heat the toroidal plasma.

With hindsight developed by extensive experience with tokamaks, it now appears that the problem with the early stellarators was not intrinsic to the stellarator concept. There is a magnetohydrodynamic limit to the current density a toroidal plasma can sustain without becoming unstable. The larger the "aspect ratio" (major/minor radius) of the torus, the lower is this limit on the ohmic current. Even though the stellarator does not require an ohmic current to twist the confining magnetic field, all stellarators use ohmic heating to raise the plasma temperature in the initial phase.

Harold Furth of Princeton told us that the striking improvements observed with the advent of tokamaks were largely attributable to their better (smaller) aspect ratios. They could be made much fatter than stellarators, because they were not encumbered by an extra layer of helical windings. With an aspect ratio of 20:1, the Model C was "simply too skinny," Furth explained, to support enough ohmic-heating current. When the helical stellarator windings were removed in 1969 for its metamorphosis to a tokamak, the Model C could be fattened by almost a factor of three, with a corresponding improvement in temperature and confinement.

The Garching group, by now well aware of the virtues of a small aspect ratio, tried to build the Wendelstein-VII with an aspect ratio significantly

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smaller than 20:1. But the magnetic stresses on the helical coils in the proposed "fat" configuration turned out to be so high that they would have required considerable mechanical buttressing. To avoid the consequent construction delay, the minor radius of the plasma had to be reduced to 10 cm. With a major radius of 2 meters, the Wendelstein VIIA is thus left with an aspect ratio no better than that of the old Model C (though with twice the plasma radius).

But nowadays the aspect ratio is no longer crucial for the achievement of high temperatures. Because it has become clear that tokamaks cannot achieve ignition temperatures by ohmic heating alone, neutral-beam injection has been developed in recent years as an additional source of plasma heating in tokamaks. The Wendelstein VIIA is the first stellarator that incorporates high-power neutral-beam injection. With this second heat source providing up to a megawatt of input power, the plasma current can be shut off after the initial ohmic-heating phase. With the complex stellarator windings making access difficult, it was no mean trick to inject the neutral beam into the plasma at a favorable angle. Although neutral-beam injection has made it possible to operate a stellarator with good confinement even at large aspect ratios, the 20:1 geometry of the Wendelstein VIIA may limit its β (plasma pressure/magnetic field pressure) to about half a percent. The higher pressures and densities necessary for a practical reactor would ultimately require a smaller aspect ratio.

The earlier stellarator project at Princeton having been named "Matterhorn," Grieger and his colleagues called their undertaking Wendelstein, after a modest Alpine foothill outside Munich—a deliberate act of humility. Unlike the racetrack-shaped Model C, the Wendelstein VIIA torus is circular. This avoids the special coils that were necessary in the Model C to smooth the transition between curved and straight sections. These transitional fields are believed by some to have contributed to the poor performance of the earlier machine.

Although the Wendelstein VIIA is significantly smaller than the current generation of large tokamaks, it and its counterparts in the Soviet Union, Britain and Japan have been doing at least as well as tokamaks of comparable size for several years now—without neutral-beam injection. Operating only with ohmic heating, these machines have shown very good values of the confinement parameter (density × energy confinement time), which now appears to be exhibiting the same favorable scaling behavior as one sees for tokamaks, with respect to temperature, density and size. This improved performance is the cumulative result of numerous small refinements of the stellerator design.

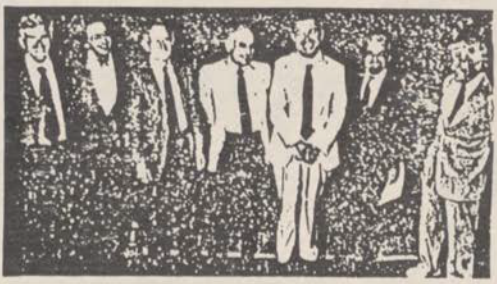
Furthermore, the helical stellarator field appears to prevent the rapid plasma breakup that can occur in tokamaks near the critical ohmic current density. (Such a violent plasma disruption could severely damage a reactor.) All this has generated considerable new enthusiasm for the stellarator concept around the world. But until the recent Garching results, no-one has been able to maintain a plasma of significant pressure in a pure stellarator mode—with the ohmic heating turned off.

Shutting off the ohmic heating has in the past always resulted in the loss of plasma confinement in the stellarator. Last fall, even after they had managed to squeeze their high-power neutral beam into the Wendelstein VIIA, the Garching group found that their plasma invariably got lost in a magnetohydrodynamic resonance as they attempted to reduce the plasma current to zero. But they have now found the trick. Instead of keeping the current in the helical stellarator coils constant as they turn down the plasma current, they gradually increase the helical current in a manner that just compensates for the loss of the plasma current. By keeping the poloidal magnetic field component approximately constant in this way during the transition, so that the offending resonant surface is kept out of the plasma, they find that confinement is maintained as the system goes over to the pure stellarator mode.

In the stellarator mode, with heating provided only by the neutral-beam injection, and the poloidal field component coming only from the helical windings, the energy confinement time of the plasma improves by a factor of four. The confinement time in the Wendelstein VIIA increases from about 5 msec in the ohmic-heating phase to 20 msec in its pure stellarator phase. With a plasma density of 10^{14} cm^{-3}, this represents a confinement parameter of 2×10^{12} sec/cm^3—at least five times as high as attained by tokamaks of comparable size. Of course the plasma temperature achieved in the Garching stellarator is only 700 eV, an order of magnitude below what has been obtained in the Princeton PLT tokamak, with a plasma volume ten times that of the Wendelstein VIIA.

The most attractive feature of the stellarator concept as against tokamaks is that a stellarator reactor would operate in a steady-state mode. Because the plasma current in tokamaks must be induced by the transformer action of external induction coils, it can only operate in a pulsed mode. Even

AGS Celebrates Twentieth Anniversary



Brookhaven celebrated the twentieth anniversary of the Alternating Gradient Synchrotron in May. John Blewett, Ernest Courant (Brookhaven) and Kjell Johnsen (CERN) reminisced about designing and building the machine. Some of the speakers recalled the great physics discoveries made at the AGS. Melvin Schwartz (Stanford) talked about finding the muon neutrino and a "residual level of junk" events that were probably neutral currents. Val Fitch described the discovery of CP violation (an experiment approved on the basis of a two-page proposal with no detailed background calculations). Nicholas Samios (Brookhaven) reviewed the bubble-chamber program, which over the two decades yielded 40 million pictures, including the first Ω^- and the first charmed baryon. Samuel Ting (MIT) described the experiments leading to the J/ψ, which led to a new high-energy era with charm, beauty and other gracious qualities.

The speakers, photographed at the meeting, are (from left): Johnsen, Samios, Fitch, Schwartz, Ting, Courant and Blewett.

though the duration of the pulses in a tokamak reactor would be of the order of an hour, the lack of steady-state equilibrium presents a host of engineering problems. The time variation of heat load, for example, would exacerbate thermal fatigue in the reactor. In a pulsed machine one has to make provision for stresses and other parameters that are constantly varying in time. The attractiveness of steady-state fusion reactors has led a number of groups to begin looking into the possibility of a tokamak with an rf-driven ohmic plasma current.

But even such a steady-state tokamak would require continuous power input. T. K. Chu, a long-time partisan of stellarators at Princeton, told us that the stellarator is unique among magnetic-confinement concepts. It is the only scheme yet suggested, he believes, that promises a fusion reactor that would require no power input after it reaches ignition. Once the deuterium-tritium plasma starts to "burn," the neutral-beam injection could be shut off. (One does of course have to maintain steady confining currents in the external windings.)

Chu, Furth and their Princeton colleagues, Christiane Ludescher, John Johnson and Katherine Weimer, are currently addressing one of the less attractive features of stellarators. Tokamaks and stellarators both require a second set of external coils in addition to the windings that provide the primary toroidal confinement field. (For tokamaks this second set provides the induction that drives the plasma current.) The resulting elaborate systems of external windings make it difficult (if not impossible) to build either of these devices by modular construction—a serious drawback to the proliferation of practical reactors. Developing an earlier idea of Stephan Rehker and Horst Wobing at Garching, Chu and his colleagues are designing a simplified stellarator configuration, in which the poloidal field comes not from an extra set of coils but from a careful distortion of the primary coils. Instead of being simply circular, and thus providing only a toroidal field component, they would be warped into something resembling the periphery of a potato chip. But, Chu cautions, they would not be perfectly stacked "like 'new-fangled' potato chips." To provide the desired helical twist in the confining field, the warp in each coil is rotated from that of its neighbor by a small poloidal angle. The trick is to provide an adequate poloidal field without warping the coils so much that they cannot withstand the severe magnetic stresses to which they are subjected.

The Garching success does not mean that we should now drop everything else in favor of stellarators, Furth stresses. The importance of the Wendelstein VIIA result, he told us, is that we now have two approaches that appear to be adequate. We are no longer rigidly tied to the tokamak as the only toroidal scheme that works. "My hope is that from somewhere in the tokamak-stellarator continuum there will emerge a steady-state toroidal reactor."

—BMS

SIS diodes for radio astronomy

As radioastronomers continue to push their observations to shorter wavelengths and fainter signals, their progress is impeded by a lack of sufficiently sensitive millimeter-wave receivers capable of operating at frequencies above 100 GHz. But now a spinoff from Josephson-junction fabrication technology appears to be coming to the rescue. New metallurgical and lithographic techniques developed for Josephson-effect computers are permitting the construction of superconducting diode junctions that promise to function as high-frequency photon detectors and heterodyne mixers near the theoretical limits of sensitivity.

Paul Richards and Ten-ming Shen at Berkeley, working with Richard Harris and Francis Lloyd at the National Bureau of Standards (Boulder), have recently produced superconductor-insulator-superconductor (SIS) quasi-particle tunnel junctions that performed at 36 GHz as heterodyne mixers with a noise level near the uncertainty-principle limit,[1] and as direct photon detectors with quantum efficiency close to unity.[2]

Gerald Dolan, Thomas Phillips and David Woody have achieved 115-GHz heterodyne mixing with SIS junctions they developed at Bell Labs.[3] Having tested their SIS mixers by observing the 2.6 mm-line of interstellar carbon monoxide, Phillips and Woody (now at Caltech) plan to install such diodes at the focal points of the three radio telescopes that will constitute Caltech's new Owens Valley millimeter-wave interferometer.

Quasi-particle tunneling across a barrier between superconductors, unlike Josephson tunneling, involves single rather than Cooper-paired electrons. If sufficient energy (the "superconducting energy gap") is provided, a superconducting Cooper pair can break up into two quasi-free electrons. If the oxide layer that serves as the insulating barrier between identical superconductors at an SIS junction is sufficiently thin (a few tens of angstroms), such quasi-particles can tunnel through the barrier when a voltage bias corresponding to twice the energy gap is applied.

The onset of this quasi-particle tunneling current at the critical bias voltage is extremely sudden. The corresponding sharp corner in the characteristic current-voltage (I–V) response curve for such diodes has been called "the strongest nonlinearity in nature." Such a highly nonlinear I–V curve is precisely what one wants for the heterodyne mixer of a millimeter-wave receiver.

Heterodyne receivers. Just as in an ordinary radio receiver, the heterodyne mixer receives simultaneous input from the signal to be detected and from a "local oscillator" of comparable frequency. Because of the mixer's nonlinear response, its output includes a Fourier component corresponding to the difference between the signal and local-oscillator frequencies—a beat frequency. This "intermediate frequency," being much lower than the original millimeter-wave frequency, is much easier to amplify and rectify in the later stages of the receiver. The more nonlinear the mixer, the stronger is the output at the desired intermediate frequency. The SIS diode approximates the ideal mixer—a switch whose resistance shuttles between zero and infinity every cycle of the local oscillator.

To function at millimeter-wave frequencies, such a superconducting junction must have an extremely small capacitance, and consequently a very small active area—on the order of a square micron. Quasi-particle tunneling at superconducting junctions had in fact been discovered in 1960 by Ivar Giaever at General Electric, but people did not begin seriously to consider SIS junctions for millimeter-wave receivers until recent technological developments made possible the production of reliable SIS junctions of sufficiently small area.

The superconducting junction required for a successful 100-GHz SIS mixer is very much like those one needs to make in large quantities for a Josephson-effect computer (see PHYSICS TODAY, June 1978, page 17). Several industrial labs have therefore lavished attention in recent years on the technological problems involved in fabricating such junctions. By 1975, Phillips told us, new electron-beam lithographic methods at Bell Labs were good enough to interest him in the possibility of using insulating oxide junctions no more than a square micron in area between superconducting layers, produced by thin-film deposition techniques. Dolan has subsequently developed lithographic techniques at Bell

CROSBYTON SOLAR POWER PROJECT

WITNESSES

HON. CHARLES W. STENHOLM, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS
NORTON BARRETT, CITY MANAGER, CROSBYTON, TEX.
JOHN D. REICHERT, PROJECT DIRECTOR, CROSBYTON SOLAR POWER PROJECT

Mr. BEVILL. We are pleased to have our good friend here, Congressman Stenholm. You may proceed and handle it as you wish.

STATEMENT OF CONGRESSMAN STENHOLM

Mr. STENHOLM. Thank you. It is my pleasure to appear before you today on behalf of the Crosbyton Solar Power Project.

I have with me at the table Dr. John D. Reichert, the Project Director from Texas Tech, and also Norton Barrett, 6th District of the Crosbyton Project.

I would like to summarize. First, I would ask that the statement of Dr. Reichert be presented in total and made a part of the record for your consideration.

[The statement of Mr. Reichert follows:]

STATEMENT OF DR. JOHN D. REICHERT

PROJECT DIRECTOR

CROSBYTON SOLAR POWER PROJECT (CSPP)

SOLAR THERMAL ELECTRIC POWER

SOLAR GRIDIRON (HEMISPHERICAL BOWL) CONCEPT

DEPARTMENT OF ELECTRICAL ENGINEERING

TEXAS TECH UNIVERSITY

LUBBOCK, TEXAS

BEFORE THE

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON ENERGY AND WATER

COMMITTEE ON APPROPRIATIONS

WEDNESDAY, MARCH 25, 1981

Mr. Chairman, I appreciate this opportunity to appear before the subcommittee today, and I hope to convey to you the progress we have made on the Crosbyton Solar Power Project (CSPP) to date, and where we are going.

For seven years now, since the spring of 1974, the citizens of Crosbyton, Texas, along with Texas Tech University and industrial firms such as E-Systems of Garland, Texas have planned and worked to produce a $5MW_e$ solar-fossil fuel hybrid electric power plant at Crosbyton. This plant we design can be operated at capacity factor one to produce 5MWe-years per year. The plant will be operated at full capacity under a tunable load arrangement to

provide the entire Crosbyton city demand plus a rural/agricultural load through a local rural electric co-op.

With the first federal funding, by the ERDA (USDOE), having been provided in September, 1976, five (fiscal) years ago, the CSPP is now the oldest continuously funded single mission project in the USDOE solar program. Funding for the CSPP project/concept has never been automatic, regular, or simple. Many tests and milestones have been set before the CSPP and have been successfully hurdled, even though the total funding provided to CSPP to date has only been $5.3 million. [For comparison, more than 60 times as much (about $1/3 billion) has been invested in the "more glamorous" tower-heliostat concept. I suggest that the cost effectiveness of our solar gridiron concept is perhaps reflected in the relative cost-effectiveness of the research and development efforts!]

Let me review just a minute, Mr. Chairman, the list of milestones which have been reached and which will be accomplished later this month:

1. Construction and successful operation (from the first try, continuously to the present date) of the largest single solar collector ever built.

2. First and only design verification system ever completed in the USDOE high-temperature solar thermal program.

3. Only system level experience (13 months to date at 1000° F, 1000 psi) in the USDOE program with a high-temperature solar thermal concept.

4. Only USDOE solar thermal power system ever to achieve its maximum theoretical performance and to be able to account (even in advance of construction) completely for all power and all power losses.

5. Production of more high-quality solar steam (over a billion Btu's) than anyone else in history.

6. On March 20, 1981 — first commercial electricity in the history of the nation to be produced from solar steam.

7. COSTS — actual receipts for the cost of construction of the world's largest solar collector, making CSPP unique in establishing the basis for its cost projections. [No robots nor other "future technology" gimmicks are presumed to be available for the work!]

For these accomplishments, Mr. Chairman, we deserve our reputation for hard-headed engineering and for dedication and determination. We are convinced that there is a viable solar-electric option for the American nation and that we are demonstrating this fact. The people of Crosbyton, Texas and the people of our nation deserve to see the next phase of the work on this promising technology pursued with the greatest possible vigor. It is time to build! After seven years of efforts, the research and development of this relatively simple technology has been accomplished! We know <u>what</u> we should build, what the <u>performance</u> of the system should be, what the <u>cost</u> should be, and <u>why</u> the system should be built.

Even though we are in extremely tough times for making such decisions, Mr. Chairman, we cannot afford to ignore or destroy this option. It is extremely important to provide an economically viable solar option to the utilities of this country. In order to provide Americans even the option of pursuing the Solar Gridiron (or Hemispherical Bowl) Concept, one complete system must be built to prove out the integration and operation of this hybrid plant. We must view this system in its entire economic context (i.e., fuel bills, operation and maintenance costs) as well as in its entire technical context (i.e., to develop the necessary controls for the plant's efficient hybrid operation so that the solar and fossil components are working together in a mutually supportive fashion.) Only by exhibiting an actual, complete operating plant can we expect private capital to be invested in similar plants.

While we certainly agree with reducing the size of the budget in order to get a handle on inflation, we cannot forget the effects that rising energy costs have on inflation. Further, we agree with the role of private business in the energy field, but what we propose, Mr. Chairman, is not a profit-making venture but one which is only a break-even proposition if conventional debt financing were involved. We must build all ten (10) bowls in the hybrid fossil plant in order to determine and exhibit how the entire system will operate from a business point of view. Since there would be no investors in this venture outside the federal government, there will be no amortization schedule to follow and thus no interest to be paid. Therefore, arrangements

have been made so that, should the operation of this plant make a profit, as expected, it is our intention to return this profit to the federal government. All of the electricity produced from this plant will be sold at the current prevailing rates, thus providing, as mentioned before, the (1) total load of the city of Crosbyton and (2) the excess up to 5 MW_e into the rural electric co-op rural/agricultural load.

Considering that, on an annual basis, 20 percent of the electricity will come from the sun and that 80 percent will come from the fossil portion of the plant, the cost of the fuel will be 20 percent less than other similarly situated fossil power plants! It is, therefore, not unrealistic to expect this plant to generate a sizable profit over the period of a 30-year plant lifetime.

Further, CSPP is deserving of the Congress' consideration for a specific line item under the construction category from whatever perspective one wishes to approach the potential for contribution to the nation's energy future.

(a) From the perspective of the previous USDOE approach to solar-electric technology, the CSPP and the solar gridiron concept have certainly earned their place in the sun. Regardless of previous or preconceived judgments and priorities, the list of accomplishments given above carries weight. Other concept which might compete with us must now compete with us[The only acceptable criterion for choice is cost effectiveness, not glamour or size of previous investment by USDOE. [Incidentally, we believe that our system is

beautiful! If a potential competitor completes a system, then we will be happy to receive comments comparing the aesthetics of as-built systems. The bottom line, however, will always be engineering effectiveness, including cost effectiveness!] Our "secret" for cost-effectiveness derives from the fact that ours is the only known high-temperature solar concept that does not require the mirror surface to move.

(b) On the other hand, if one prefers a perspective more oriented toward the energy-based supply economy, then CSPP can stand on its own merits, without appealing to relative comparisons. The CSPP has actual receipts from construction of the 65-foot bowl at Crosbyton. From this data, we know that it is a viable option which the Congress owes to the American people, as their corporate board of directors, to approve. From this perspective, Texas Tech University is in a sound position, since we have the necessary performance, prediction and modeling data, plus we are in the best position for conducting the actual measurements of performance of the future hybrid system.

Mr. Chairman, before presenting our specific request, I would add that this is not a local benefit, but a national benefit. Conservation is a primary national energy priority and, as stated previously, this proposed hybrid solar plant contributes to this national goal since it consumes fossil fuel at a reduced pace, thus allowing diversion and, more importantly, conservation of our finite petroleum supplies. Yes, this project will affect the national economy, especially if CSPP can act as a catalyst to the many Crosbytons across America —

especially the Southwest — for such undertakings at their own expense.

Request for Line Item Funding

Mr. Chairman, at the appropriate time of markup, I would urge you to consider the following as a construction line item:

FY 1982 - $15 million for Texas Tech to construct the fossil fuel portion of the plant and two 200-foot bowls at Crosbyton.

FY 1983 - $18 million for Texas Tech to construct the eight (8) remaining 200-foot bowls at Crosbyton.

Total - $33 million

This will then give the equivalent of one-half (1/2) MW_e per bowl, for a total of 5 MW_e for the total plant. By the way, Mr. Chairman, "off-the-shelf" existing technology is emphasized for this plant, with a near standard 5MWe fossil fuel plant, hybridized for the necessary and sophisticated integration into the solar system. [One might note the cost of this plant is about one- fifth the cost of the Barstow plant and that, although it is designed to have only one-half the peak solar capability, it will produce far more electricity each year, because it will operate at capacity factor one.].

In conclusion, Mr. Chairman, I would like to point out that on March 20th, we commemorated with ceremonies the first time that electricity had been

produced from solar steam and sold into a commercial power system. While the quantity produced was only 10,000 watts, we demonstrated our determination to provide a solar option to this nation.

Additionally, CSPP was a special feature during the American Energy Week on ABC's Good Morning America program on March 18, 1981. CSPP was also featured on CBS Evening News with Dan Rather last Friday, March 20, 1981.

Attached to our statement is the "Crosbyton Solar Catechism" which will provide further illumination to the committee.

I urge your committee to join us in providing America this immediately available Solar Electric Power option. This is your chance and ours to build a new electrical option for the American people.

# # # # #

CROSBYTON SOLAR CATECHISM

PRIMARY DATA

The Crosbyton Solar Power Project (CSPP) was organized by Texas Tech University, Lubbock, Texas and presented to the federal government in 1975 as a sole source, unsolicited program.

FUNDING AGENCY: ERDA/USDOE, $5.3 million to date (March 15, 1981)
$6.0 million by end of FY 81.

SUBCONTRACTORS TO TEXAS TECH: E-Systems of Garland, Texas
Foster Wheeler Energy Applications, Inc. of Livingston, New Jersey
Glitsch, Inc. of Dallas, Texas

ASSOCIATED AND LOWER TIER CONTRACTORS: H. C. Lewis Construction Co. of Lubbock, Texas
Terry Turbine Co. of Houston, Texas

CONCEPT CATEGORY: Solar-Thermal, Electrical Power, Fossil Hybrid Plant

CONCEPT: Fixed Mirror, Spherical Segment Bowl

CONCEPT NAMES: Solar Gridiron, Solar Bowl, Hemispherical Bowl, Fixed Mirror Distributed Focus (FMDF)

PROJECT MISSION: To build a 5 MW_e Solar-Fossil Fuel Hybrid Electric Power Plant

MISSION PURPOSE: Exhibit an actual, complete operating plant so that private captial will be invested in similar plants; to prove out the integration and operation of such plants

PLANT SITE: Crosbyton, Texas on U.S. Highway 82, about 38 miles east of Lubbock, Texas

EXPECTED COST TO BUILD THE PLANT: $15M (FY 82) + $18M (FY 83) = $33M*

PROJECT ACHIEVEMENTS:
- Oldest continuously funded single mission project in DOE Solar Program
- Constructed largest single solar collector ever built
- Only design verification system ever completed in the USDOE high temperature solar program
- Only system level experience (13 months at 1000°F) with a high temperature solar concept in the USDOE program
- Production of more high quality solar steam (over a billion Btu's) than anyone else in history
- (On March 20, 1981) to produce first commerical electricity in history of nation from solar steam
- Performance - only solar power system ever to achieve its maximum theoretical performance and to account (even in advance of construction) completely for all power and power losses
- Costs - actual receipts for cost of construction of world's largest solar collector and corresponding cost projections for full scale system

PROJECT STATUS: Phase I, as planned in 1974 for research and concept development, to be completed in FY 81. Ready for Phase II - Construction of power plant during FY 82.

* For cost explanation, see Question 2e.

CROSBYTOWN SOLAR POWER PROJECT
March 19, 1981

COST BREAKDOWN:

The indicated cost to build the plant shown above:

$15 M (FY 82) + $18 M (FY 83) = $33 M,

is composed as follows.

Average cost per gridiron (first ones will be more expensive) = $2.5 M each.	
Total cost of ten gridirons	$25 M
Cost of fossil fuel side of plant (including about $1.5 M of solar interface costs)	$ 8 M
Total Cost (in 1981 dollars)	$33 M

Cost Plan:

1. Backbone plant (FY 82)

Fossil fuel side of plant	$ 8 M	
First two gridirons (@ $3.5 M ea.). .	$ 7 M	
		$15 M

2. Completion of plant (FY 83)

Remaining eight gridirons (@ $2.25 M ea.)	$18 M	
		$33 M

NOTE: The estimated cost in Item 2 above does not allow for inflation. Should inflation continue, contingency must be made for this effect in the FY 83 funding.

1. HAS THE CSPP ACTUALLY BECOME A REGLIGION?

No, and the proponents are not fanatics, but this is a fair question. Indeed, the engineers of Texas Tech, the people of Crosbyton, Texas, and personnel from industrial firms have exhibited strong commitment and dedication, and there is a definite sense of moral duty to the concept, the mission, and the American people. Throughout history there have been solar religions featuring Ra, Helios, Apollo, Osiris, and so forth. The present proponents, however, are far less concerned with solar power than they are with future electric options for America. These are citizens deeply concerned about the future of electric power, and these people do believe that they are right in their approach and their mission. Perhaps these people are best described as trying to be Men. [Ref: Rudyard Kipling's IF, attached as an appendix to this catechism.] These people have also received some powerful indications, in the past year, that they are on the right track. There is a powerful momentum here!

2. WHAT, HOW, WHY, WHEN, WHERE DOES THE CSPP INTEND?

2a. WHAT?

The CSPP intends to build and exhibit an actual, complete solar-fossil fuel hybrid electric power plant. The designated plant capacity is 5 MWe, considered by CSPP to be the smallest size for a "real power plant". A larger plant would simply cost more without yielding additional purposeful benefit. A smaller plant would be somewhat a toy which would not properly utilize existing "off-the-shelf hardware" and would not exhibit realistic component efficiencies. The plant must be a hybrid with fossil fuel in order to provide the usual American standards of reliability in a cost effective fashion.

2b. HOW (DESIGN)?

The CSPP employs the only known high temperature solar concept which does note require moving mirror surfaces. The Solar Gridiron, therefore, offers strong cost advantages over any-other known concept. The CSPP has determined the most cost effective single bowl size to be about 200-feet in aperture diameter, capbable of enough steam for efficient production of 0.5 MWe, peak. The most cost effective overall 5 MWe plant would, therefore, require 10 such gridirons. The fossil fuel portion of the plant will cost about 23% (about $1.5 million) more than a conventional fossil plant in order to accomplish an effective hybridization with the solar components, even though heavy emphasis has been placed on the use of conventional hardware. This is not a conventional fossil plant, even though most components will be conventional hardware.

2c. HOW (IMPLEMENTATION)?

The CSPP would proceed in much the same fashion that it used previously in constructing the 65-foot aperture diameter ADVS (Analog Design Verification System), the largest single solar collector ever built, a "dress rehearsal". Texas Tech will serve as prime contractor with the federal government and be responsible for overall design, synthesis,

subcontractor selection, and cost and quality control. The land for the plant site would be provided (as it was for the ADVS) by the City of Crosbyton from the same tract used for the ADVS. The near proximity of the existing ADVS offers strong technical advantages: comparisons, checks, and tests.

2d. WHY?

This plant will exhibit production of electricity with a considerable reduction in the amount of fossil fuel previously required. This plant would operate almost entirely on solar steam under peak solar conditions and almost entirely on fossil fuel at night. [A small amount of thermal storage is included, but only as a buffer to allow full use of all solar boiler output, even output which is not of turbine quality.] If this plant is operated at capacity factor one (i.e., at 5MWe, 24 hours a day, every day), then it would produce 5MW-years (i.e., 43.8 million kWhrs) of electricity each year. Of this amount, 4 MW-years (80%) would result from fossil fuel and 1 MW-year (20%) would result from solar power. Thus there would be a 20% reduction in fossil fuel consumption. Of course, if, for some reason, the plant were not operated at night, then there would be a 40% reduction in required fossil fuel, but only half as much electricity would be generated.

This plant is balanced (20%, 80%) to illustrate cost effective use of solar power. According to the levelized busbar cost scenarios used by CSPP, a larger proportion of solar power would be less cost-effective and make the retail cost of electricity higher (for the 30 year lifetime at Crosbyton, Texas). More bowls would require extensive thermal storage and, thus, introduce two sources of increased capital cost. The whole intention of CSPP for this plant is to exhibit a cost effective application of solar power in a realistic economic context.

It is extremely important to build this system so that it may be observed in its entire economic context (fuel bills, operation costs, maintenance costs, lifetime, . . .) and in its entire technical context (development of necessary controls for the plant's efficient hybrid operation, survivability of components, needed technical improvements, . . .). In addition, in a production oriented economy, it is necessary to produce. This plant will produce!

2e. WHEN?

As soon as possible. By the end of FY 81, the CSPP will be finished with Phase I. The CSPP will be totally prepared with 1) what it wants to build (design), 2) what the plant will do (performance), 3) how the implementation will be accomplished (cost), and 4) justification (economics). Although certain design options are yet to be selected, this information is basically available now! It is essential to initiate long lead time procurement early in FY 82, so that the backbone plant can be completed early in calendar year 1983.

In order to reduce the size of the FY 82 request for funding, the plant has been divided into two construction efforts: the backbone plant and

the completed plant. The backbone plant (FY 82, $15 million) includes the entire fossil fuel portion of the plant along with two of the 200-ft. power gridirons. The plant would then be completed (FY 83, $18 million) by the addition of the remaining eight gridirons. The total cost is $33 millions.

2f. WHERE?

The CSPP intends to build this power plant on the same piece of property, provided by the City of Crosbyton, Texas, previously used for the ADVS. Two benefits are immediately obvious. Valuable land is provided by Crosbyton at no cost to the program, and advantage will be taken of the proximity of the ADVS. The engineering aspects of the ADVS are well understood, and it will serve as a comparison and test tool of great value. Although the CSPP is certain that the concept and plant have application at many other sites, it would be unfair to the history of the CSPP effort not to build the Crosbyton Plant at Crosbyton, Texas. The Crosbyton site is fully representative of the conditions to be encountered elsewhere: sun, clouds, winds, dust, rain, snow, hail, . . .

3. WHAT WOULD BE THE ELECTRIC DEMAND LOAD ON THE CROSBYTON PLANT?

This plant has a tunable load! It is intended that this plant supply the entire demand of the City of Crosbyton at all times. Since the peak city demand over the past several years was 3.6 MWe, the city demand will not saturate the plant's 5 MWe capacity. Even should the city demand grow during the plant lifetime, there is adequate margin. Meanwhile, generation beyond the city demand can be applied to the rural/agricultural load of the region through the rural electric co-ops in the area. Thus, the plant can be fully applied, up to capacity factor one, through agreements with rural electric co-ops (REC's). [The basic reason for selection of the 5MWe size of the plant was given in question 2a. above.]

4. WHAT WOULD THE CROSBYTON PLANT CHARGE FOR ITS ELECTRICITY?

The CSPP intends and recommends that electricity from the Crosbyton Plant be artificially set to always be at the current prevailing rate in the Crosbyton region. Under these conditions, the plant should make a profit because it incurs only 80% of the fuel cost of a similarly situated fossil plant and because it has no amortization schedule for invested capital. Because this plant would be capitalized by the federal government, it should be operated for the best purposes of the nation, not for local gain. The best purpose would be to exhibit a plant operating in an accurate and complete economic context! In the opinion of the CSPP, any profit from the Crosbyton plant should be returned to the federal government - in any fashion determined by the Congress. With a 20% fossil fuel saving, it is not unrealistic to expect this plant to generate a sizable profit over the period of a 30 year plant lifetime. Thus a substantial portion of the federal investment could be repaid. Should it result that the return exceeds the federal investment, then the federal government should consider a redistribution of the proceeds. As Project Producer, Texas Tech advises the Congress that it would be equitable to also consider some reimbursement, from plant proceeds, to the City of Crosbyton for the land [Ref: Q2a].

5. HOW DOES THE PROPOSED RETURN OF PROCEEDS MECHANISM DIFFER FROM A FEDERAL LOAN?

There is a major difference! Use of borrowed funds is equivalent to use of local funds, because borrowed money must be repaid. Default in any form, guaranteed or otherwise, affects one's reputationand self-image. The Crosbyton area electric consumers neither ask for nor offer unearned benefits. This plant is in the national interest and its benefit is national in scope. Reduction in local electric rates (contrary to the recommendation in Q4) would be an unrequested, unnecessary, and improper local benefit. Similarly, risk of private or local capital on a first-of-its-kind plant would be outside the American tradition of risk/profit-expectation investment. Because solar electric plants should be balanced (Ref: Q2d) for optimum displacement of fossil fuel requirements (a national benefit) future plants will be near break-even propositions for the private and commercial investor. Solar power is costly enough that solar electric plants can not be represented as profit making ventures!

6. SHOULD MATCHING FUNDS BE OFFERED FOR THE CROSBYTON PLANT?

No, there is no useful purpose, no reason. There is no local benefit (Ref: Q4)! The CSPP has no intention of trying to "trick" funding out of the federal government with gimmicks of any kind. A national benefit is offered along with intended service to the American people. It is the responsibility of the Congress, as the corporate board of directors for the nation, to accept or reject the solar-electric option on it own merits. Simply stated, the CSPP offers its concepts, it dreams, its talents and skills, its reputation, its determination, its cost effectiveness; it does not offer substantial matching or cost-sharing. It might be mentioned that the land is offered (Q's 2a and 5) and that West Texas people already cost-share undertakings in the national interest through their federal taxes. [Of course, it is widely known that the CSPP is strongly committed to its mission. Perhaps it could be induced to seek matching funds, if it has no other way to perform its service to the American people. The present position taken by CSPP is that such gimmicks should be unnecessary!]

7. HOW WOULD THE CROSBYTON PLANT BE MANAGED AND OPERATED?

With primary emphasis on realism and economic context. Neither Texas Tech nor, presumably, the federal government wishes to enter into direct commerical sale of electricity. The CSPP intends to establish a private entity to manage and operate the power plant. [For reasons to be explained below, the CSPP prefers for the plant to be operated by an existing electric co-op already serving the area.] Under the proposed "return of proceeds mechanism" (Ref: Q4 and 5) the private entity would not purchase the plant. Rather, the Crosbyton plant would be assigned to that entity for its use subject to various restrictions and constraints; such as:

- To the extent practicable, the plant must be operated in the fashion for which it was designed and intended;
- The plant components must not be inappropriately dismantled and salvaged;

- The plant must be maintained at a level of serviceability and efficiency consistent with the intention to exhibit this solar-electric option to potential investors in similar plants;
- Appropriate spare parts will be maintained and repairs and replacements made in a suitable fashion;
- The plant will be obligated to give first priority to provide the electric demand for the City of Crosbyton, but only to the extent deemed desirable by the people of Crosbyton;
- The electric rate structure would be specified by agreement with the federal government and its agents.

The private entity receiving the plant should understand that it will be allowed little or no profit. This is appropriate, because it has risked no capital. Proceeds from the plant would be used for:

- maintaining the plant and an appropriate supply of spare parts,
- repairs and necessary modifications,
- improvements as permitted or directed by the federal government,
- operation of the plant and appropriate operator and managerial personnel,
- necessary costs involved in exhibit, demonstration, or analysis of the plant for the benefit of potential investors in similar plants, and
- return of proceeds to the federal government.

The CSPP recommends that an existing REC (rural electric cooperative), already serving the area, be selected to receive the Crosbyton Plant. This would offer two advantages:

1. An existing electric network would be available for transmission and distribution and an existing management structure would be available; and

2. There is a tremendous potential market for systems like the Crosbyton Plant in the existing association of REC's.

Other REC's would find it particularly easy to discover and assess the economic value of such systems for their own purposes. The CSPP hope here is that REC's will sell REC's on the idea to the extent that, should it be justified, a rapid deployment of solar-electric plants can take place with a corresponding rapid impact on national economics.

8. HOW MANY OF THESE PLANTS MUST THE FEDERAL GOVERNMENT FUND?

Only one! It is essential to exhibit one actual, complete operating plant in order to offer private and commercial investors the opportunity to evaluate the concept. For the federal government to build more than one would be inefficient and unnecessary. Advanced concepts or improvements might be developed in various laboratories at the discretion of the government, but the CSPP position is that if a subsequent (private or commercial) plant builder wishes to try to improve on the plant concept, he should do so at his own risk. Should his venture be successful, he is entitled to his legitimate profits. The point is that the Crosbyton Plant should already exhibit good

engineering. Let the sophistication of higher technology arise, if it does, only by the traditional profit incentive!

9. WILL FEDERAL FUNDING FOR THE CROSBYTON PLANT BE INFLATIONARY?

Not in a deep sense; it is an investment in the nation's future. Personnel of the CSPP believe that, among the sources of inflation, one of the driving terms is fuel cost escalation. It would, therefore, appear to be very ironic if such an effort to curb fuel consumption were interpreted not as a response to, but as a cause of inflation. Such irony is not amusing to those that are deeply concerned about the nation's energy and electric future!

10. WHAT WILL HAPPEN TO THE EXISTING CROSBYTON ELECTRIC PLANT?

It will be de-commissioned and salvaged. Its function will be totally replaced by the new Crosbyton Plant. Existing fuel contracts will be transferred to the new plant. A diesel plant does not make a suitable hybrid with a solar concept. [Retrofits (repowering) are possible, but are the wrong way to exhibit cost-effective engineering of solar-electric options.] Proceeds from the salvage of the diesel plant will be applied to reduce Crosbyton's indebtedness on its existing plant. Any remaining indebtedness should be retired through an artificially adjusted wholesale/retail electric arrangement (Ref: Q4). The present city-owned distribution network can be retained and serviced by the city as in the past or transferred to the new plant. Either way, the cost of maintaining the distribution network must be met from the sale of electricity generated by the new plant. Because the City of Crosbyton has no reasonable way to retire its remaining indebtedness on its present facility except through sale of electricity, it would be appropriate to set a wholesale price to the city which would allow the individual customers to pay retail rates current in the area while allowing the city to retire its debt.

11. HOW WOULD OTHER PLANTS BE FINANCED?

Subsequent plants should be financed by private and commercial investors. The first plant is unusually expensive and generates a "profit" only because the federal government provides the capitalization and no amortization schedule is imposed. Subsequent plants would have to apply the monthly fuel cost savings over the lifteime of the plant to an amortization of the capital investment. Although economic projections are somewhat scenario dependant (the fuel cost escalation for the next thirty years being rather uncertain), the CSPP determinations are that future plants can operate in a break-even fashion: trading monthly fuel cost savings for amortization payments. It can not be assumed that there is a strong local benefit to either the investor or the consumer. The solar option does not appear to be good enough (in regions secure in their fuel supplies for the next thirty years) to provide strong local incentive for investment. As stated before, the benefits are primarily to national economics.

12. WOULD SOLAR-ELECTRIC PLANTS SELL THEMSELVES?

Probably not. At best they would offer no particular disadvantage to the local investor. Deployment of these plants would depend, therefore, on salesmanship.

Because the true beneficiary of the use of such plants is the nation as a whole, it would be the business of the federal government to have such plants deployed. The government could require use of such plants or might encourage such deployment through tax restraint or other incentives. Such decision is the business of the federal government, not the CSPP. Simiarly, it is the business of the federal government to decide how to take advantage of or to realize the national economic benefit. Obvious choices would be to reduce American purchase of energy from foreign producers or to divert displaced fuel to some other region of the nation or some national need such as military requirements. It is the business of the Congress, as the nation's corporate board of directors, to judge the value of these options to the nation and to act according to its judgement. It is the business of the CSPP to provide the options to the nation.

Bettmann

If

RUDYARD KIPLING

(Born December 30, 1865; died January 17, 1936)

If you can keep your head when all about you
  Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
  But make allowance for their doubting too:
If you can wait and not be tired by waiting,
  Or, being lied about, don't deal in lies,
Or being hated don't give way to hating,
  And yet don't look too good, nor talk too wise;

If you can dream—and not make dreams your master;
  If you can think—and not make thoughts your aim,
If you can meet with Triumph and Disaster
  And treat those two impostors just the same:
If you can bear to hear the truth you've spoken
  Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
  And stoop and build 'em up with worn-out tools;

If you can make one heap of all your winnings
  And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings,
  And never breathe a word about your loss:
If you can force your heart and nerve and sinew
  To serve your turn long after they are gone,
And so hold on when there is nothing in you
  Except the Will which says to them: "Hold on!"

If you can talk with crowds and keep your virtue,
  Or walk with Kings—nor lose the common touch,
If neither foes nor loving friends can hurt you,
  If all men count with you, but none too much:
If you can fill the unforgiving minute
  With sixty seconds' worth of distance run,
Yours is the Earth and everything that's in it,
  And—which is more—you'll be a Man, my son!

Mr. STENHOLM. I will summarize it and speak to the project. I realize, first off, the tremendous budget restraint that we are facing this year. I guess I, of all people, recognize this.

The spirit in which I am here today is to ask this committee, as we are asking all of the permanent subcommittees and committees, to take a look at this project based on the merits, to look at it within the realm of realizing we have a limited number of dollars.

We think that this project, of all of the solar projects that we have had anywhere in the United States, and probably anywhere in the world, offers the most hope as far as being something of practical importance in the nearest term.

This is a project that has been put together by a small town in cooperation with the local lighthouse, with Texas Technical University, with private enterprise and with government.

We, the Congress, the government, have appropriated by the end of this year some $6 million in R&D funds to develop the process, and it has worked. And based on the folks that I believe—and I believe most of DOE believes—the process itself has worked.

What we are saying is take the process and put it together and see whether or not this reearch project can actually become a commercial generating facility. That is what we are here to ask your consideration of, a line item appropriation in the amount of $15 million in 1982, and $18 million in 1983.

I mention rural electrification. I think that this is certainly an area that we think has merit. I think the same philosophy that had occurred in the 1930's with folks saying rural electrification would not work was an idea that would not be economically feasible.

If we had listened to those folks at that time, I would question whether or not we would have brought the development of rural America that we have had through a very, very sound and productive program of rural electrification.

I think the same can be said, if not this project, of similar ones, as we delve into a new field of solar energy.

The beauty of this project, if it works—and based on the design specifications, we believe it will work because we did on March 23 generate the first commercial solar produced steam anywhere in the history of the world. We were supposed to have done it on the 20th, but the sun didn't cooperate on that day, and that is one of the weaknesses of solar energy, you have to have the sun out on that day.

That is why the marriage of a fossile fuel plant with the solar concept that we are talking about makes a lot of sense to me.

What we are talking about, if it works, is a generating plant, electric one, that will be able to do with 20 percent less fossile fuels than a comparable size would need.

In this day of the shortage of energy in which we are all looking at producing more domestic oil and gas, looking at what we can do to lower our dependence upon foreign imported oil, I think we need to be looking at all possible answers. This we think is one of them.

Another concept or idea with this project that kind of appeals to me is the fact there will be pay-back if in fact it does work and if in fact it does produce electricity.

The people of Crosbyton will pay the commercial rate for their electricity just as anyone else, based on a commercial rate in that

there will be funds that will be paid back for whatever purpose we in government might determine as far as the overall project is concerned.

This quickly summarizes where we are. We have an idea that a lot of people have spent a lot of time and effort. The people of Crosbyton have been working on this for something like eight years. We have had the cooperation of private industry, of Texas Tech University, of rural electric cooperatives, of people interested in where our future power is going to come from.

When you compare the amount of monies in this project with those that have gone into other solar projects, certainly I think we qualify as being penny-pinchers.

We have been efficient, we have been frugal. The idea has worked.

What I am saying in regard to everyone concerned is that we need folks that should know the answers. If it does have merit, if it is a good sound idea, if it is something that is worth a further investment of the taxpayers' dollars, this is what we want.

We are trying to convince others it does. If we are unsuccessful, if the people in the know, as far as solar energy and future energy produced from solar power, looked at this project with the results, test verifications, all the information that has been furnished now over a period of several years, if after looking at it, the end result is this project has no merit and any future expenditure of funding would be a waste of taxpayers' funds, so be it.

We happen to believe the idea has merit and nothing else can touch it.

Mr. BEVILL. Very good. We certainly appreciate your coming and going over this.

As you know, Charlie, this subcommittee shares your views on this. We also realize that $15 million is not going to be easy. It is not in the budget. But actually, in the past it was left out of the budget twice before and we have kept the project alive.

Mr. STENHOLM. Which we appreciate.

Mr. BEVILL. We will work with you and we will do what we can because we do feel as you do about the project, that it has a good potential.

Mr. STENHOLM. That is all we are asking, Mr. Chairman.

Mr. MYERS. Has the fossil fuel part been built?

Mr. STENHOLM. No.

Mr. MYERS. Just the two gridirons?

Mr. STENHOLM. No. All that is built today, Mr. Myers, is this: Let me give you a few pictures to show you. This is what we have. This is the 65-foot solar disc that has been used to prove the technique or to prove the system.

This picture is what we propose to do with building an additional 10 200-foot solar collectors in the design you see in front of you there, and then also to build the fossile fuel plant in a marriage; and to test the commercial aspects of this design.

Mr. Reichert could best describe this.

Mr. MYERS. Does the disc have to be rotated?

Mr. REICHERT. No, sir. This is the only known one that will give you high-termperature steam without moving any mirror surface.

Mr. MYERS. The tripod moves?

Mr. REICHERT. The tripod supports the pivot point. The boiler tracks the sun. Something has to move because the sun does. The boiler has to point at all times right at the sun. It is very much like the shadow of a sundial. It moves very slowly, but in the course of a day, it moves from the far west to the far east, reversing the direction that the sun follows because we are on the other side of the pivot point.

We live in a region that gets a lot of wind, snow, hail and sleet. We have operated this system making thousands of PSI, in that whole period of time everyday—Easter Sunday and Christmas Day and July 4, and we have been through the snow and the hail and the sleet, and we are very conscious of it.

Mr. MYERS. Did somebody else get out there to sweep the snow off?

Mr. REICHERT. No. If it stays cold, you have to wait until you shovel it off.

The dust can get deeper than the snow where we live.

Mr. BEVILL. We will place additional statements in the record. This committee stands adjourned until 10 o'clock tomorrow morning.

[Whereupon, at 4:30 p.m. the committee adjourned.]

TESTIMONY OF HON. FORTNEY H. (PETE) STARK, JR.

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to present this testimony in support of our nation's magnetic and inertial confinement fusion programs.

The Lawrence Livermore National Laboratory in my district is the center of magnetic mirror research, representing 15 percent of the entire magnetic program's operating budget. The Lab's magnetic mirror program has been so successful that we have been able to skip an entire generation of experimentation and move directly to an advanced fusion device, the Magnetic Fusion Test Facility (MFTF-B), now under construction at LLNL.

I appreciate the support the Administration has given to the MFTF-B Facility at the Lab. Fiscal Year 1982 funding requests will allow completion of the MFTF-B on time and within budget.

I know, however, that the program at the Lawrence Livermore National Laboratory is only part of a much greater effort. This greater effort—the development of commercial fusion power—is jeopardized by the Administration's decision to cut funding for the national magnetic fusion program from $506 million to $460 million in fiscal 1982.

This important program has reached a critical point. According to DOE officials, "the progress in magnetic fusion research has been so rapid that the program is now technically ready to enter the engineering development phase."

While the Administration acknowledges the importance and viability of the magnetic fusion program, it does not intend to provide for the buildup of engineering forces necessary to move the program into its engineering phase.

The Administration assumes that the magnetic fusion program can remain at a standstill for a year or two, poised between the basic research phase and the engineering phase, without harm to the program. This is simply not true.

This refusal to commit to the next inevitable phase in magnetic fusion energy development, risks losing the talent, commitment, international leadership, and commercial interest that have made the U.S. magnetic fusion program the enormous success that it is today.

Cost, necessity, and promise point to the wisdom of an immediate commitment to the next phase of development. Fusion can become a universally available, environmentally reponsible source of limitless energy. We all know how desperately that is needed. We also know that the cost of developing magnetic fusion energy will not get any cheaper.

Budget concessions can and must be made. By restoring only $15 million to the fiscal 1982 program budget, we will be able to move at a reasonable—if not rapid—pace into the engineering phase of magnetic fusion development, $15 million will provide a strong and vital commitment to our nation's energy future. I urge this Subcommittee to make this commitment.

Now, I'd like to turn to the Inertial Confinement Fusion Program.

When we first committed ourselves to the ambitious goal of harnessing fusion energy, we decided to find the best—and not simply the easiest—road to fusion power development. In the best scientific tradition, the U.S. fusion effort has supported fusion research in many directions—magnetic, inertial confinement, and a host of alternative fusion concepts. I'm not a physicist, but I do have a pretty clear notion of how shortsighted it is to put all of your eggs in one basket when you're dealing with such levels of complexity.

Unfortunately, Administration budget proposals threaten the healthy and vital diversification of the fusion effort. The Inertial Confinement program, funded at the modest level of $209 million in fiscal 1981, has been cut to $180 million in fiscal 1982.

The mainline ICF effort—the Shiva and Nova lasers at the Lawrence Livermore National Laboratory—will be severely impacted by these cuts. Deferrals in the 1981 funding could shut down the Shiva Laser; completion of Nova, now under construction at the Lab, could be set back by a year.

This nation has approximately $104 million invested in just the Nova laser facility. Completion of this important project will produce significant national security benefits as well as vital information on energy production. Inadequate funding has already set back the completion date six months.

The fusion research and development effort requires firm commitment and steady progress. Morale and commitment are important in any project; they are critical in a scientific effort that must break untried ground in order to move forward.

I am aware of the funding limitations we face. It is hardly cost effective to chip away, year after year, at an effort so significant from a national security and an energy standpoint. Restoration of at least $30 million will maintain the progress and momentum of the inertial confinement fusion program in fiscal 1982. I urge you to take this step.

STATEMENT BY FORMER CONGRESSMAN MIKE MCCORMACK

The Administration has requested $460 million for magnetic fusion research for Fiscal Year 1982. This level of funding, while a distinct increase from fiscal year 1981, provides no money for moving ahead with engineering, development, and materials testing in our magnetic fusion program as provided by the Magnetic Fusion Energy Engineering Act of 1980. This law, as you recall, called for a twenty-year, $20 billion program designed to move magnetic fusion from its recent successes in research into an Apollo-like program of materials testing, engineering, development, and onto a magnetic fusion electric generating demonstration plant, to be on the line before the year 2000. The new law calls for an expenditure of $525 million to start this program in fiscal year 1982.

Secretary Edwards has repeatedly indicated his desire to more forward even more rapidly with magnetic fusion than is called for in the law. However, the Administration budget provides no money for this purpose. The additional $65 million required would allow the Department of Energy to continue its present magnetic fusion research program ($460 million) and move forward with engineering development ($65 million).

Of critical importance is the Fusion Materials Irradiation Test facility which is under construction at Hanford, Washington. This is the only machine in the world that can, or will, in the foreseeable future, be capable of doing essential materials testing for fusion power producing facilities. Fusion materials testing is a critical bottleneck in our program. The Administration proposes to rescind funds for the Fusion Materials Irradiation Test facility in Fiscal 1981, and not to fund the FMIT in 1982. This is unspeakable folly and would be a tragedy for this critically important program. I hope that you will do everything you can to provide full funding for the magnetic fusion program in fiscal year 1982 and that you will protect the FMIT from rescission in 1981.

The second item is funding for the ongoing High Energy Physics program. This is the program that funds our large advanced research accelerators, primarily at Brookhaven on Long Island, Fermi Laboratory near Chicago, and the Stanford Linear Accelerator in California. The Administration provided a "cost of living increase" of 11 percent for fiscal year 1982 for High Energy Physics, increasing the 1981 level from $352 million to $393 million. Unfortunately, the cost of living at these High Energy Physics facilities is heavily impacted by the consumption of large blocks of electricity to operate the equipment. During recent years, the cost of electricity has doubled or even tripled for these facilities, and because of this the requested Administration funding level for fiscal year 1982 will require that these multi-million dollar machines only operate about half time during the coming year. These machines are so valuable that every available second is booked up for months and years in advance, night and day for 365 days a year. Unless additional funding,

about $20 million, is provided for High Energy Physics, we will find ourselves in the extraordinary position of having hundreds of the world's outstanding scientists who have planned their research programs for two or three years, and built equipment costing tens of millions of dollars for a single experiment, sitting around half the time waiting for the laboratory to have enough money to buy electricity!

How absurd! I hope that you will actively support adding about $20 million to the High Energy Physics budget so that our laboratories can operate full-time. (The Administration will, of course, deny this, but it is the truth—and I can provide proof if you wish.)

The third item (over which you may or may not have direct jurisdiction) deals with a proposal by the Administration to zero out funding for graduate engineering education support under the National Science Foundation. Today, more than half of the graduate students in physical science and engineering in the United States come from foreign countries—because so few American students are participating in these programs. We are facing a crisis in inadequate enrollment in, and support for, education in science and engineering. This crisis is just as real and just as dangerous as the energy crisis or impending shortages of water in certain areas of the country, and it is just as important. We need about $80 million in this program for fiscal year 1982.

The fourth item is the High Temperature Gas-Cooled Reactor. During recent years, we have funded continued research and development in this technology, although most of the money (about $900 million) has come from private industry. The High Temperature Gas-Cooled Reactor has a number of inherent advantages over water-cooled nuclear plants. It cannot melt down, and it can provide higher efficiency and high temperature gases for such chemical processes as hydrogen production. The HTGR does not threaten existing light water nuclear industry, but there is strong interest in cooperative financing and programming in Germany, Switzerland, and Japan. I urge that $35 million be provided for the High Temperature Gas-Cooled Reactor program.

If you feel that the total budget for the Department of Energy should not exceed the level requested by the Administration, I suggest that a reduction of 5.5 percent in the Administration request for the Strategic Oil Reserve ($3.9 billion) would provide all the additional funding called for in this statement.

JOHN J. KEARNEY, Senior Vice President

EDISON ELECTRIC INSTITUTE The association of electric companies

1111 19th Street, N.W.
Washington, D.C. 20036
Tel: (202) 828-7400

March 31, 1981

The Honorable Thomas Bevill
Chairman, Subcommittee on Energy
and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Attached please find a statement of the position of the Edison Electric Institute regarding the Department of Energy Budget for Fiscal Year 1982.

I respectfully request that this statement be included as part of the record for the Subcommittee hearing held on March 25, 1981.

Please do not hesitate to contact me if you need additional information or if I can be of assistance in any way.

Your interest and cooperation are greatly appreciated.

Sincerely,

John J. Kearney

Attachment

Statement
of
Edison Electric Institute
on
U. S. Department of Energy
Fiscal Year 1981 Nuclear Budget
to
Subcommittee on Energy and Water Development
Committee on Appropriations
U. S. House of Representatives

This statement is submitted on behalf of the Edison Electric Institute to present views of the electric utility industry on the DOE FY'82 Nuclear Budget. The Institute is the association of investor-owned electric utilities and its members provide about 78 percent of the nation's electricity.

The FY'82 budget for DOE nuclear programs must provide funds for the essential aspects that will assure the effective development, demonstration, and use of this vital domestic energy resource.

A primary goal for the nation's energy future should be the early replacement of our demand on the depleting world reserve of petroleum, wherever practical, with the use of our abundant domestic solid fuels--coal and uranium. The best and earliest means of increasing the use of domestic solid fuels is through the increased use of electricity generated by coal and nuclear power plants.

While conservation through greater efficiency in the use of energy must be encouraged and the search for economic alternative fuels be pursued with vigor, we must proceed to improve the use of those technologies that are available and develop those on which we have a high confidence of achieving success. Within the planning horizon of the utility industry, this means the increased use of coal and nuclear fission. Since they have the highest payoff, the Federal Government must support them with appropriate research and development activities. Nuclear fission must be used to achieve the desired high degree of overall reliability for the electricity supply system as we build new plants to serve the growing economy, displace the use of petroleum and replace obsolete facilities.

The reliance on nuclear power has provided major benefits to the customers of electric utilities in terms of lower cost of generation, diversity of fuel resources, and decreased reliance on imported foreign oil. When the nuclear power plants currently under construction or on order are completed, these plants, together with the plants in operation, can provide the energy equivalent of more than 4.5 million barrels of oil per day. To achieve these benefits at an early date, however, it will be necessary to reaffirm a national policy that is fully supportive of nuclear power, regain the research and development momentum that was lost during the prior Administration, and remove the regulatory uncertainties and delays now being experienced. The programs and their funding levels in the DOE nuclear budget must reflect the important role that nuclear power is to play in our energy future. This is the time to clearly focus the nuclear fission programs to achieve the needed support. There must be a strong commitment to this if today's energy picture is to be improved.

I will now address those programs we believe should receive substantial support in the DOE FY 1981 nuclear budget. They include:

- Regionally-sited away-from-reactor (AFR) spent fuel storage facilities
- Spent fuel reprocessing
- Commercial nuclear waste management
- Breeder reactors
- Gas-cooled reactors
- Uranium enrichment

Away-From-Reactor (AFR) Spent Fuel Storage

Congress should provide the authority for DOE to acquire or construct regionally-sited AFR spent fuel storage facilities and establish a funding arrangement such that DOE can provide spent fuel storage. The most recent DOE studies on the need for AFRs has shown that AFR capacity is required during the 1980s. Utilities have been and are continuing to rerack their storage pools at reactors to provide maximum on site storage and to use intra-utility transhipment where permitted.

For two decades prior to 1977, the Federal Government and the nuclear industry based their programs on the approach of recovering by reprocessing the energy values contained in spent fuel. However, the prior Administration changed that direction with its April 1977 declaration of an indefinite deferral of commercial reprocessing. This action of the prior Administration trapped the electric utility industry in the unfortunate position of having committed billions of dollars for nuclear generating facilities with limited on-site spent fuel storage capability and no reasonable alternative for disposing of the spent fuel. The industry fully recognizes that spent fuel represents a large national energy resource that should be used. Unfortunately, the direction for its use has been clouded by the Federal Government and a reasonable interim program has not been put in place to compensate for this Federal action. Thus, during the 1980s a number of presently operating nuclear power plants will need to ship their spent fuel to storage facilities away from the reactor site or face plant shutdowns. To assure the continued operation of existing nuclear power reactors a Congressional directive to the Department of Energy is needed to establish interim storage facilities by the mid 1980s.

We concur with the early indications by Secretary of Energy James B. Edwards for the need to resume the reprocessing programs halted by the prior Administration. However, it must be pointed our that commercial reprocessing could not be made available in sufficient time, with adequate capacity to be a substitute for the needed early AFRs. If the Federal ban on reprocessing were to be lifted today, the lengthy time of building and licensing any facility would still necessitate these early AFRs.

It should emphasize that the cost of programs for storage of spent fuel will be paid by the utilities to the Federal Government. These costs in turn will be reflected in the costs of providing electricity generated by nuclear power and ultimately borne by the utilities' customers.

Spent Fuel Reprocessing

The research and development program at the Barnwell Nuclear Fuel Plant in South Carolina should be contined and enhanced. What exists at Barnwell today is the largest modern spent fuel reprocessing facility in the world, but Federal policy has prevented its use.

During fiscal years 1979-1981 Congress appropriated funds for research and development programs at Barnwell. Direct Congressional support for the Barnwell programs came about after the prior Administration's April 1977 decision to indefinitely defer commercial reprocessing. During this period the programs at Barnwell have preserved the nucleus of its unique technical staff, produced valuable research results on the nuclear fuel cycle and maintained the option of using the Barnwell facility in the future. Programs at Barnwell have developed what many believe to be the most sophisticated nuclear safeguards system in the world. It is clear, based upon the actions being taken by other countries, that reprocessing of spent fuel will be a part of the world's energy future. We look forward to a re-instatement of commercial reprocessing early during President Reagan's Administration. The continuation of work at Barnwell will be enormously valuable when that occurs.

Commercial Nuclear Waste Management

The industry supports the need for a major DOE program on nuclear waste management that is focused on achieving a waste repository within a reasonable time period. The present research and development programs are expansive beyond reason and a clear direction must be defined. A step-by-step approach needs to be developed which will result in siting, construction and operation of a geologic repository. The current schedule for this is, however, unnecessarily relaxed because of the lack of program focus. During the last four years, the timetable for operation of the first geologic repository has slipped by more than a full decade from 1985 to about the year 2000. Utilities accept the responsibility to pay the Federal Government for disposal of nuclear waste, on a full cost recovery basis, for all reasonable program costs.

Breeder Reactors

Our industry continues, after many reevaluations, to be firmly convinced that breeder reactors must be developed as a long-term fuel resource for the production of electricity and the LMFBR is the preferred technology. While the timing for the commercial breeder reactors has receded further into the future than we has projected ten years ago, the need continues to exist and breeder reactors represent the only predictable means of serving the long-term needs of electricity for the nation along with the use of coal. Based on today's knowledge, we believe breeder reactors represent the concept most likely to succeed over the long haul. Since breeder reactors produce more fuel than they consume in the process of generating electricity, they are a form of renewable energy.

We fully recognize that the LMFBR technology entails major challenges that require massive efforts both in manpower resources and in developmental funding. Building upon the research and development efforts of the past 25 years we are definitely at the point where a demonstration facility should be built and operated as soon as possible. Other steps will be required to provide the basic knowledge and confidence that is necessary for the electric utility industry to

accept the LMFBR as a dependable power system. This program entails several more decades of effort. The time frame however, does allow the U.S. to develop an indigenous breeder reactor capability if it is pursued expeditiously. If we continue to delay such an approach, we may be forced in the future to rely on licensing foreign technology and the purchase of foreign equipment.

In 1972, the utility industry entered into a cooperative agreement with the Federal Government to undertake the design, construction and operation of a liquid metal fast breeder reactor from a combination of about 750 electric utility organizations including investor-owned, public and cooperative utilities. This is the largest utility industry commitment ever made to such a program. Proceeding with the construction of the CRBR is a major element to rebuilding the confidence that has been lost over the last four years for engaging in cooperative industry/government programs.

Gas-Cooled Reactors

The high temperature gas-cooled reactor (HTGR) concept offers potential for greater operating efficiencies, greater flexibility in reactor siting, and possible application for industrial process heat requirements. Development of the HTGR continues to be supported both financially and with managerial expertise through the utility supported Gas Cooled Reactor Association (GCRA). Continued Government cooperation and support are vital to the success of the joint effort now under way.

Uranium Enrichment

We urge the Congress to continue its support for the development of gas centrifuge technology for uranium enrichment and the construction of the Gas Centrifuge Enrichment Plant (GCEP). The three DOE gaseous diffusion plants have served the U.S. military and domestic and foreign commercial nuclear programs well. However, the diffusion plants themselves are highly dependent on large quantities of electric energy. Fifty percent of the cost of present uranium enrichment services is the cost of electricity to run the diffusion plants. A gas centrifuge process would use only 4 to 5 percent of the electricity used by the diffusion process to produce a unit of separative work (SWU). The GCEP offers obvious benefits both in conservation of energy resources and in potentially reducing the cost to consumers. It is also an important element in maintaining our position in the international community as a reliable and competitive supplier of uranium enrichment services. We also encourage the development of advance isotope separation (AIS) techniques which may one day provide an even more efficient form of uranium enrichment. We caution, however, that AIS research and development should not detract from GCEP manufacturing, construction and installation aimed at meeting its present schedule of 2.2 million SWU by 1988 and subsequent increments at Portmouth, Ohio to a capacity of 8.8 million SWU. The GCEP offers a high confidence path for more efficient uranium enrichment while AIS requires major developmental efforts to apply the technology.

Utilities pay the Federal Government for uranium enrichment service on a full cost recover basis.

In conclusion, economic and reliable electric energy must play a greater role in this country and this can be achieved only with the use of nuclear power and coal. Nuclear power is a domestic energy resource that is converted to a high grade flexible energy form -- electricity. Major Federal programs are necessary to permit this potential large energy resource to be fully developed to serve the nation's growing economy, to displace the use of the world's depleting petroleum where-ever practical and to replace obsolete electricity generating facilities.

****

San Diego Gas & Electric

March 24, 1981

G. D. COTTON
VICE PRESIDENT—ENGINEERING

FILE NO.
PMB 410.14
Heber Binary

Honorable Tom Bevill, Chairman
House Committee on Appropriations
Subcommittee on Energy & Water Development
2362 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

Attached is a statement that we wish the Subcommittee to include in its record of hearings on the DOE FY '82 budget on renewable resources (geothermal). This statement was prepared by Robert G. Lacy, San Diego Gas & Electric's Manager of the Heber Binary Project. This project is vital to the attainment of our national goals for energy independence.

We urge your support in ensuring that FY '82 federal funding is made available for the project.

Sincerely,

G. D. Cotton

gdv

attachment

cc: R. K. Fuller

STATEMENT OF ROBERT G. LACY
MANAGER - HEBER BINARY PROJECT
SAN DIEGO GAS & ELECTRIC COMPANY

Mister Chairman and Members of the Subcommittee, my name is Robert G. Lacy, the Project Manager of the Heber Binary Project for San Diego Gas & Electric Company. The Project is a 65 Mw (gross) binary cycle power plant. It will be the first commercial size plant of its kind in the world. As Project Manager, I am responsible for the design, construction, start-up, and demonstration of the Project.

I am a registered professional engineer in the State of California. I am a member of the American Society of Mechanical Engineers, and a member of the Board of Directors of the Geothermal Resources Council. I am also a member of the Advanced Power Systems Division Committee for the Electric Power Research Institute (EPRI).

Before I begin my statement, I would like to thank the Subcommittee for this opportunity to discuss the Heber Binary Project. I would also like to express my appreciation for the leadership role shown by Congress and, in particular the Committee on Appropriations, for the Project.

My statement will discuss the importance of the binary cycle to the development of geothermal resources and the urgency to demonstrate this technology. I will also stress the importance of federal funding to the Project and the minimal burden on the federal government in view of the Cooperative Agreement with DOE. Finally, I will explain the unacceptable consequences that withdrawal of federal funds would have on the Project.

When this Subcommittee reviews federal funding for the Heber Binary Project the following points must be considered:

1. The only commercially available technology for electric production from hydrothermal reservoirs is the flash cycle.
2. The Interagency Geothermal Coordinating Council has established the goal of 25,000 Mw of electric capacity from hydrothermal reservoirs by the year 2000. This equals about 340 million barrels of oil each year. The binary cycle will account for at least half of the 25,000 Mw goal and could account for all 25,000 Mw.
3. The flash cycle has an adverse impact on the environment through the release of noncondensable gases which often include hydrogen sulfide. The binary cycle has no such emissions.
4. The binary cycle must be demonstrated on a commercial scale before the electric utility industry can use Hot Dry Rock energy resources.
5. The Cooperative Agreement that was signed by DOE and SDG&E to carry out the Project is of benefit to both parties. From the government's point of view, DOE is not liable for cost overruns; the government contributions could be returned through revenue sharing. Also, the Agreement provides for broad dissemination of Project data to the industry.
6. The private sector has already made a large financial commitment to the Project and will pay fifty percent of Project costs.
7. The private sector, particularly the electric utility industry, cannot provide the additional financing necessary to move the Project forward without continued federal funding.

8. Withdrawal of the federal funding would cause the termination of the Project. Goals for geothermal development by the year 2000 would almost certainly not be met.

SDG&E BACKGROUND IN BINARY CYCLE DEVELOPMENT

SDG&E has conducted geothermal exploration, research, and field test development since early 1971. As a result of geothermal well drilling performed in the early 1970's and further drilling and testing done in 1976, we identified three promising reservoirs in the Imperial Valley of California. These are located at the south end of the Salton Sea near Niland, south of El Centro near Heber, and east of Holtville at East Mesa. Two of these, Heber and East Mesa, are prime candidates for development using the binary cycle. The attached map (Figure 1) shows the location of these reservoirs. About 75 reservoirs with potential for electric power generation in the United States have also been identified.

SDG&E began conducting field loop tests applicable to binary cycle technology at Niland in 1973. Small-size heat exchangers, with the hot, highly mineralized brine flowing directly through the tubes, were used to heat a working fluid. These tests revealed the high scaling tendencies of the Niland brines, and the company set about to develop ways to overcome this problem. In 1974, a multi-stage flash/binary system was designed. It removed heat from the geothermal fluid in the form of steam. Based upon field tests of this system and under a 50-50 cost sharing arrangement with DOE, SDG&E built and operated a 10 Mw Geothermal Loop Experimental Facility (GLEF) to evaluate the potential of the reservoir and the practicality of the flash/binary conversion process.

Valuable experience, of direct benefit to the Heber Binary Project, was gained through the design, construction, and operation of the GLEF. Special construction techniques were employed for the desert soil and weather conditions of the Imperial Valley. Operational problems, such as high injection well pressures, scale deposition, and erosion of plant piping and components were identified and overcome. The GLEF also provided insight into plant cleaning operations and reservoir performance and furthered the development of important plant components.

To determine scaling characteristics of the Heber brine, SDG&E, in cooperation with EPRI and Chevron Resources Company, conducted heat exchanger tests at this reservoir in 1974. These tests consisted of a series of 500-hour runs with four small heat exchangers and three different tube materials. The results of these tests were published in EPRI Report ER-376, "Final Report of Test and Evaluation of a Geothermal Heat Exchanger," September 1975.

EPRI followed up the first 500-hour heat exchanger test with a 2000-hour test, which verified the findings of the first scaling and corrosion tests. The quantity of noncondensable gas in the brine was also determined. Results of this test were published in another EPRI Report ER-572, "Final Report of Geothermal Heat Exchanger at Heber, California," August 1978. Data from the testing program formed the basis for full-scale design criteria for the Heber Binary Project.

NEED FOR BINARY DEMONSTRATION

The utility industry has only one commercially available cycle that may be used to develop liquid-dominated hydrothermal reservoirs--the flash cycle. With the flash cycle, the hot geothermal fluid flows under pressure to a vessel where the fluid is allowed to boil, or flash, to

produce steam. The steam then runs the turbine in a conventional manner. The flash cycle is proven and has been in commercial service for a number of years but its use is limited to high temperature (over 210°C) reservoirs.

The flash cycle is effectively ruled out at moderate-temperature (below 210°C) reservoirs. It is not practical to flash the geothermal fluid at pressures lower than atmospheric; thus, the geothermal fluid will leave the plant at about 100°C, taking with it much of the heat that would be converted to electricity if flashing could occur at subatmospheric pressures. A second limiting factor is that more than two stages of flash are not cost effective, and in practice, the geothermal fluid may leave the plant at a temperature higher than 100°C. A third limitation is that if the geothermal fluid is flashed at low pressures, the turbines using this low pressure steam must be large and therefore expensive. Finally, noncondensable gas in the flashed steam could impose severe economic penalties by requiring large amounts of power for its removal. The release of noncondensable gases, often containing hydrogen sulfide, to the atmosphere also results in adverse environmental impact.

To overcome the limitations of the flash cycle we will develop the binary cycle. This concept uses heat exchangers to transfer heat from the hot geothermal fluid to another liquid known as the working fluid. The working fluid is heated and vaporized and then used to drive the turbine to produce electricity. The advantage of this approach is that a working fluid can be selected which has a boiling point equal to the prevailing temperature, either high or low, of the geothermal resource. The amount of energy production is limited only by the ambient

air temperature. This flexibility allows us to generate electricity from the moderate-temperature reservoirs and improve resource utilization at other reservoirs. The binary cycle has been used on a small scale in other industries, but has not yet been developed for full-scale commercial power generation. The 5 Mw Raft River Project and the 10 Mw Magma Project are pilot plant efforts to generate electric energy. These projects will not be relied upon by the electric utility industry to make decisions for commercial scale power plants. Our objective with the Heber Binary Project is to advance the binary cycle to commercial maturity. Simplified flow diagrams for the flash cycle and binary cycle are shown in Figure 2.

The binary cycle must be developed because hydrothermal reservoirs are not uniform. Reservoirs are different in size, temperature, dissolved solids, heat content, and chemical composition. Therefore, a single technology will not satisfy the requirements of full-scale geothermal development. Single- and multi-stage direct flash cycle and the binary cycle will all be required and will play important roles in geothermal development.

To gauge the importance of the binary cycle, about four out of five hydrothermal reservoirs in the United States are moderate-temperature reservoirs and will require the binary cycle for both technical and economic reasons. Furthermore, if, as expected, reservoir temperatures decline with time, the need for the binary cycle will become even greater.

Another way of gauging the relative need for the binary cycle is to examine the total electric production that can be developed from hydrothermal reservoirs. Last June the Interagency Geothermal

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Coordinating Council, chaired by DOE, established the goal of 25,000 Mw of electric capacity from hydrothermal reserviors by the year 2000. This equals about 340 million barrels of oil each year. The binary cycle will account for at least half of the 25,000 Mw goal. In fact, the binary cycle could account for all of the 25,000 Mw because it is applicable to all reservoirs over the entire spectrum of reservoir temperatures. The flash cycle, on the other hand, is applicable to only high temperature reservoirs.

The binary cycle also provides other potential advantages, such as greater efficiency of energy extraction, elimination of noncondensable gas emissions, and elimination of steam carryover problems. Such advantages could make the cost of construction and operation of a binary cycle plant lower than the cost of a similarly sized flash plant, significantly reduce the amount of energy required to operate the plant, and minimize its environmental impact.

The Heber Binary Project is essential to advance the state of the art to commercial maturity and to further develop binary cycle power plant components. To demonstrate the commercial viability of a binary cycle geothermal plant, turbines and other systems must be manufactured, tested, and operated. Commercial size (about 50 Mw) hydrocarbon turbines must be fabricated. Although preliminary designs for commercial size binary turbines have been prepared, they have never been built or operated; the largest one built to date is about 5 Mw. Other areas where development or verification must be accomplished prior to commercial application include downhole well pumps; plant and component reliability; safety and environmental impacts; heat exchangers; working fluid

characteristics; waste control technology, such as cooled brine reinjection; and plant operating procedures and performance.

THE BINARY CYCLE IS ESSENTIAL TO COMMERCIALIZATION OF HOT DRY ROCK

Hot Dry Rock resources will not be used by the electric utility industry unless the binary cycle is demonstrated on a commercial scale. A Hot Dry Rock resource is defined by DOE as heat stored in rocks that contain little or no water. The lack of sufficient water to transport heat distinguishes Hot Dry Rock from naturally occurring hydrothermal reservoirs.

Hot Dry Rock resources occur throughout the United States in extremely large quantities. Los Alamos Scientific Laboratory has estimated that if as little as 2% of this vast resource base could be exploited, it would supply the entire country's nontransportation needs at the present rate of consumption for more than 2000 years.

To extract energy from a Hot Dry Rock resource, a manmade hydrothermal reservoir is formed by connecting two deep holes in impermeable rock through a system of fractures in the rock which are produced by pressurizing water. Cold water flows down the deeper hole, is heated by the hot rock in the underground fracture system, and is brought to the surface in the second hole as superheated water under sufficient pressure to keep it from boiling or flashing. After the hot water runs through a heat exchanger at the surface, it is pumped back down the injection hole. Because the hot water is kept under pressure, the only way to use its heat is to transfer it to a working fluid in a heat exchanger. This constraint dictates the use of the binary cycle if the heat is to be used to generate electric power.

Continued federal funding in Fiscal Year 1982 is proposed for the DOE Hot Dry Rock Program. The current schedule for the Program could lead to commercial power plant decisions by the electric utility industry by the late 1980's. This schedule is compatible with the schedule for the Heber Binary Project. If the binary cycle has not been demonstrated on a commercial scale, however, the electric utility industry will not be able to take advantage of the Hot Dry Rock resources.

HISTORY OF THE HEBER BINARY PROJECT

The Heber Binary Project had its beginning in a study performed for EPRI by Holt/Procon. The purpose of the study was to evaluate alternate technologies that could exploit the extensive low- to moderate-temperature geothermal reservoirs in the United States. The study also screened 17 candidate reservoirs to determine which would be best to demonstrate the selected technology on a commercial scale. The results of the study were published in 1976 and 1978 as EPRI Reports ER-299, "Geotechnical Environmental Aspects of Geothermal Power Generation at Heber, Imperial Valley, California," October 1976; ER-301, "Geothermal Energy Conversion and Economics--Case Studies," November 1976; ER-364, "A Comparison of Hydrothermal Reservoirs of the Western United States," December 1976; and ER-670, "Preliminary Design Manual for a Geothermal Demonstration Plant at Heber, California," February 1978. The study concluded that the binary cycle showed the most promise for application to low- to moderate-temperature reservoirs, and that the Heber reservoir was one of the best sites to demonstrate the technology on a commercial scale.

In 1977, SDG&E agreed to manage a demonstration project with a capacity of 65 Mw (gross) that would be located on the Heber reservoir.

This decision was based on SDG&E's extensive geothermal experience and EPRI's supporting work. Consequently, a project was formed with participation by SDG&E, EPRI, six other utilities, two reservoir developers, and the California State Energy Commission. Engineering and environmental studies were initiated and efforts were made to obtain federal funding for the portion of project costs that could not be financed by industry. In 1978, federal funding was not forthcoming and because the risk of this first-of-a-kind project was greater than industry could assume, the project was terminated.

In 1979, when DOE was directed to proceed with the demonstration of the binary cycle on a commercial scale, SDG&E again submitted a project proposal. This proposal was accepted by DOE, and in September 1980 the parties signed a Cooperative Agreement. Other agreements to carry out the newly-formed project have been signed with EPRI and a group of three utilities--the Imperial Irrigation District, California Department of Water Resources, and Southern California Edison Company. A contract has been signed with Fluor Power Services to perform the engineering design work for the Plant. A geotechnical services contract has also been signed with Fugro, Inc.

It is important to note that substantial progress has been made on the Project--all of it funded by the private sector. For instance:

1. Extensive reservoir exploration and evaluation is complete.
2. The plant conceptual design is in place.
3. A number of engineering trade-off studies have been performed.
4. Turbine-generator conceptual designs have been completed.
5. Environmental studies are complete.

6. A land use permit has been obtained from Imperial County.

7. The site has been acquired.

8. An assured source of cooling water has been acquired.

PROJECT ORGANIZATION AND FUNDING

SDG&E has formed a consortium to fund and operate the Project. The contributions to funding interests and ownership interests of the six participants are as follows:

PARTICIPANT	FUNDING	OWNERSHIP
Department of Energy	50.0%	---
Electric Power Research Institute	10.0%	---
San Diego Gas & Electric	32.8%	86.3%
Imperial Irrigation District	4.0%	10.5%
Department of Water Resources	1.2%	3.2%
Southern California Edison	2.0%	---

SDG&E is responsible for managing the Project, including its design, construction, start-up, and demonstration. We will manage the Project to the maximum extent possible as if it were a commercial power plant. In this way, we will have a good chance of completing the Project on schedule and with a greater liklihood that it will be commercially successful.

FEATURES OF THE COOPERATIVE AGREEMENT

THAT ARE FAVORABLE TO THE GOVERNMENT

The Cooperative Agreement differs from other more conventional contracts used by DOE to fund projects. It recognizes that the Heber Binary Project is a partnership, with the private sector bearing a significant part of the risks. It permits the Project to be managed by the private sector with minimal burden on DOE.

The goal of Government involvement should be to advance the time when the binary cycle will be available for commercial use. This goal can be achieved with the Heber Binary Project because the private sector has a large financial interest in the Project and, consequently, a great incentive to achieve success.

Some of the key features of the Cooperative Agreement that are favorable to the government include:

1. A revenue sharing provision which will return to DOE the government contribution if the demonstration power plant is successful and can be operated as a commercial facility.
2. A ceiling on government financial exposure so that if the cost ceiling is exceeded, the government has no liability for cost overruns.
3. Provisions for the broad dissemination of data from the Project to industry so that others interested in making commercial commitments to the binary cycle can do so with minimal risk.
4. The development of data and information for DOE which are important to the realization of national energy goals.

EFFECT OF DOE WITHDRAWAL

SDG&E, like the rest of the utility industry, is experiencing financial constraints that prevent it from undertaking completely on its own a demonstration power plant like the Hebery Binary Project. By law, SDG&E is required to meet the needs of its existing and future customers; consequently, its scarce financial resources must be used to add commercial generating plants and related transmission lines and to accomodate new customers on its system. With the approval of the California Public Utilities Commission, we have reallocated our limited

R&D budget to provide our share of the funds to the Heber Binary Project. SDG&E cannot provide additional funds.

Furthermore, the company does not believe that the $61 million shortfall that would result if federal funds were not provided to the Project could be replaced by industry or the other Project participants. In 1978 when federal funding for the Project was not granted, SDG&E and EPRI canvassed the utility industry in an effort to replace what was then a much smaller shortfall; these efforts were unsuccessful. In 1979, SDG&E again tried unsuccessfully to obtain additional financial participation. The electric utility industry cannot fund demonstration projects on its own. We are having enough difficulty obtaining the capital needed to meet our customers' needs using proven technology. The non-federal funding which we now have for the Project is the maximum we can obtain. While industry is united in its support and need for the Project, sufficient additional funding is simply not available to permit the Project to go forward without federal support.

Without federal funding this essential Project will be abandoned. The likelihood of its being resurrected and completed in the near future is negligible. As a result, four out of five of the hydrothermal reservoirs in the United States will not be developed.

CONCLUSION

In conclusion, I urge this subcommittee to demonstrate your continued support for the Heber Binary Project. Funding in Fiscal Year 1982 is essential if the Project is to proceed. Justification for your continued support includes:

1. Binary cycle will permit the achievement of at least half of the 25,000 Mw goal.

2. The binary cycle is an environmentally desirable source of electricity.
3. The binary cycle is essential to the commercial development of Hot Dry Rock energy resources.
4. The Cooperative Agreement between DOE and SDG&E is beneficial to both parties.
5. Industry has already made a large financial commitment to the Project.
6. The Project cannot proceed without continued federal funding.

LOCATION OF IMPERIAL VALLEY GEOTHERMAL RESERVOIRS

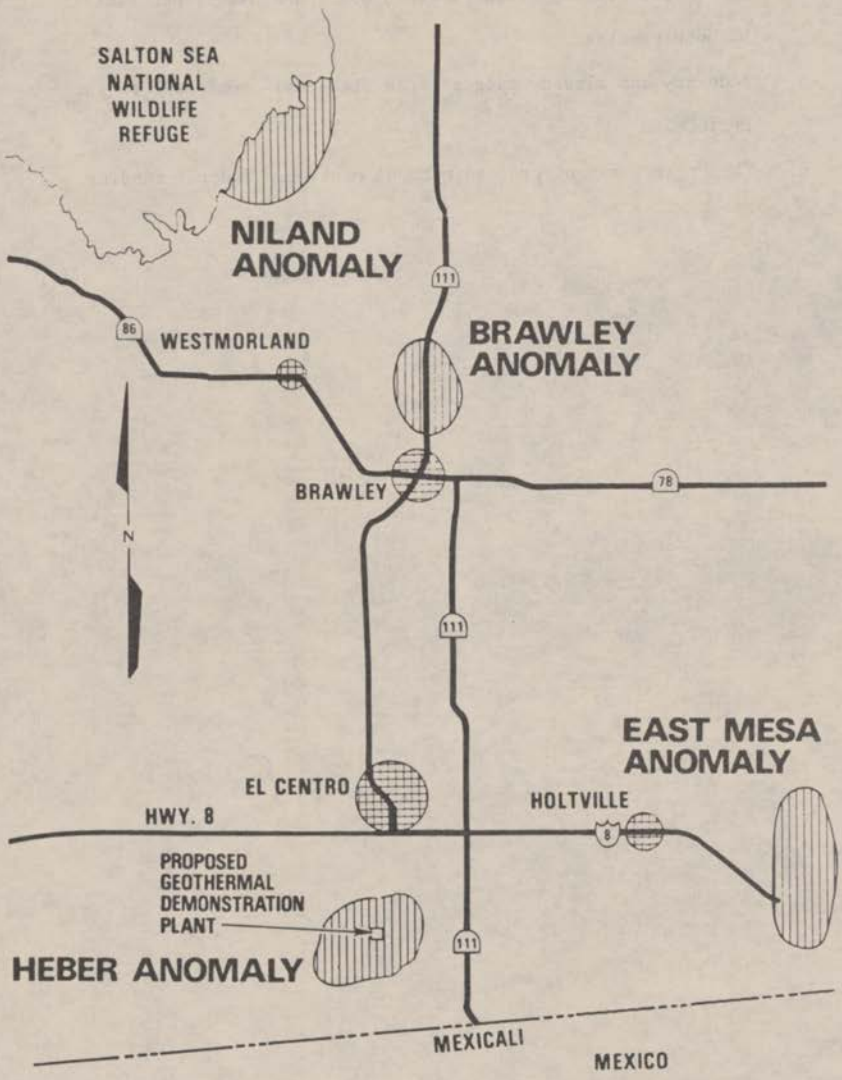
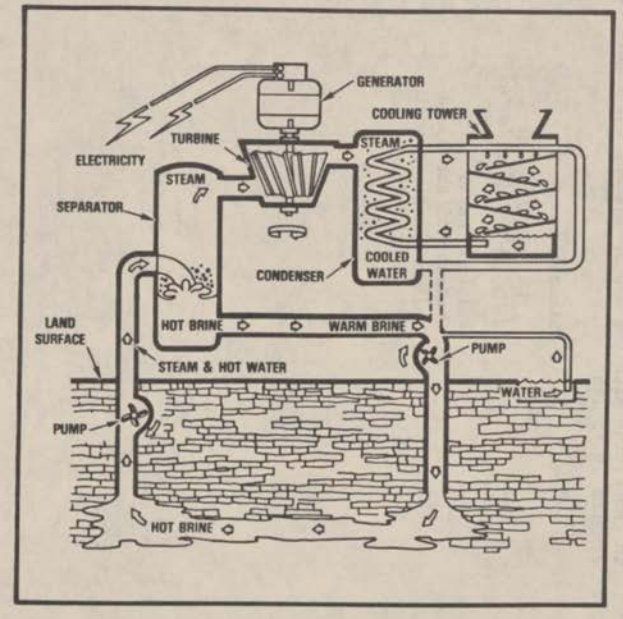


Figure 1

FLASH SYSTEM



BINARY SYSTEM

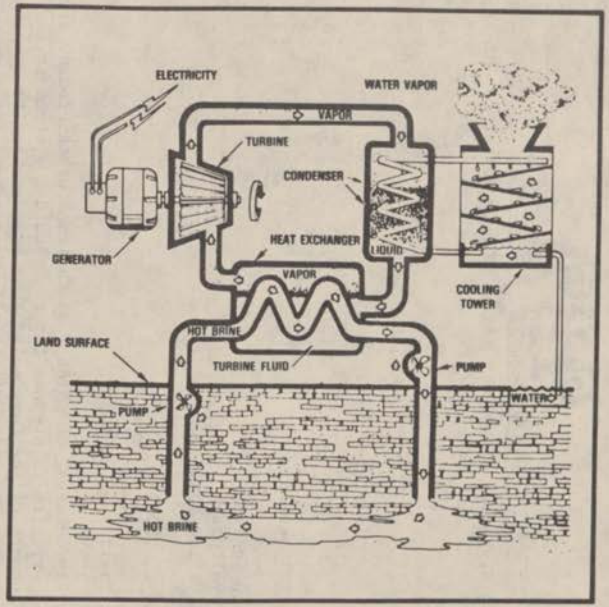


Figure 2

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HBA
HELIUM BREEDER ASSOCIATES
3344 N. Torrey Pines Ct., Suite 300, La Jolla, CA 92037

April 6, 1981

The Honorable Tom Bevill
Chairman
Subcommittee on Energy
and Water Development
Rayburn House Office Building
Room 2362
Washington, D. C. 20515

Dear Chairman Bevill:

Helium Breeder Associates, of which I am Chairman of the Board, respectfully requests an opportunity to present for the record the accompanying written statement in support of the Gas-Cooled Fast Breeder Reactor to your subcommittee. This is in connection with the Appropriations for funding for the National Breeder Program in FY 1982.

Sincerely,

Ralph M. Davis

Ralph M. Davis
Chairman of the Board
Helium Breeder Associates

RMD:kw

Enclosure

Thank you for the opportunity of allowing me to present testimony to your committee. I am Ralph M. Davis, Chairman of the Board of Helium Breeder Associates (HBA), and I am speaking to you today as a representative of approximately 74 utilities and industrial participants who are members of HBA and who have contributed significant financial support to the development of Gas-Cooled Fast Breeder technology.

The Gas-Cooled Fast Reactor (GCFR) program was terminated by the Carter Administration at the end of fiscal year 1980. We, along with the General Accounting Office, believe that this decision was premature and we urge you to reinstate this program as part of the national breeder program.

Helium Breeder Associates believes that nuclear energy is essential to the future well being of this country and that a long term role for nuclear energy in our future energy economy can be assured by a strong program to develop breeder reactors. We are pleased to see that the Reagan Administration has increased the breeder budget significantly. However, that budget is all related to the Liquid Metal Fast Breeder Reactor program and as such lacks the diversity of supply which is the hallmark of the American System. We concur with the recommendation to the Congress in the GAO report "U S Fast Breeder Reactor Programs Needs Direction"(1) that "A commitment to a long term nuclear option should include continued support for the Gas-Cooled Fast Breeder Reactor Program since it is currently the only real nuclear alternative to the LMFBR technology".

(1) EMD 80-81 September 22, 1980.

What if the LMFBR fails for technological, institutional or economic reasons to fulfill its objectives? Without the GCFR the country has no long-term nuclear alternative. We are not interested in slowing down the mainline LMFBR Program. However, we feel that it would be only prudent to spend a small fraction of the national breeder program funds on the GCFR to enhance the probability of ultimate success and to provide technical insurance.

Although most of the world wide effort has gone into the LMFBR, a complementary effort toward a GCFR has made significant progress on an international scale. The GCFR is an advanced breeder reactor which uses helium for cooling leading to a number of potential advantages. They include:

(1) The transparency of helium to neutrons which inherently results in a very high breeding ratio.

(2) An apparent energy cost lower than any other power reactor as indicated in economic studies done by a leading architect-engineering company for DOE.[2]

(3) Considerable easing of operating and maintenance problems because helium is a transparent and chemically inert gas.

Recognizing that the cost of development of any brand new reactor concept is very high the GCFR has been designed to make maximum use of helium system and component technology which has been demonstrated in the Fort St. Vrain Gas Cooled Reactor and fuel and physics technology which is being developed under the LMFBR program, both in this country and elsewhere. Hence the program is incremental in nature and the estimated cost of its development much less than that for a completely new concept. In fact, a funding level of 5% to 10% of the national breeder program would assure technical advancement of the program and the continuing interest of the utility industry.

(2) C004954-1 "Final Report and Initial Update of the Energy Economic Data Base (EEDB) Program Phase I" prepared for the Department of Energy by United Engineers and Constructors, Inc. December 1979.

The utility industry initiated support for the GCFR in 1964 following several years of private development by General Atomic Company. The utility interest stems from the desire to assure themselves of a long term source of fissionable material, to achieve the potential advantages of gas cooling, and to provide diversity of concept. In spite of the lack of government funding in FY1981, HBA has continued as a corporate entity and has not to date lost any members.

The AEC and its successor organizations, also supported the programs starting in FY1964 initially in the area of fuel development and later more broadly.

In Europe, two efforts evolved. One was an international industry group, Gas Breeder Reactor Associates (GBRA), which worked closely with the Nuclear Energy Agency (NEA) of the Organization for Economic Cooperation and Development (OECD). The other consisted of cooperative programs among General Atomic, Kraftwerk Union and the German Nuclear Research Centers at Julich and Karlsruhe and between General Atomic and the Swiss Federal Institute for Reactor Research.

Exchange of information among all parties was extensive so that there was no duplication of effort except where technically desirable, e.g., comparison of calculated breeding ratios.

Through 1980 over $200 million has been spent on GCFR-specific work as follows:

Industry	$25 million
DOE	$96 million
International	$101 million

All the design and development work which has been done to date, both in this country and in Europe, has given positive results and the prognosis for ultimately achieving the potential advantages of the GCFR is excellent.

At the end of FY1980 the program status was as follows:

(1) The Conceptual Design of the Nuclear Steam Supply System for a 350 MW(e) Demonstration Plant had been completed.

(2) Development plans had been completed for all major components and systems.

Safety and licensing have been key considerations throughout the life of the program. In fact, a large fraction of the utility funds has been devoted to this subject. In 1971, a Preliminary Safety Information Document (PSID) on the GCFR was submitted to the AEC's Directorate of Licensing. After extensive dialogue and meetings with the ACRS, a Safety Evaluation Report was issued in 1974 by the DOL and a letter written by the ACRS also in 1974 on their respective reviews.

Recently two amendments to the PSID have been prepared for submittal to and review by the Nuclear Regulatory Commission. They relate to important safety issues raised in the reviews.

Although the Administration terminated the GCFR Program in FY1981, residual funding has allowed some work to continue at several U.S. national laboratories, particularly ORNL. Also an in-pile loop continues to operate in the BR-2 at Mol, Belgium under German auspices and heat transfer experimental and analytical work is going on both in Germany and Switzerland.

All of this work will come to an end in 1981 unless funds for the GCFR are provided in FY1982. The feeling of the utility supporters of the

program was well expressed at a Program Technical Review Meeting held in mid 1980. After hearing reports on the design and development work which was going on in Europe and the United States, one of the utility representatives said from the floor "You mean all of this wonderful work which is going on will cease?". This statement is echoed in the GAO report cited. "The utility companies and industrial and engineering firms involved also told us that their efforts would probably cease if DOE terminated its program. Officials of the Helium Breeder Association told us that without DOE funding, it would not be possible for them to carry out a viable program or maintain their organization's membership. And, officials of the leading industrial proponent of GCFR, the General Atomic Company, told us that if the DOE program is terminated, it is doubtful that they would continue to spend company funds to further the program."

If funding of $10 million were to be authorized and appropriated for FY1982, which would be less than 2% of the LMFBR budget, the program would have the objective of:

(1) Continuing to advance GCFR technology and maintaining and expanding the previously developed data base.

(2) Reinitiating dialogue with the NRC on the safety and licensability of GCFR.

(3) Maintaining a viable core group of technologists at key industrial contractors and national laboratories.

(4) Resolving key heat transfer issues.

Although these objectives are limited, they would maintain the program as a viable option and focus work in areas of greatest technical uncertainty. This work would all be a part of the National Breeder Base Program.

We agree with the above-cited GAO report in their recommendation to the Congress:

"Further, a commitment to a long-term nuclear option should include continued support for the gas-cooled fast breeder reactor program since it is currently the only real nuclear alternative to the LMFBR technology. Accordingly, GAO recommends that Congress continue to fund the program at least until the program reaches a decision point on whether to construct and operate a demonstration facility. Such an approach is essential as a prudent management step in helping assure the timely success of this Nation's nuclear energy future."

Thank you for the opportunity to present this testimony.

TESTIMONY OF DAVID I. SHAPIRO

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, I AM DAVID SHAPIRO AND I AM PRESENTLY A CONSULTANT TO KETRON, INCORPORATED, A WASHINGTON, D.C. BASED TECHNICAL AND MANAGEMENT SCIENCES CONSULTING FIRM THAT SPECIALIZES IN OPERATION ANALYSES AND RESEARCH AND SUPPORT FOR THE CHIEF OF NAVAL OPERATIONS AS WELL AS OTHER GOVERNMENT AGENCIES AND INDUSTRIAL CLIENTS. PRIOR TO BECOMING A CONSULTANT, I WAS THE PROGRAM MANAGER AT TRACOR, INCORPORATED FOR THE PUERTO RICO ELECTRIC POWER AUTHORITIES TECHNICAL & MANAGEMENT SUPPORT CONTRACT FOR THE PUERTO RICO OTEC EFFORTS AND WAS INSTRUMENTAL IN FORMING AND INITIALLY OPERATING THE OTEC UTILITY USERS COUNCIL WHO HAS TESTIFIED PREVIOUSLY TO THIS COMMITTEE. MY LAST ASSIGNMENT AT TRACOR WAS PROGRAM MANAGER FOR THE TRACOR CONTRACT WITH THE DEPARTMENT OF ENERGY FOR A STUDY OF THE MILITARY APPLICATIONS AND IMPLICATIONS OF OTEC SYSTEMS.

IT IS THIS LATER EFFORT THAT I WOULD BRIEFLY LIKE TO MAKE THIS COMMITTEE AWARE OF. THIS CONTRACT WAS A DOD CLASSIFIED STUDY SO I WILL, IN NECESSITY, ONLY EXPOSE SOME OF THE UNCLASSIFIED FINDINGS AT THIS HEARING. I WILL ALSO APPRECIATE THE OPPORTUNITY TO EXTEND MY REMARKS FOR THE RECORD WITH AN UNCLASSIFIED SUMMARY OF THE STUDY THAT I PRESENTED AT THE UNITED STATES NAVY POST-GRADUATE SCHOOL SEA POWER '80 FORUM IN NOVEMBER 1980.

THIS CONTRACTED EFFORT BY THE DEPARTMENT OF ENERGY WAS IN KEEPING WITH THE DEPARTMENT OF ENERGY MISSION TO SURFACE POTENTIAL ENVIRONMENTAL ISSUES - IN THIS CASE, THE ENVIRONMENT WAS DEFINED AS THE IMPACT ON OPERATIONAL SUBSURFACE AND SURFACE NAVAL SHIPS THAT UTILIZE UNDERWATER ACOUSTICS FOR NAVIGATION AND COMMUNICATIONS. ADDITIONALLY, THE STUDY IDENTIFIED POTENTIAL APPLICATIONS OF OTEC'S SYSTEMS FROM THE ENERGY PRODUCING AND COMMUNICATION/SURVEILLANCE STANDPOINT. THIS STUDY WAS NOT AN IN-DEPTH TREATMENT OF ANY OF THESE ISSUES, BUT WAS DESIGNED TO IDENTIFY POTENTIAL IMPACTS AND POSTULATE POSSIBLE CONSIDERATIONS.

ONE OF THE MAJOR ISSUES THAT WE ENCOUNTERED DURING THIS STUDY WAS THE LACK OF A TECHNICAL KNOWLEDGE BASE VIS-A-VIS ACOUSTIC DATA FOR SYSTEMS SUCH AS OTEC. WHILE THERE IS A GREAT DEAL OF EXISTING ACOUSTIC KNOWLEDGE ON SHIPS - THESE SHIPS ALL

USE PROPELLERS WHICH IS THE PRIMARY SOURCE OF ACOUSTICALLY GENERATED NOISE. THERE ALSO EXISTS ACOUSTIC MEASUREMENT DATA ON OFFSHORE OIL PLATFORMS - WHICH BY THE WAY HAS RAISED THE NORTH SEA BACKGROUND ACOUSTIC NOISE BY APPROXIMATELY TEN db SINCE THEIR DEPLOYMENTS. HOWEVER, THE DATA FROM NEITHER OF THESE CLASSES OF SYSTEMS CAN BE EXTRAPOLATED SO THAT AN ACCURATE MODEL OF OTEC SYSTEMS CAN BE CONSTRUCTED AT THIS TIME. THIS ACOUSTIC MODEL WILL BE REQUIRED BY NOAA IN ORDER TO CONSIDER LICENSING APPLICATIONS PER PUBLIC LAW 96-320 AND WILL ALSO BE REQUIRED SO THAT THE UNITED STATES NAVY CAN ASSESS THE IMPACT OF FOREIGN BUILT AND DEPLOYED OTEC'S IN THEIR OPERATIONAL AREAS.

AS A RESULT OF THE STUDY, THE UNITED STATES NAVY AND SPECIFICALLY THE COMMANDER IN CHIEF PACIFIC HAS SUGGESTED THAT ACTION BE TAKEN ON SEVERAL OF THE STUDIES RECOMMENDATIONS. THESE SUGGESTED ACTIONS ARE:

- THEY HAVE ASSIGNED A NAVAL OFFICER TO MAINTAIN CLOSE LIAISON WITH THE DEPARTMENT OF ENERGY.
- THEY HAVE AGREED THAT POTENTIALLY HIGH NOISE LEVELS COULD AFFECT SUBMARINE SAFETY AND STATED THAT IT IS ESSENTIAL FOR THE COMMANDER AND CHIEF PACIFIC FLEET TO BE KEPT INFORMED OF ALL PLANS OF DEPLOYMENTS FOR OTEC SYSTEMS (THIS ACTION WILL BE IMPOSSIBLE TO COMPLY WITH UNLESS THE OTEC SYSTEMS ARE DEPLOYED BY UNITED STATES PRODUCERS AND/OR IN U.S. TERRITORIAL WATERS - I.E. THE NAVY COULD BE SUPRISED IF A FOREIGN OTEC PRODUCER DEPLOYS A SYSTEM IN NON-U.S. WATERS. BASED ON THE RECENT TESTIMONY OF ACTING ASSISTANT SECRETARY FOR CONSERVATION AND RENEWABLE ENERGY FRANK DEGEORGE TO THIS COMMITTEE, HE HAS MADE THIS A VERY REAL THREAT BY ACCURATELY REPORTING THAT THE JAPANESE AND EUROPEAN ECONOMIC COMMUNITY WITH THEIR RESPECTIVE GOVERNMENTS PARTICIPATION, ARE PLANNING TWO PLANTS, ONE IN THE PACIFIC AND THE OTHER OFF THE IVORY COAST.)

- THEY HAVE SUGGESTED THAT THE DEPARTMENT OF ENERGY INVESTIGATE ALTERNATIVE OTEC DEPLOYMENT SITES OTHER THAN THOSE THAT MIGHT DEGRADE THE PERFORMANCE OF THE SEVERAL FLEET OPERATIONAL READINESS ACCURACY CHECK RANGES.
- THEY STATED THEIR DESIRE FOR FURTHER DOD STUDIES OF THE IMPLICATIONS OF OTEC AND SUGGEST THAT THE PRESENT OTEC I TEST BED BE EVALUATED AS TO THE ACOUSTIC EFFECTS. (THIS LATER OTEC I EFFORT IS PRESENTLY UNDERWAY).

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, WHATEVER ACTIONS OR INACTIONS THE UNITED STATES GOVERNMENT TAKES WITH RESPECT TO THE PRESENT OTEC PILOT PLANT PROGRAM THERE WILL BE AN IMPACT ON THE UNITED STATES NAVY TO PROPERLY ASSESS THE POTENTIAL IMPLICATIONS AND APPLICATIONS OF OTEC ON THEIR OPERATIONS. IF THE UNITED STATES GOVERNMENT SUPPORTS THE DOE PLAN FOR IMPLEMENTATION OF PUBLIC LAW 96-310 AND THE U.S. OTEC PILOT PLANT PROGRAM PROCEDES, THE UNITED STATES WILL BE ABLE TO CONDUCT EXPERIMENTS AND GATHER DATA IN A TIMELY MANNER IN ORDER TO MAKE THESE NECESSARY ASSESSMENTS.

HOWEVER, THE PRESENT ADMINISTRATION PLAN IS THAT THE UNITED STATES WILL NOT SUPPORT THE DOE PILOT PLANT PROGRAM AS TESTIFIED BY SECY. DEGEORGES WHICH INDICATED THAT U.S. INDUSTRY IS EXPECTED TO PROCEED WITHOUT U.S. GOVERNMENT FINANCIAL ASSISTANCE. (THIS AGAINST THE FACT THAT THE JAPANESE AND FRENCH GOVERNMENT ARE FINANCIALLY SUPPORTING THEIR RESPECTIVE INDUSTRIAL PILOT PLANT EFFORTS). THIS NON SUPPORT BY THE DOE HIERARCHY WAS ALSO VOICED BY DOE ACTING UNDER SECRETARY RAY ROMATOWSKI AT THE JOINT CONGRESSIONAL BUDGET STAFF BRIEFING ON 9 MARCH AT WHICH TIME HE TOOK THE OPPOSITE APPROACH TO THE DEGEORGE TESTIMONY AND STATED THAT THE TECHNOLOGY WAS "TOO RISKY" (VS DEGEORGE WHO STATED THAT "SUFFICIENT PROGRESS HAS BEEN MADE TO DATE TO INDICATE THAT OTEC IS TECHNICALLY FEASIBLE" ETC.) AND "IT WAS TOO EXPENSIVE" (WHICH IS IN CONFLICT WITH THE GAO, OTA, MIT AND THE MARINE BOARD OF THE NATIONAL ACADEMY OF SCIENCES STUDIES). THEREFORE, IT NOW APPEARS

THAT THE MOUNTING FOREIGN COMPETITION WILL PRODUCE AND DEPLOY OTECS BEFORE THE UNITED PRODUCERS, WITH THE DETREMENTAL IMPACT ON THE U.S. NAVY'S ABILITY TO PROPERLY ASSESS THE POTENTIAL IMPLICATIONS AS WELL AS THE APPLICATIONS OF OTEC. IF FOREIGN PRODUCED OTECS ARE DEPLOYED BEFORE BEFORE UNITED STATES PRODUCED OTECS, WE WILL ONLY BE ABLE TO MAKE THESE ASSESSMENTS AFTER THE FACT WHICH COULD POTENTIALLY DEGRADE OUR DEFENSE POSTURE, TO SAY NOTHING OF THE UNITED STATES LOSING ANOTHER MAJOR INDUSTRIAL TECHNOLOGY, WHICH WE PRESENTLY POSSESS A LEAD IN, AND, WHICH HAS THE INHERENT ABILITY TO PRODUCE UNITED STATES JOBS AND CAPITAL FORMATION FOR OUR "INDUSTRIAL RENEWAL."

MILITARY APPLICATIONS & IMPLICATIONS OF OCEAN THERMAL ENERGY CONVERSION SYSTEMS

by:

D. Shapiro, Consultant
to TRW and Tracor

Paper presented at:

Sea Power '80 Forum
U.S. Naval Post Graduate School
Monterey, CA

20 November 1980

Background

Recently enacted legislation commits the United States to accelerated development and commercialization of ocean thermal energy conversion (OTEC) technology. The Ocean Thermal Energy Conversion Research, Development, and Demonstration Act (Public Law 96-310) establishes goals for the Department of Energy OTEC development and mandates the pace of OTEC output growth; the Ocean Thermal Energy Conversion Act of 1980 (Public Law 96-320) sets up regulations that the National Oceanic and Atmospheric Administration will govern the licensing of OTEC plants and establishes a loan guarantee program to aid their construction.

Ocean thermal energy conversion technology is based on utilization of the thermal gradient existing between warm surface water and cold water present at depths of approximately 1000 meters. In the closed cycle, which is technically ready for development, a secondary working fluid (such as anhydrous ammonia) is vaporized in a large heat exchanger warmed by circulating surface water; passed through a "conventional" turbine-generator; and condensed in a large heat exchanger cooled by circulating water pumped from the 1000 meter depth through a massive pipe. Because a temperature gradient ΔT of at least 20°C is required for potentially economical energy conversion, sites for OTEC plants are restricted to the sub-tropical regions.

U.S. effort will concentrate on development and demonstration of various types of OTEC systems. One of which is an ocean thermal energy conversion facility moored at a fixed, favorable ΔT site, and transmitting electrical power ashore by means of a submarine cable. (A variant of this is possible in a number of locations where it might prove economically attractive to place the OTEC system on land or on an offshore, shelf-mounted platform.) Another type, termed an ocean thermal energy conversion plantship, propels itself within favorable ΔT regions, and manufactures energy intensive products such as hydrogen, methanol, and ammonia for bulk shipment to shore. The moored facility may experience seasonal variations in ΔT and, hence, seasonal (but presumably tolerable) variations in power output. The self-propelled plantship, which "grazes" in a near-equatorial "pasture" not subject to major cyclonic disturbances, moves to the highest available ΔT locales so as to maintain maximum energy product output continuously.

Objective

This Department of Energy (DOE) sponsored study addresses the military possibilities inherent to application of ocean thermal energy conversion technology. Its primary objective was to perform a preliminary assessment of acoustic and electromagnetic effects of OTEC facility and plantship equipment and platforms within the military context of the oceanic environment. Additionally, the assessment incorporates some discussion of commercial and foreign ownership barriers to exploitation of OTEC military applications (positive effects) and to mitigation of OTEC military implications (negative effects).

Immediate initial consideration of these issues is necessitated by the accelerating international pace of OTEC technology development, demonstration and commercialization. United States intent regarding OTEC technology, as manifested in the Ocean Thermal Energy Conversion Research, Development and Demonstration Act, mandates demonstration of at least one hundred megawatts of electrical capacity or energy product equivalent by 1986 and of at least five hundred megawatts of electrical capacity or energy product equivalent by 1989 from OTEC systems. Furthermore, the Act establishes as a national goal, production of ten thousand megawatts of electrical capacity or energy product equivalent by 1999 from OTEC systems.

A number of foreign nations, most notably France and Japan, are openly pursuing vigrous research and development programs. France, for example, is exploring application of OTEC technology to tropical, energy-poor, French territories, such as Tahiti, Guadeloupe and Martinique; Japan is exploring the possibility of selling OTEC systems to tropical, energy-poor islands in the Western Pacific Ocean, such as Guam. Recent unconfirmed reports indicate that Tokyo Electric has committed to building an OTEC plant to supply 100 kw of power in 1983 with growth to 10 Mwe by 1985 for the island of NAURA in the Pacific. Hence, it appears that a continuing assessment of OTEC's military role is both necessary and prudent.

Conclusions

Military Control of Selected OTEC Systems - An important military application of ocean thermal energy conversion technology involves military control ("ownership" and operation) of appropriately sized OTEC systems that could supply electric power and/or energy products to selected, stand-alone, military facilities. A near term, low cost approach to this situation could involve the joint ownership (DOD/DOE/commercial) of an appropriately sized and configured OTEC. Such an application is in consonance with Section 7.0 of the Ocean Thermal Energy Conversion Research, Development and Demonstration Act where it is stated that program activities shall be selected and priorities set which are consistent with "... promotion of ocean thermal energy conversion facilities for coastal areas, islands, and isolated military institutions (emphasis added) which are vulnerable to interruption in the fossil fuel supply...".

OTEC Ownership Consequences - Under military control, OTEC system siting, platform configuration and electric power or energy product output can be specified (within technological and economic limits) to achieve desired levels of military applicability. Under commercial ownership (and peacetime operation), specification--as distinct from utilization--of selected military applications may require extensive negotiation to resolve competing military and commercial interests; under (friendly) foreign ownership, some specification may be possible and negotiable in those instances when national interests coincide. In like manner, deliberate mitigation of military implications should be straightforward for OTEC systems under military control, but such mitigation will be far more difficult for commercially owned and operated plants and impossible for many, foreign owned and operated plants.

Acoustic Applications - Accepting the fact that a given military application can employ OTEC qua OTEC or OTEC as a platform with abundant power and that system ownership has an important influence on the realization of such an application, important military, acoustic uses are as follows:

- Submarine Sanitization - Acoustic levels and frequency bands of OTEC-produced noise may naturally mask or can be designed to mask submarines in the immediate vicinity of an OTEC system; appropriate siting of high directivity, passive detection systems can be employed to unmask threat submarines attempting to take advantage of this ensonification.

- Submarine Communication - Low bit rate, low frequency acoustic communication with submarines through modulation of "natural", OTEC-produced noise currently appears feasible but technologically crude; use of high sound level projectors (driven by OTEC-generated power) that radiate in "natural" OTEC frequency bands seems a simpler and more economical means for realizing such a requirement.

- Bi Static Sonar - Utilization of "natural" OTEC-produced acoustic energy with a remote, directional receiver operating in a bi-static (sonar) configuration is precluded by the moderate sound levels postulated for OTEC; a high powered, active adjunct would be needed for even limited-range realization of such a configuration.

- Fixed Array - Deep Sound Channel Monitoring - Use of the OTEC cold water pipe (CWP) as a cylindrical baffle for sets of vertically stacked rings of (directional) transducers placed at selected depths within the deep sound channel appears both feasible and useful provided that CWP motions can be constrained and/or tolerated and that CWP self noise is low.

Electromagnetic Applications - Important military electromagnetic uses are as follows:

- Submarine Communication - Use of sub-surface antennas (such as OTEC features and/or a network of deployed cables) for VLF communication with submerged submarines appears to be inefficient because of the severe sea-water attenuation at these frequencies. This communication mission is not precluded, if the communication system could use OTEC power to drive an above-surface, VLF relay antenna with the CWP as the mirror image. This latter concept appears technically straightforward and relatively inexpensive.

- Electromagnetic ASW - The limited range of quasi-static, electromagnetic devices employing magnetic anomaly detection (MAD) and similar (or derivative) techniques effectively eliminates operationally useful OTEC qua OTEC for electromagnetic ASW. However, the use of the OTEC platform as a military base for helicopter ASW operations could be satisfied very easily with the proper design.

- Electromagnetic Device Base - Use of OTEC-generated power and the OTEC platform for electromagnetic devices such as radar and communications and telemetry hardware depends upon OTEC site proximity to more "conventional" military facilities; plantships, by virtue of their remoteness, may prove very attractive in this regard.

Acoustic Implications - Important acoustic impacts are as follows:

- Basin Ensonification - Although noise from individual, OTEC systems may impact military operations severely in the immediate vicinity of the systems, OTEC facility influence on fixed system operation is deemed minimal based on current estimates of modest OTEC system sound levels and on possible OTEC facility sites; future, presumably extensive and concentrated, mid-basin deployments of OTEC plantships after 1990 could, however, have a significant impact in this regard.

- Threat Submarine Masking - OTEC-produced noise could be employed by threat submarines as a mask in those instances where OTEC location or a lack of ASW resources precludes deployment of passive, directional systems capable of unmasking the threat.

Electromagnetic Implications - The high conductivity of sea water effectively limits the influence of electromagnetic affects (even at low frequencies) to ranges on the order of kiloyards; hence, electro-magnetic impacts of OTEC systems are expected to be similar to on-shore systems of similar output power and, thus, comparatively benign.

Recommendations

Major recommendations resulting from this preliminary assessment of military applications and implications of OTEC facility and plantship equipment and platforms are:

Establishment of Department of Defense - Department of Energy Liaison - Formal liaison should be established between the Department of Defense (DOD) and the Department of Energy (DOE). Said liaison should be on a weekly basis, at least initially, and would require a part time DOD billet at DOE to be filled by a senior-level U.S. Navy officer. In this manner, a current information base regarding rapidly changing OTEC technology, proposed OTEC facility and plantship deployments, and international developments can be maintained at DOD.

Furthermore, said liaison, if effectively instituted, could provide the foundation for informed responses required of the Secretary of Defense (together with other, affected Executive Branch Secretaries) by Sections 101 and 102 of Public Law 96-320, the Ocean Thermal Energy Conversion Act of 1980.

Department of Defense Studies of OTEC Systems - The Department of Defense should initiate new studies (where required) or update existing studies (where possible) regarding requirements, specifications and cost-effectiveness of small sized OTEC systems with electrical generating capacities of about one to twenty megawatts for utilization at candidate, isolated military facilities. These studies should include those locations where low grade geo-thermal resources exist and could potentially be used as the "evaporator side" of the cycle and surface water for the "condensor side".

Department of Defense-Sponsored Measurements and Analyses - The Department of Defense should take immediate advantage of the CY80/82 deployment of OTEC I and the potential redeployment of Mini-OTEC to initiate acoustic noise measurements and analyses (for guidance in developing models of OTEC-associated acoustic effects for validation in 1986 using OTEC demonstrative systems) and to conduct "brassboard" evaluations of selected acoustic and electromagnetic military applications using these systems as test platforms.

USNPG Theses

Several research and analyses topics should be considered for further U.S. Navy study e.g., Military Laboratories and by the U.S. Naval Post Graduate School. Appropriate academic areas include: military economics, vulnerability, marine environment, sea control/surveillance and acoustics/electromagnetic effects.

Nestlé Enterprises, Inc.
100 Bloomingdale Road, White Plains, New York 10605 (914) 682-6000

March 30, 1981

To Call Writer Direct
(914) 682-6767

The Honorable Tom Bevill
Chairman - Energy and Water
Development Committee
House Appropriations Committee

Dear Congressman Bevill:

During February of this year Nestle Enterprises, Inc. working together with the Sunmaster Corporation and the Center for Energy and Environmental Research of the University of Puerto Rico received an award, from the Solar Energy Research Institute (SERI), for construction of a 50,000 ft.^{2} solar array at one of our manufacturing facilities in Puerto Rico. This award was made on the basis of a prior design phase competition and comes after almost two years of effort expended on securing the initial design grant and on work on the design phase of this study.

This project is one in which both Nestle Enterprises, Inc. and the Commonwealth of Puerto Rico have pledged a significant cost share with the remainder of the funds to be provided by SERI. In fact, SERI has already expended almost $1,000,000 on the first phase of design funding. The remaining money, amounting to approximately $2,000,000, has been transferred to SERI where it is now on hold pending review by Congress.

It appears that our project has been targeted for abandonment during the budget cutting process. The basis for this action being that government should no longer support those activities which will attract industry investment as non-renewable fuel prices escalate and tax incentives are increased.

Unfortunately neither of these assumptions apply to this application of solar energy for generation of industrial process heat. At present there are no actual large scale installations utilizing the newer technology which was specified for our project (drainable evacuated tubes) and the only applications which provide some degree of assurance that the technology is ready for purchase are in the residential/commercial sector. As such, industry enthusiasm and acceptance of such installations will remain negligible until such time as a full scale installation is available in a real industrial setting. Furthermore, presently available tax incentives are wholly inadequate to allow achievment of anywhere near the payback periods normally required for industrial investment even if account is taken of the fact that they are energy replacement projects.

As Energy Secretary Edwards stated in his February 25, 1981 remarks to your Subcommittee there is a need for federal involvement in the energy area where advancement will not proceed within a reasonable time frame. This is one of those areas and one in which I doubt industry will move into until there is at least one tangible success available for inspection and evaluation.

All of the members of our project team are totally committed to a successful implementation of this project and to promoting this use of solar energy throughout the industrial sector. If allowed to proceed this project will serve as the necessary model to convince industry leaders that this new technology may be applied in an industrial environment. Without retention of the federal support for this project there is no possibility for this demonstration to proceed since, as mentioned above, present tax incentives are insufficient to allow our industry to implement the program.

I would appreciate your consideration in restoring funding to this important project. If further information is desired please contact either Dr. Walter W. Carey, Program Manager for the project, or myself at this address.

Very truly yours,

NESTLE ENTERPRISES, INC.

A. R. Mishkin
Sr. V.P. - Technical Management

ARM:ejs

CC: Dr. Walter W. Carey

BALTASAR CORRADA
RESIDENT COMMISSIONER, PUERTO RICO

KENNETH MARTY-LÓPEZ
ADMINISTRATIVE ASSISTANT

COMMITTEES:
EDUCATION AND LABOR
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March 19, 1981

Hon. Edward Boland
Energy and Water Development
Subcommittee
House Appropriations Committee
Washington, D. C.

Dear Ed:

I am writing to express my deep concern over the lack of funding for FY'82 for the Ocean Systems Program at the Department of Energy.

It is particularly disturbing to note that, at a critical point in the development of the ocean thermal energy conversion (OTEC) technology, the Reagan budget would completely stop the program in its tracks.

The government of Puerto Rico continues to be extremely interested in OTEC as a viable and needed alternative to expensive fossil fuels. As evidence of our commitment, our government-owned public utility, the Puerto Rico Electric Power Authority (PREPA), submitted two proposals, one of them as a prime contractor, under the Program Opportunity Notice (PON) for an OTEC demonstration plant(s).

The 96th Congress went on record in its support for this program with the enactment of two major laws, PL 96-310 and PL 96-320. But in order to achieve the goals set down in those laws, we must provide adequate funding. The budget submitted by President Carter asked for $36.8 million for FY'82. Under the revised budget, the Reagan Administration asks for zero funding for FY'82, thus effectively killing the program.

This action is even more astonishing in light of DOE's acknowledgement during testimony before your Subcommittee that "...OTEC designs could be competitive with conventional energy sources as a baseload option for islands by 1985, and as a baseload option for the Gulf Coast by 1992." We need to ensure that this appraisal becomes a reality, and for that to occur we need to provide adequate funding.

I urge you to consider the potential of this new technology in reducing our Nation's dependence on foreign oil and to reinstate full funding of $36.8 million for the Ocean Energy Systems.

With best regards, I remain

Sincerely,

Baltasar Corrada, M. C.
Resident Commissioner
Puerto Rico

San Diego
VOICE OF ENERGY
P.O. BOX 99401 • SAN DIEGO, CA. 92109 • (714) 272-1711

March 18, 1981

The Honorable Jamie L. Whitten
Chairman, Committee on Appropriations
U. S. House of Representatives
2314 Rayburn House Office Building
Washington, DC 20515

Subject: Heber Binary Geothermal Project

Dear Congressman Whitten:

The SAN DIEGO VOICE OF ENERGY urges you to take whatever action you can to continue the subject project.

First, the SAN DIEGO VOICE OF ENERGY is a group of concerned citizens who are volunteering their time and energy to do everything they can to assure a plentiful supply of energy for our people. Our aim is to support all viable energy sources that can produce reliably at reasonable cost and without dependence on foreign, uncontrollable input.

We feel the Heber Binary Geothermal Project falls into this viable category and deserves support from all who can possible provide it.

This project shows real promise of leading to the development of approximately 80% of the hydrothermal resources in the United States.

We wish to stress that the signed agreement with the DOE calls for 50% private investment and 50% Federal investment, but the cooperative agreement also provides for return of the Federal investment to the government from the revenues received. This is not an outright grant, project subsidizing or make-work project.

This project is a positive step toward energy independence for the United States and needs your support.

Thank you for your efforts in our behalf.

Very truly yours,

Barney Hekkala, Legislative Liaison for SAN DIEGO VOICE OF ENERGY

BH/pgb
cc: Chris Worsham, President, SAN DIEGO VOICE OF ENERGY

MAAC PROJECT

A MULTI-PURPOSE SOCIAL SERVICE AGENCY SERVING THE COMMUNITY.

ADMINISTRATION
140 W. 16th Street

NATIONAL CITY, CALIFORNIA 92050

(714) 474-2232
(714) 474-6784

ROGER CAZARES
EXECUTIVE DIRECTOR

In our country's often desperate search for alternative sources of energy. Geothermal looms large as a viable, and safe source of energy.

We all see the need for alternative energy resources. FY 79 through FY 81 saw no less than $8 million of congressional appropriations for the Heber Binary Project. The Heber Binary Oroject if allowed to follow through to completion, would prove the viabilty of the binary process on a commercial scale, therby, paving the way for a renewable. clean, relatively inexpensive source of energy.

With the advent of a new administration, we are faced with a variety of budgetary changes. One potential victim of proposed budget cuts is the Heber Binary Project. The purpose of this letter is to bring to your attention the critical need for keeping this crucial project alive.

Our country has shown poor judgement in allowing ourselves to become over-dependent on imported oil, we have used sources of energy that have left our enviroment stripped and polluted, and are now faced with the danger of nuclear waste. The issue here is not only to meet oue present energy needs, nut to insure future generations of a society that has sufficient energy sources;sources that are energy efficient and safe.

The growing governmental support of nuclear power is an area that should be of great concern. We haven't the means of properly disposing of vast amounts of nuclear waste. more important, there is the ever present danger of accidents occurring in nuclear plants. Lives are a heavy price to pay if we continue to show bad judgement in allowing the expansion of nuclear plants.

Geothermal energy is clearly one of the most praticalsources of energy. It is not only renewable, but it is a non-pollutant, and most important, it is a safe source of energy.

Can we put aside political considerations, in order to provide our chidren's children with a safe, energy efficient society. We can give them clean, safe energy, we can give them Geothermal. Help save the Heber Binary Project.

Jacqueline D. Robinson

Jacqueline D. Robinson

Energy Advisor

Energy Department
MAAC Project

BALTASAR CORRADA
Resident Commissioner, Puerto Rico

KENNETH MARTY-LÓPEZ
Administrative Assistant

COMMITTEES:
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cc: JB

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March 24, 1981

Hon. Tom Bevill
Chairman
Energy & Water Development
Subcommittee
House Appropriations Committee
Washington, D. C.

Dear Mr. Chairman:

I am writing to express my concern over the anticipated FY'81 budget rescissions in the area of Solar Thermal energy.

It is expected that total rescission in this area will amount to $18 million. Within that budget, there is a cost-share project in Puerto Rico which is of great interest to me.

The project is with Nestle and Sunmasters to construct and operate a low-temperature industrial process heat demonstration facility at Nestle's Libby, McNeill & Libby, Inc. food processing plant located in Santa Isabel, Puerto Rico.

The project received $200,000 for the design phase and was selected to receive $1.9 million for the final phase. The Puerto Rico Office of Energy is committed to match funds up to $325,000. If completed, the project would provide 40 percent of the energy needs of that Nestle plant at a saving of 4,000 barrels of oil per year.

I urge you to consider the benefits to be derived from the Solar Thermal budget when you consider the rescissions submitted by the Administration.

With best personal regards, I remain

Cordially,

Baltasar Corrada, M. C.
Resident Commissioner
Puerto Rico

TESTIMONY OF MEMBERS OF CONGRESS AND INTERESTED INDIVIDUALS AND ORGANIZATIONS

THURSDAY, MARCH 26, 1981.

VARIOUS CALIFORNIA PROJECTS

Mr. BURGENER. We are very pleased to welcome Congresswoman Bobbi Fiedler from California. Will you proceed and we will move right along. Are you first?

Mr. FRANKLIN. I am Scott Franklin, and I defer to the Congresswoman from California.

HANSEN DAM

WITNESS

HON. BOBBI FIEDLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

STATEMENT OF CONGRESSWOMAN FIEDLER OF CALIFORNIA

Ms. FIEDLER. Thank you. We have what is really a fairly simple problem, and I brought a couple of photographs here, because I feel that they really describe it best of all. In this photograph over here, you can see the reservoir, which has been filled with silt.

Mr. MYERS. We have our own.

Ms. FIEDLER. You have a picture, okay. You can see that the silt has really filled up most of the catch basin. It is very necessary that we remove that in order to utilize it for its original purpose. This is the way that it used to look and should look in the future. We are asking for a $500,000 study by the Corps of Engineers that will permit us to evaluate what is the most efficient way in which to remove that silt and resolve the problems. There are several different approaches that they are trying to use but one of the most interesting is this one. Conrock Quarry, just a very short distance away, has been evacuated over a period of years, and it is our firm belief that it is very possible and the most cost effective to simply remove it from this area down to this area and into the quarry, and we can end up with the solution to a problem, and an entirely new area where the Conrock Quarry is. There had been some discussion of possibly filling that before, and this will simply solve that problem for us.

That is basically what we are asking for. I have submitted into the record a statement which is in more detail, but I think that that picture really shows you what our problem is. We have tremendous cooperation from all the government agencies in the area, and hope that we will have a recommendation from this committee for that budget allocation.

[Ms. Fiedler's statement follows:]

STATEMENT OF

THE HONORABLE BOBBI' FIEDLER

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

HONORABLE TOM BEVILL, CHAIRMAN

MARCH 26, 1981

Mr. Chairman, members of the Committee, I appreciate this opportunity to testify before you as part of the California Water Commission presentation on water projects of importance to our State.

I would like to briefly comment on the Hansen Dam Project, which is located in my Congressional District in the City of Los Angeles, and is one of the projects recommended by the California Water Commission. The California Water Commission and the City of Los Angeles recommends that $500,000 be appropriated in Fiscal Year 1982 for the U.S. Corps of Engineers to complete a feasibility study to determine the best means of desilting Hansen Dam and restoring the water conservation and recreation operation as well as meeting the needed flood control requirements. I am in full agreement with this recommendation.

BACKGROUND

Hansen Dam, located in the San Fernando Valley, has provided for decades important benefits to the residents of Southern California by controlling floods, conserving storm runoffs and local rainfall which become part of Los Angeles' water supply, and by serving as a source of water-oriented recreation. The dam was authorized by the Flood Control Act in 1936, and completed in 1940. Recreation at the project was authorized by the Flood Control Act of 1944. The dam was constructed and is operated by the U.S. Corps of Engineers.

However, since 1969 the reservoir behind the dam has been filling up with silt (estimated in excess of 20 million cubic yards of mineral debris), primarily due to fire-related erosion originating from the local canyon hills. As a result, the total storage capacity of the reservoir has been reduced from a 1940 figure at 35,000 acre-feet to a present estimate of 26,000 acre-feet, a volume reduction of 27%. According to the Corps of Engineers, the present capacity exceeds the flood control storage required for safe operation by 1000 acre-feet; however, additional inflows of silt will eliminate this margin of safety in the near future.

Moreover, this situation has resulted in the loss of water supply to Los Angeles and virtually to Southern California. Spreading basins for recharge of the local ground water supply are operated downstream of the dam by the Los Angeles County Flood Control District, and by the Los Angeles Department of Water and Power. In the past, the Corps of Engineers, in coordination with these two agencies, and as part of the dam operation, has impounded water behind the dam for controlled release into these spreading grounds. However, due to the significant reduction

in reservoir capacity, the Corps has had to evacuate the water from the reservoir during and immediately after the floods. This has substantially eliminated the opportunity for use of the spreading grounds and has caused siltation and plugging of the downstream grounds on the occasions when the basins are used.

Furthermore, the recreational use of the reservoir has been seriously curtailed by the silt accumulation. The surface area of the reservoir has been significantly reduced from 140± to 30 acres, a surface area reduction of approximately 79 percent (see Exhibit 1). In the past, the reservoir was used for water skiing, boating, swimming, fishing and other activities under the supervision of the Los Angeles Department of Recreation and Parks. This reservoir is the only water-oriented recreation in the San Fernando Valley and is very important to residents. The local community is now forced to go without water-oriented recreation, or travel significant distances.

CURRENT STUDY EFFORT

The Corps of Engineers is presently conducting a limited $10,000 alternatives study, initiated in November, 1980, only to determine possible method(s) to alleviate the short-term flood control problem at the dam. Among some of the alternatives under study include: 1) trucking part of the debris from the dam; 2) raising the dam's embankment, and 3) increasing the water outflow capability of the dam. The Corps estimates that the study will be completed in June, 1981. The Corps has also indicated that the modification of the project to provide water conservation is being examined under the Los Angeles County Drainage Area Review Study scheduled for completion in October, 1985. Under this study, Hansen Dam would be one of numerous projects and facilities to be reviewed under a study budget of $500,000.

Under the Corps' current study plan, the residents of Los Angeles and Southern California would not realize the water conservation and recreation benefits of Hansen Dam until 1987 at the earliest.

RECOMMENDED STUDY EFFORT

The City of Los Angeles and the California Water Commission recommend that $500,000 be appropriated in FY 1982 for the U.S. Corps of Engineers to accomplish this objective. We believe that the Hansen Dam project warrants a separate study and that the current study scope should be expanded to include all three project purposes -- flood control, recreation and water conservation. Various alternatives, which consider all three project purposes as equally important components in an integrated manner, should be identified and assessed including the preparation of comparative cost estimates.

In closing, Mr. Chairman, I want to thank you and Members of the Subcommittee for your attention to our needs in California.

Mr. BURGENER. Thank you very much, Ms. Fiedler, for a very fine presentation. The brevity is not indicative of the interest of this committee, I assure you.

Ms. FIEDLER. Thank you.

STOCKTON EAST WATER DISTRICT

WITNESSES

HON. NORMAN D. SHUMWAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA
CHUCK DIXON, COUNTY ADMINISTRATOR
GEORGE BARBER, SUPERVISOR
EVELYN COSTA, SUPERVISOR
JERRY SHERWIN, COUNTY COUNSEL
JOE BLANCHARD, COMMISSIONER
ALEX KRYGSMAN, PORT DIRECTOR
RAY CEASAR, CITY MANAGER
TROM MADDEN, STOCKTON CITY COUNCIL MEMBER
ARNOLD RUE, STOCKTON CITY COUNCIL MEMBER

Mr. BURGENER. We are pleased to welcome our colleague, Congressman Shumway, followed by Congressman Panetta.

Mr. PANETTA. You are taking the Republican projects first?

Mr. MYERS. Yes.

STATEMENT OF CONGRESSMAN SHUMWAY OF CALIFORNIA

Mr. SHUMWAY. I appreciate the opportunity, Mr. Chairman, to testify again before this committee. At the outset I would like to introduce some members from my district who are here in support of the statement I am going to make this morning. We have representing San Joaquin County, Chuck Dixon, the County Administrator, George Barber, and Evelyn Costa, County Supervisors. For the city of Stockton we have Ray Ceasar, the City Manager, and Tom Madden and Arnold Rue, members of the Stockton City Council.

Mr. BURGENER. As your names are called off, why don't you stand so we can see who you are.

Mr. SHUMWAY. Arnold Rue, Tom Madden, Ray Ceasar, George Barber, and Evelyn Costa.

We also have here for the County Counsel Jerry Sherwin. And then representing the Port of Stockton we have Joe Blanchard, Commissioner, and Alex Krygsman, Director of the Port.

Mr. Chairman, I would also like permission from the committee to submit the statement of the Stockton East Water District. Representatives from that water district are not present but they have asked that their statement be part of the record of this committee. I would ask the approval of the chairman for that purpose.

[The statement follows:]

STATEMENT TO UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
(PUBLIC WORKS)
HONORABLE TOM BEVILL, CHAIRMAN

On behalf of

THE STOCKTON-EAST WATER DISTRICT

February 25, 1981

Mr. Chairman and Members of the Committee:

The Stockton-East Water District is located in Eastern San Joaquin County, California, and extends from the Sierra Nevada on the east, to the edge of the Sacramento-San Joaquin Delta on the west.

The District encompasses 114,500 acres, of which about 75,000 acres is irrigated farmland. The total population of the District is nearly 200,000 or approximately 58 percent of the population of San Joaquin County, including the City of Stockton. The population of the District is expected to reach 320,000 by the year 2020.

The District provides surface water both for agricultural and municipal uses. In addition to the supply of water for agriculture, the District operates a water treatment plant, which was commissioned in March, 1977, for the wholesale supply of treated water to the City of Stockton, the County of San Joaquin, and the California Water Service Company; which together, including their

own sources of groundwater, supply the City of Stockton and surrounding areas. The purpose of the treatment plant is to reduce the overdraft on the groundwater by supplying good quality treated surface water to areas previously served by the groundwater basin. This plant is being paid for by local revenue bonds.

Presently, the District's source of surface water is from New Hogan Dam on the Calaveras River which source is now fully developed. Under contractual arrangements between Stockton-East Water District, Calaveras County Water District, and the Water and Power Resources Service, almost the entire yield of New Hogan Dam is presently utilized by Stockton-East Water District. However, 43.5% of that yield is reserved for Calaveras County Water District when use can be made of the water by that District.

The District's present water needs are being partially satisfied by overdrafting the groundwater supply by an average of about 59,000 acre-feet annually[1/] above the safe groundwater yield. The State of California Department of Water Resources has designated eastern San Joaquin County as an area of critical overdraft.

Stockton-East Water District, in its Water Action Program[1/], has determined the need for supplemental surface water for the year 2020 to be 126,000 acre-feet annually; this is expected to increase to 145,000 acre-feet annually by the year 2030.

In short, the Stockton-East Water District's source of surface supply will eventually be reduced by about 43% while the District's present surface supply is insufficient to curtail the

1/ Bookman-Edmonston Engineering, Inc., Water Action Program, (September, 1978).

continuing overdraft of groundwater, let alone recharge and restore the groundwater level.

Two Federal Flood Control and Reclamation Programs are of primary concern to the District; namely, New Melones Reservoir and the Auburn Dam and Folsom South Canal. The Stockton-East Water District supports the appropriations in the Presidents' Fiscal Year 1981-82 Budget Request for these two projects.

The District further encourages early approval of the Water and Power Resources Service's recommendations contained in the Stanislaus River Basin Alternatives and Water Allocation Special Report, dated September, 1980, which provides for an interim water supply to the Stockton-East Water District, firm and interim supplies to Central San Joaquin Water Conservation District, and the potential for a County-wide solution to our supplemental water needs for many years to come. It is imperative that New Melones be filled to accomplish these objectives; and to realize its full multipurpose potential for hydroelectric power, irrigation and domestic benefits, and alleviation of groundwater overdrafts.

The District also urges that sufficient funds be appropriated, within the guidelines of the new administration, to resolve the current dilemma preventing construction of the Auburn Dam and Folsom South Canal so that a permanent solution to Eastern San Joaquin County's water needs can be implemented in a timely manner.

[Mr. Shumway's statement follows:]

STATEMENT OF

THE HONORABLE NORMAN D. SHUMWAY OF CALIFORNIA

BEFORE THE

HOUSE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT

MARCH 26, 1981

10:00 a.m.

Mr. Chairman, I appreciate this opportunity to testify in support of a number of public works projects which are vital to my Congressional District and to the entire State of California. I wish to commend the Subcommittee for its willingness to hear what we Californians have to say and for its thoughtful consideration of our budget requests.

Mr. Chairman, it hardly needs to be said that a different set of priorities and guidelines will govern the actions of this Subcommittee and this Congress during its FY82 budget deliberations. There are, as in the past, a number of worthwhile projects and a limited amount of available funds; but there is also, as never before, an overriding need to reduce dramatically the rate of growth in federal spending.

I am pleased to support the President's program for economic recovery in general and his proposed revisions in the FY82 budget requests of both the Army Corps of Engineers and the Water and Power Resources Service in particular. These cuts will eliminate more than $3 million in funding for water and energy related projects of immediate interest to my Congressional District -- not to mention, the budget revisions which will have an even greater impact on the entire State of California. And yet, Mr. Chairman, I am convinced that our long-range interests -- namely, a healthy and prosperous economy -- will only be served if we the Congress have the resolve to make these necessary cuts in funding now.

As you know, California's 14th Congressional District is made up of nine counties -- an area which includes a large portion of the Central Valley, the Mother Lode country, and the Sierra Nevada mountains. This diverse region provides a substantial amount of the Federal Central Valley Project's annual water yield, as well as possessing rich agricultural land which greatly benefits from such water deliveries.

Agriculture is the leading employer and source of revenue in my district. Water -- which truly is the life blood of California -- is an absolute necessity. The continued operation of water projects, as well as the studies mentioned here today are therefore vitally important. I should add that the constant threat of flooding in the Sacramento-San Joaquin Delta, portions of which are also in my district, underscore the necessity of the flood control benefits provided by the projects under consideration today.

The revised FY82 funding levels and FY81 reprogramming suggestions which I am advocating today are both responsible and essential for these public works projects.

I recommend the following:

ARMY CORPS OF ENGINEERS

1. San Francisco Bay to Stockton Ship Channel Project -- $1,400,000

The existing 30 foot channel must be dredged an additional five feet in order to accomodate a greater percentage of the world's merchant marine fleet. The Port of Stockton is one of the largest employers in San Joaquin County, and the channel deepening is vital for its continued economic viability.

It is my understanding that $800,000 of the Corps' request has been earmarked for the actual construction of this project. I join the Port of Stockton, the California Marine Affairs and Navigation Conference, and the California Water Commission in strongly supporting the President's FY82 budget of $1,400,000.

2. New Melones Lake -- $12,700,000

When filled to its full capacity of 2.4 million acre-feet, the New Melones Reservoir will generate 455 million kilowatt hours of clean and efficient power each year -- an amount sufficient to displace 830,000 barrels of imported crude oil. New Melones will also provide flood control, fishery protection, and recreational benefits, as well as yielding significant amounts of irrigation water for use in water-short areas.

The President's revised budget reduced the Corps' original request by $1,300,000. This cut will delay for one year the relocation of a highway bridge for downstream access to recreational facilities. It is my understanding that this component, as well as the construction of overnight facilities at the reservoir, will be strectched out -- though not eliminated from future funding requests.

I would like to join the California Water Commission, the Stockton City Council, and San Joaquin County in endorsing the President's request of $12,700,000 for FY82.

3. Sacramento River Bank Protection -- $3,400,000

It is essential that construction of the bank protection and erosion control project continue so as to assure the protection of rural areas which account for a major portion of California's agricultural output.

I support the President's FY82 budget request.

4. Surveys

The budget requests submitted to the Subcommittee by the Stockton City Council and San Joaquin County relating to the Corps' surveys of the Sacramento-San Joaquin Delta and the San Joaquin River Basin were based on the former Administration's FY82 budget figures. I am pleased to report that City and County officials have joined me in supporting the President's proposal to eliminate FY82 funding for both studies.

It is my understanding, however, that the Army Corps will ask the

Appropriations Committee for approval to reprogram $45,000 in FY81 funding for the Sacramento-San Joaquin Delta Surveys in order to expedite these studies and to complete a Draft Report by December, 1981. I would urge the Committee to grant such approval following the submission of the Corps' request.

5. Operation and Maintenance

I fully support the FY82 budget requests of the Army Corps of Engineers for the operation and maintenance of the following projects:

a. Farmington Dam	$	66,000
b. New Hogan Lake		1,020,000
c. New Melones (downstream channel)		388,000
d. Sacramento River		2,637,000
e. San Joaquin River		1,340,000

WATER AND POWER RESOURCES SERVICE

1. Auburn-Folsom South Unit -- $4,267,000

I support the President's total FY82 budget request of $4,267,000 -- with $2,841,000 earmarked for additional studies and maintenance of facilities associated with Auburn Dam, and the remaining $1,426,000 allocated for further work on the recreational facilities at the Sugar Pine Reservoir.

On December 30, 1980, former Secretary of the Interior Andrus decided the long-standing issue of dam safety by concluding that a concrete gravity dam would be an appropriate design. However, the Secretary declined to recommend the reauthorization of the project until certain economic and environmental concerns had been resolved.

The former Secretary's decision was released too late to allow the prior Administration to request additional FY81 funds to complete the important Folsom South Canal -- Lower American River Alternatives Study. It is my understanding that the Water and Power Resoures Service has already submitted a request, which has not been cleared by the Office of Management and Budget, for the Appropriation Committee's approval to reprogram $390,000 in FY81 for the completion of the Lower American River Alternatives Study.

Ground water tables in Eastern San Joaquin County continue to decline rapidly and must be augmented by water supplies from the Folsom South Canal. Completion of the important Lower American Alternatives Study at the earliest possible date is essential for final approval of Folsom South. I therefore respectfully urge that -- if the FY81 reprogramming request of $390,000 is not submitted by the new Administration in a timely manner -- the Subcommittee should consider a stretch-out of at least $400,000 in funding for the Sugar Pine recreational facilities and appropriate the resulting savings for the early completion of the Lower American Study. Such action would not increase the Water and Power Resources Service FY82 budget; rather, it would result in a reallocation of funds to a project of higher priority.

2. Delta Support Studies -- $775,000

I am pleased to report that the Stockton City Council and San Joaquin County have joined me in strongly supporting the President's request of $775,000. This appropriation will allow the Water and Power Resources Service to meet its responsibilities in the Sacramento-San Joaquin Delta.

3. General Investigations

I support the President's request for the following investigations:

a. Central Valley Project Fish and Wildlife Management Studies	$	475,000
b. Environmental and Interagency Coordination Activities		475,000

c. Technical Assistance to States	37,000
d. Central California-Nevada Wind-Energy Study	172,000

4. Operation and Maintenance

I endorse the President's request for the operation and maintenance of the following projects:

a. Central Valley Project	29,679,000
b. Soil and Moisture Conservation	900,000

In closing, I wish to bring to the Subcommittee's attention an important matter regarding the future operation and maintenance of the New Melones Reservoir. In the very near future, the Interior Secretary is expected to issue a long awaited decision which will authorize the filling of the reservoir to its full maximum capacity, define the areas to be included in the Stanislaus River Basin, and allocate some firm and interim water supplies to water-short areas.

It is absolutely essential that the Water and Power Resources Service be prepared to enter into contracts for water service as soon as adequate supplies have been stored in the reservoir. However, delays in the decision-making process described above have unfortunately resulted in the omission of funds in both the current fiscal year and in the FY82 budget request which would carry the New Melones project forward into its next important phase.

It is my understanding that shortly after the Interior Secretary has made the basin determination and water allocation decisions, the Water and Power Resources Service will ask the Appropriations Committee for approval to re-program funds from its Central Valley Project operation and management FY81 budget to commence important studies of diversion and conveyance locations, contracting conditions, and payment capabilities associated with the New Melones Reservoir. I would urge strongly that the Committee approve such authority following the submission of the Water and Power Resources Service's request.

Furthermore, I would suggest that the Subcommittee earmark an additional $200,000 in funding from the Central Valley Project operation and management FY82 budget request to allow these additional New Melones studies to be continued, and hopefully completed, by the end of FY82.

Mr. SHUMWAY. I fully realize the rigid constraints that this committee is going to be under during this year of cost-cutting. I would like to tell the committee at the outset that the proposals I am endorsing this morning are within the President's budget. We are fully supportive of that budget. The city and county members are supportive of that budget even though it does entail reductions of some projects that are vital to my district of more than $3 million. Nevertheless, we are willing to take our share of the lumps.

I would also just point out that Stockton in San Joaquin County is at the heart of a very vital agricultural area of California, and many of the projects that we favor directly help us in our pursuit of agriculture in California.

I would first like to endorse the President's budget proposal of funding the Stockton ship channel project to the extent of $1.4 million. This is a project that has been a long time in the making. It is a vital project for the Port of Stockton, one that is necessary to keep that Port a viable part of the Central Valley economy.

Secondly, I would like to endorse the project identified as New Melones Lake. The requested funding level of $12.7 million will play an essential role in the completion of that project. Although the revised budget does reduce the Corp's original request by $1.3 million, we nevertheless support that reduction.

I would like to address briefly the matter of surveys. The President's request for the Corp's budget deletes funding for surveys which are important for the Sacramento-San Joaquin Delta. We support that deletion, but we understand that there will be a request made to reprogram $45,000 in fiscal year 1981 funding to complete a necessary draft report. We hope when that request is made that it will have the approval of this subcommittee.

On requests made by Water and Power Resources Service, it is most important to us that the Auburn-Folsom South Unit be funded to the extent recommended of $4.2 million. Last December 30, Secretary Andrus indicated that the design construction of Auburn Dam be changed to accommodate some seismic concerns. That decision came too late to allow the prior Administration to request additional fiscal year 1981 funds to complete the important Folsom South Canal-Lower American River study. It is my understanding that the WPRS will request a reprogramming within the current year budget of some $390,000 to complete those studies. We would just like to impress upon the committee how important that request will be to us, and ask that when it does come before you, that you approve it.

If for some reason the request is not made or you cannot approve it, we would ask that you reprioritize the funding for the entire Auburn Folsom South Unit, and perhaps allow something in the magnitude of $400,000, which is now earmarked for the Sugar Pine Reservoir recreational facilities, to be used for completing the vital Folsom South Canal studies.

Finally, Mr. Chairman, I would just like to suggest that with regard to WPRS's operation and maintenance budget, we believe that a decision will be made very shortly by the Secretary of the Interior which will authorize the filling of the New Melones Dam and Reservoir. It will define the service area to be served by that

structure, and it will allocate some firm and interim water supplies.

When this decision is made, we must be prepared to go ahead and make the studies to determine the location of diversion and conveyance facilities which must necessarily precede the making of contracts. We understand that WPRS would probably request a reprogramming of funds within the current year budget for that purpose, and when that proposal comes before this subcommittee, I would certainly ask that you look upon it favorably. All of us are most anxious to see that the Melones project is completed and in full operation at the earliest possible date.

Thank you.

Mr. Chairman, I appreciate this opportunity and apologize for perhaps taking more time than I should have.

Mr. BURGENER. Thank you.

The moment of truth and reality having arrived, I am pleased to turn the gavel over to our very fine chairman, Chairman Bevill.

Mr. BEVILL. I thought you were doing a very fine job there.

Mr. BURGENER. It felt good.

Mr. MYERS. Success doesn't last long, does it?

SAN FELIPE DIVISION, CENTRAL VALLEY PROJECT

WITNESS

HON. LEON E. PANETTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. We are pleased to see many of our colleagues here. We will now recognize our good friend and colleague, Congressman Panetta.

STATEMENT OF CONGRESSMAN PANETTA OF CALIFORNIA

Mr. PANETTA. Mr. Chairman, it is comfortable to have you in that position while I discuss this next project.

Mr. MYERS. Shall the rest of us leave?

Mr. PANETTA. Oh, no. I must say that on most of the efforts of this subcommittee and obviously with regards to projects in California, these have been bipartisan efforts, because water is something that has been extremely important to our State, as most of you know.

I would like to ask unanimous consent that my statement be included in the record, Mr. Chairman.

[Mr. Panetta's statement follows:]

TESTIMONY OF THE HONORABLE LEON E. PANETTA

BEFORE THE SUBCOMMITTEE ON ENERGY AND WATER
DEVELOPMENT OF THE HOUSE COMMITTEE ON APPROPRIATIONS

March 26, 1981

Mr. Chairman: I appreciate this opportunity to present testimony on behalf of water and harbor projects of interest to my constituents in the 16th District of California. I would like to begin my testimony with a few comments about the new Administration's request for funding in 1982, and then move on to describe several projects which were not included in the President's budget request but which are of enormous importance to the residents of my district.

The first project in the President's budget request for which I would recommend the Committee's support is funding for the San Felipe Division of the Central Valley Project. The Carter Budget provided $47.650 million for this purpose. President Reagan, however, recently announced a $37 million reduction in the entire construction program budget for 1982 which impacts on eight projects including the San Felipe Division. Reagan's request for the San Felipe Division in Fiscal Year 1982 is $37.050 million, a reduction of $10.6 million from the Carter request. Of the eight construction projects impacted by the March 10 cuts, the reduction in San Felipe Division funding amounts to almost one third of the total.

As a member of the House Budget Committee who is committed to balancing the budget and reducing federal spending, I accept the need for reductions as long as they are equally distributed. Spending reduction must be even handed and across the board wherever possible. I urge the Committee to give very careful scrutiny to the $37 million worth of cuts proposed by the Administration. To ask one project to bear such a disproportionate burden of the reductions is simply not fair. I think

that these reductions could be more equitably distributed among the eight major projects in the construction portion of the budget.

I would like to heartily support the request of $3.84 million for the San Benito County Water Conservation and Flood Control District. These funds are crucial to the efficient development of the local distribution system to link up with the San Felipe Project. Substantial contributions to this local system are being made by the small communities in San Benito County. A delay in the receipt of these funds would have a significantly adverse effect on these communities.

The Administration has requested $595,000 to complete the minimum dredging required to keep the Santa Cruz Harbor open in Fiscal Year 1982. I fully support this request but would like to bring to the Committee's attention a very serious problem that requires additional assistance from the Corps of Engineers. There is a sand leak in the West Jetty of the harbor that is contributing to the rapid build-up of sand in the channel necessitating extensive annual harbor dredging. In his February 18 appearance before this Subcommittee, General Johnstone testified that the sand leak has caused shoaling for some time and the cost to seal the jetty is $390,000. He indicated that if these funds were made available, the Corps could complete the work in one year.

The Harbor Master of Santa Cruz has estimated that sealing of the jetty leak would significantly reduce the build-up of sand in the Harbor and thereby reduce the future cost of dredging the harbor by 15 to 25 percent. I strongly recommend that the Subcommittee provide funding for the jetty repair work in the interest of saving future expenditures on harbor dredging.

I support the Administration's request for $230,000 to conduct survey work on the improvement of Morro Bay harbor in San Luis Obispo County. The Corps indicated at the April 18 hearing that it could efficiently utilize $2 million in fiscal year 1982 to conduct rock revetment and dredging operations in Morro Bay. Last year Congress provided $649,000 for the Morro Rock Revetment project only to have the vast bulk of these funds diverted to other projects in the State. I urge that this vitally important work be funded and completed in Fiscal Year 1982.

There is a potential disaster waiting to occur in Santa Cruz where silt has been allowed to continue to build up along the San Lorenzo River during the past twenty years. Unless some concrete action is taken to either dredge the river bed or construct levees, the City of Santa Cruz faces the danger of a major flood similar to that which caused widespread damage in 1957. The Corps initially provided flood control along the river twenty years ago. A permanent solution is now needed.

Last year $100,000 was provided to study the San Lorenzo siltation problem. No funds were included in the Fiscal Year 1982 budget for continuation of this study which could be completed by 1983. I urge the Subcommittee to provide funds to the Corps to move toward completion of this study so that concrete steps can be taken to avert a potential catastrophe.

I draw my colleagues' attention to the fact that last year the House passed H.R. 4788 which included authorization for the Corps to conduct a one-time only dredging of the San Lorenzo River at a cost of $2 million. Given the threat of severe flooding from the river and the potential for over $39 million worth of damage within the city

of Santa Cruz, I would urge you to fund this operation should the authorizing Committee and the Congress enact legislation identical to H.R. 4788 in the present Congress.

Other projects of interest to the people of the 16th District are the possible expansion of Moss Landing Harbor and the construction of a comprehensive levee system along the Salinas River. I understand that the Corps has testified before this Subcommittee that if an environmentally and socially acceptable project for expanding Moss Landing harbor can be found along with a confirmed local cost-sharing sponsor, the Corps would participate in the expansion of the harbor facilities. I therefore urge support for the Corps' stated intent to continue its investigations of alternatives for the expansion of facilities in the south channel and the Moro Cojo Slough.

The Corps also testified that the construction of a comprehensive levee system along the Salinas River would help to alleviate the flooding problems of that area. I urge the Committee to direct the Corps to complete its siltation study along the entire length of the Salinas River. The data from such a study would prove quite helpful to local efforts to deal with the continuing flooding problems along the river. In addition, a more careful examination of the situation by the Corps may result in a finding that Corps participation in the construction of a comprehensive levee system is warranted.

Thank you for allowing me to testify before your Subcommittee today. I appreciate your continued assistance and attention to these vitally important matters.

Mr. PANETTA. Mr. Chairman, I am going to be leaving in a few moments to go over to the Budget Committee to question Mr. Stockman, who will be appearing before the Budget Committee with regard to the proposals of the administration, and so as a member of that committee, and as chairman of the Reconciliation Task Force of that committee, I am obviously very sensitive to the needs for the reductions that the President has recommended in a number of areas, and I am prepared to accept many of those reductions, as long as they are balanced.

One of the concerns I have specifically is with regard to a project in my area, the San Felipe Project, which has been funded by the subcommittee and is well on its way to completion. Fifteen years ago, when I was legislative assistant to Senator Tom Kuchel from California, this project began, and it is time we got it completed. We are well on the way to getting it completed. In fact, the tunnel is just being completed, so that we can serve the farmers in my area and the people in the Santa Clara Valley in Norm Mineta's district.

The unfortunate thing is that in the President's proposals for roughly a $37 million reduction in projects, $10.6 million impacts on San Felipe. That is a third of the cuts nationwide that is applied to one project. I don't think that is a proper balance. We are prepared to take some reductions. We understand the need for it, but we also think that these reductions ought to be balanced.

In the end, you wind up paying a lot more when you delay necessary funding on a project that is going to be completed, come hell or high water. I give you my commitment, and I think it is Norm Mineta's commitment as well, that we are going to fight to see this project completed. It is well on its way to completion, but to delay and try to nickel and dime a construction project when it is on its way to completion is simply asking for larger costs in the long run, and so we ask that with regards to the San Felipe Division, that project, yes, we are prepared to accept some reductions, but for goodness sakes, don't put a third of all of the cuts on one project, particularly one that is as important as this one. Balance those reductions as much as possible.

Secondly, I would mention, again with regards to cost savings, that there is a harbor in my area, the Santa Cruz Harbor, which has been dredged by the Corps of Engineers and continues to be dredged, and there is funding in here that is supported by the administration for that purpose. One of the problems, however, is that there is a leak in the jetty, which simply adds to the costs of dredging. That leak in the jetty needs to be plugged. The Corps of Engineers supports doing that. That is going to be an additional cost of $390,000, but we think in the long run that is going to mean less expense in terms of the continuing dredging.

The last project I would bring to your attention is a revetment project in Morro Bay which this committee funded to the tune of $649,000. Unfortunately, there is a prerogative here of being able to move these funds around, and the funds made their way to Congressman Lagomarsino's district, the Ventura Harbor, and I am prepared to be charitable with regards to those funds, but I think when a project is funded that we certainly are entitled to keep those funds this year, and I'll be damned if I am going to be

charitable this year with regards to that, so I will ask your support for that money, which was included last year. We ask that it be included this year in order that we can wind up that particular project.

I want to, as a member of the Budget Committee and as a representative of California, work very closely with you. Your job isn't easy this year. I recognize that. I want to be able to cooperate with you in trying to do what is right in the water project area, but more importantly what is right for the people of the country.

Thank you very much.

Mr. BEVILL. A very good statement.

Congressman Dreier, I notice that we are listing the members of Congress as they walk in, and so we are pleased to have you, Congressman Dreier. We will be glad to hear from you.

Congressman Panetta, we would be glad to have you stay with us, but we realize you are a very busy man.

Mr. PANETTA. I am going to go over and talk to Mr. Stockman right now.

Mr. DREIER. That is a worthy project.

CUCAMONGA CREEK

WITNESSES

HON. DAVID DREIER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA
ROBERT O. TOWNSEND, SAN BERNARDINO COUNTY, SUPERVISOR
DAVID L. McKENNA, SAN BERNARDINO COUNTY, SUPERVISOR

STATEMENT OF CONGRESSMAN DREIER OF CALIFORNIA

Mr. DREIER. That is a worthy project.

Mr. Chairman, I would like to thank you for giving me the opportunity to be here. I am speaking on behalf of the Cucamonga Creek Project which is in my district. We are fortunate to have two members of the county board of supervisors here, Supervisor Bob Townsend and Dave McKenna in the background here. I would like to introduce them.

The Cucamonga Creek Improvement Project is one of the most crucial flood control projects in Southern California. Unless this project is completed as originally planned, a potential for serious flooding will still exist along the tributaries of Cucamonga Creek.

This project, which began in 1975 with the cooperation of the County of San Bernardino and the U.S. Army Corps of Engineers, has gone a long way in stemming flood damage; however, more needs to be done.

As recently as February 1980, San Bernardino was declared a disaster area as a result of flooding for the third time since 1969. The storms of January 1980 alone caused damages up to $10 million, and you may recall the devastating fires of last November and December in California, that "thunder fire," which certainly presents an imminent problem there.

We must ensure that the potential for loss of life and property due to flooding is severely mitigated. It is therefore critical that the

Cucamonga Creek Improvement Project is completed as originally planned.

The funding requirements from the U.S. Army Corps of $25.5 million for fiscal years 1981–82 is included in the President's budget, and I am hopeful that you will concur with the President's budget.

I certainly appreciate being allowed this time to speak on behalf of completing this desperately needed project. You will be hearing from our supervisors later. Thank you very much.

Mr. BEVILL. A very good statement. We appreciate your appearance.

VARIOUS CALIFORNIA PROJECTS

WITNESS

HON. ROBERT LAGOMARSINO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. Next is our good friend and colleague Congressman Lagomarsino.

Mr. LAGOMARSINO. Thank you, Mr. Chairman. I would ask unanimous consent that my entire statement be included in the record.

Mr. BEVILL. Permission granted.

[Mr. Lagomarsino's statement follows:]

TESTIMONY OF CONGRESSMAN ROBERT LAGOMARSINO

Mr. Chairman, Members of the Committee, I appreciate as always the opportunity to appear before you in support of a number of vitally needed Corps of Engineers' programs in the 19th Congressional District of California. The Committee's support in the past has resulted in the provision of vital Corps projects and services for our area, services of which you can be proud and for which we are grateful.

I support all the proposed items in the March 10 Corps budget for the 19th District, including the vitally needed dredging programs at the Ventura Marina, Santa Barbara Harbor, and Channel Islands Harbor.

Parenthetically, I'd like to express gratitude on behalf of my constituents for the quick response by the Corps this year in helping to resolve a shoaling problem at the entrance to the Ventura Harbor. Without the Corps' ability to move quickly, boats would still be locked in the Harbor, due to massive paperwork requirements. Harbor officials are working on a plan now which holds the prospect for permanently solving the problem, and they hope that in future years this item can be scaled back considerably and perhaps eliminated as an item of public expense, not only at our harbor but at others.

In addition to these vitally needed navigation projects, I want to express my support for the Santa Maria Valley Levees project. Funds provided in the 1982 Corps budget will hopefully complete this repair and protection project, which serves to protect a large community from flooding.

I also support the proposed funding for engineering and design of the Goleta Streams flood control project, which will protect the Santa Barbara Airport and public facilities, homes and businesses in the vicinity.

At the request of Santa Barbara County and the City of Santa Barbara, I would like to propose that $150,000 of the $520,000 budgeted for the Goleta Streams project be used to restore funding for a survey of the Santa Barbara County Streams flood damage prevention project. The Santa Barbara County Streams study was proposed for funding at this level in the Corps January budget submission, but was deleted, along with many other study projects, as part of the Office of Management and Budget effort to stretch out spending on capitol programs. I support the President and OMB in their efforts, as do my constituents, and therefore they are proposing not to request any additional funds, but have agreed among themselves to share the

burden by means of this limited transfer of funds between local projects. I am advised they are willing to accept the stretch out which this will mean in design of the Goleta project, if it will help advance the Santa Barbara Streams project, which will provide protection to an area which has experienced severe flooding in recent years. At the request of Congressman Burgener last month, the Corps indicated a capability to support the Santa Barbara Streams study at the $150,000 level (see attached letter). I have been assured that both the City of Santa Barbara, which operates the airport and in which the Santa Barbara Streams study project would be located, and the County, in which the Goleta project is located, support this transfer and I respectfully ask the Committee to approve this unusual display of brotherly, or sisterly, concern.

Finally, I would ask the Committee to closely consider, should additional funds become available in fiscal year 1982, funding for a study of the Santa Barbara Harbor Project, a long inactive project which has been reclassified to a "deferred" status preparatory to being reactivated at the request of the City of Santa Barbara.

Thank you for your consideration of these requests.

SANTA BARBARA COUNTY STREAMS STUDY

Question. You are requesting $150,000 for the Santa Barbara County Streams study. What is your capability?

Answer. Our capability is $150,000, the same as the budget request.

SANTA BARBARA HARBOR PROJECT

Question. In September 1969, a project known as the Santa Barbara Harbor project was reclassified to inactive after the general design memorandum had been ninety percent completed. I understand that based on my request and the request of the Mayor of Santa Barbara, the project is being reclassified to the active category. Can you tell us what capability you would have in fiscal year 1982 for reinstituting the study and what progress could be made during the year?

Answer. Conditions, as well as criteria, have changed considerably during the period of time this project has been inactive. Accordingly, we feel the project can be reviewed more appropriately under the "Restudy of Deferred Projects" category, and therefore, have recommended the project for reclassification from the "Inactive", to the "Deferred", category. Subject to the usual qualifications, our fiscal year 1982 capability is $150,000 to initiate a three-year restudy of Phase 1 General Design Memorandum scope to determine whether an economically viable, and socially and environmentally acceptable, plan of authorized scope can be developed.

Statement of Congressman Lagomarsino of California

Mr. Lagomarsino. I would like to, as I have done before but with no less enthusiasm or gratitude, thank this committee for what they have done before. My constituents are grateful and you should be very proud. You have really helped us do good work.

Mr. Myers. Talk to Leon about this.

Mr. Bevill. This subcommittee has been mighty good to California.

Mr. Lagomarsino. It certainly has.

Mr. Myers. It hasn't exactly been an accident.

Mr. Bevill. It is the only State in the Union that has two members on this subcommittee, both of them very outstanding and active, who have contributed a great deal.

Mr. Lagomarsino. I am sure that is not just a coincidence.

Mr. Fazio. Mr. Chairman, we have also been relatively good to Alabama lately.

Mr. Myers. I might as well go out for coffee.

Mr. Bevill. You have got not only the largest delegation, of course, in the Congress, but you have got, I think, one of the best.

Mr. Lagomarsino. Thank you, sir.

Mr. Bevill. We appreciate the California delgation.

Mr. Lagomarsino. We try to help. I might say with regard to Congressman Panetta's description of his involuntary contribution to the well being of Ventura County, that I really do appreciate it, and it really is a rather remarkable thing that happened. The

Corps was asked to help the Ventura Harbor District handle what was really an emergency. Boats could actually not get out of the harbor, it was so shoaled up. The Corps looked around and thought that it was a very worthwhile project, but they didn't have any money. They were not allowed to get any money from the Corps headquarters back here, so what happened was that they did take, temporarily, some money from a couple of other districts in California where they felt the need was not quite as urgent as it was for actually opening and maintaining that harbor. The harbor officials are now working on a plan, I think I mentioned this to you before that would probably, if not eliminate the necessity for Corps contribution and Corps projects, at least cut it way down. But they do feel it is very important for one reason to have the Corps maintain its position with that project, those ongoing projects, and that is that there would be no way, those boats would still be locked in that harbor, if it were not for the Corps and its ability to cut through the paperwork which the local agencies were not able to do.

As a matter of fact, the managing director of the harbor district was threatened with jail because he finally decided to go ahead and do the dredging anyway, in spite of some threats, and has done that and apparently has gotten away with it.

Mr. MYERS. You had better promote him.

Mr. LAGOMARSINO. Right. We need people like that, but I wanted to speak to you about two particular projects that are not in the President's budget, but I am not asking you to add to it. I support the President's budget, but I do have an interesting, I submit, proposal. There is one project in the budget that is included in the President's budget called Goleta Streams Project; it is budgeted for $520,000. There is another project which the City of Santa Barbara and the County of Santa Barbara—and I will have documentation for this later; we don't have it yet; we have telephone confirmation of it—for $150,000 within the City of Santa Barbara, called the Santa Barbara County Stream Study.

The Corps has said they have $150,000 worth of capability. That was in a letter addressed to Congressman Burgener in response to his question about it, and the city and the county are willing to cut back the sum of $150,000 from the Goleta Project if the money can be used for the other project. I think that is an imaginative way of doing this. I hope you will take advantage of that offer.

There is another one which is not as high priority. It is very important—we want to get it done—called the Santa Barbara Harbor Project, a very good long-range project, and if you can find the money someplace else, we would appreciate your funding that. But I am not asking you to add it on top of the President's budget. I think that we have to maintain that budget if we can.

Again, thank you for what you have done in the past.

Mr. BEVILL. Bob, thank you. I appreciate your fine statement.

SAN FELIPE DIVISION

WITNESSES

HON. NORMAN Y. MINETA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

ALBERT HENLEY, REPRESENTING FOUR—COUNTY SERVICE AREA OF THE SAN FELIPE DIVISION
LINDA PERALTA, MEMBER, BOARD OF DIRECTORS, SANTA CLARA VALLEY WATER DISTRICT
RON ESAU, ASSISTANT GENERAL MANAGER, SANTA CLARA VALLEY WATER DISTRICT

Mr. BEVILL. Next we have our good friend and colleague here, Congressman Mineta.

Mr. MINETA. Mr. Chairman, Ms. Fiedler was here before you. Oh, I am sorry, you have already presented your statement.

Mr. BURGENER. She just wanted to stay for the funny stuff.

STATEMENT OF CONGRESSMAN MINETA OF CALIFORNIA

Mr. MINETA. Thank you, Mr. Burgener.

Mr. Chairman and members of the subcommittee, I really appreciate this opportunity to come before you to discuss some of the problems facing residents of our community with regard to their water supply. I am pleased to be accompanied this morning by Mr. Albert Henley—Mr. Henley, if you would rise—who represents the four-county service area of the San Felipe Division, as indicated by Congressman Panetta; Linda Peralta, a member of the Board of Directors of Santa Clara Valley Water District; and Ron Esau, the Assistant General Manager of that district.

First, with regard to the budget figure proposed by the administration for continued construction of the San Felipe Division, Central Valley Project, that figure has been cut by $10,600,000. The former amount, which I believe to be a conservative forecast of needed funding for fiscal year 1982, is $47,650,000. I think so deep a cut, and we are talking about a 22.2 percent reduction, is a mistake from any point of view. It appears to be very greatly and unfairly disproportionate to the reductions proposed for other programs.

Out of all the water projects targeted for cuts from around the country, none are so deeply affected as this one. Projects much larger than the San Felipe project sustained cuts far less. These cuts will result in a setback of the completion date to 1988, have a negative impact on agriculture, slow down economic growth and cut back on new housing construction.

Administration spokesmen have publicly declared that the principal criterion upon which budget cuts in ongoing water project construction will be based is that there is to be no delay in providing for urban water supply. Mr. Chairman, San Felipe is in much the greater proportion just that—an urban water project.

It cannot be economic wisdom, and I do not think it is the informed intention of this administration to depress in any degree the extraordinary economic life and growth of what has come to be known as "Silicon Valley." Yet the cut, if not restored, will do that. It will mean a year's delay in bringing needed water to that area. A year may not sound like much until you learn that already, even with normal rainfall, our valley is sure to be water deficient before the new supply comes in. Water deficiency means overdraft of local groundwater and that means irreversible land surface subsidence.

The Chairman is very well aware that inflation in construction costs is outrunning the Consumer Price Index. We calculate that a

year's delay will mean an extra and unnecessary $30 million in construction costs. Again, I doubt this is economic wisdom.

With regard to flood management, Mr. Chairman, there are several projects of critical importance affecting the San Francisco Bay area and Santa Clara County in particular. Specifically, I refer to one construction project and two ongoing studies within the Corps of Engineers civil program.

The Pajaro River: Uvas-Carnadero Project requires funding in the amount of $680,000 in fiscal year 1982 to complete design and initiate construction. This is a project involving the construction of a single levee to protect the urban area in the southern sector of the city of Gilroy. This project deserves high priority because benefits are exceptionally high in comparison to cost.

In fact, the cost/benefit ratio is 3:1 to 1. Total Federal costs for the project are approximately $1.2 million. Nearly two-thirds of the contruction costs are being assumed by State and local agencies. The project will result in eliminating $23 million of damage from a single flood event. Strong public support prevails for this project locally.

The survey of Guadalupe River and adjacent streams, located in Santa Clara and Alameda Counties, is nearly complete and requires minor funding in the amount of $73,000. This will complete the feasibility report. Over $1.7 million has already been expended for this study and feasibility has been clearly established for protecting the central urban area of the city of San Jose. Flood damage potential is $61,000,000 in San Jose alone. Under these circumstances, funding for completion of the study is highly justified.

Finally, Mr. Chairman, the San Francisco Bay shoreline study has been funded and underway for three years and requires an appropriation of $700,000 for fiscal year 1982. The completed reconnaissance study verifies the potential for damage from tidal flooding in Alameda, Napa, San Mateo, San Clara, Solano, and Sonoma Counties. Substantial risk to Federal, public, and private facilities is present within this extensive flood-prone area around San Francisco Bay. Local and State agencies are working closely with the Corps on this study. Adequate continuation of funding is respectfully requested.

A little later on I know Mr. Henley and Ms. Peralta will further brief the committee on these projects, and like Congressman Panetta and our very fine member Ms. Fiedler from California, I also serve on the Budget Committee, and will have to excuse myself in order to be at the hearings right now before the Budget Committee where Mr. Stockman is present.

We are very supportive of the cuts. I think the Budget Committee will be coming up in support of substantial cuts as being offered by Mr. Stockman and Mr. Reagan, but I just feel that where it comes to leveraging public sector capital investment on the private sector, and that cost-benefit ratio is there, that we in the public sector should continue to make that kind of infrasructure capital investment, because it adds to our economic vitality across this country. I think to do otherwise would be penny wise and pound foolish.

Thank you very much, Mr. Chairman.

Mr. BEVILL. Very good.

VARIOUS CALIFORNIA PROJECTS

WITNESSES

HON. GEORGE MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA
TOM POWERS, CHAIRMAN, COUNTY BOARD OF SUPERVISORS
ERNEST LASALLE, PRESIDENT, COUNTY WATER COMMISSIONER
JOHN DeVITO, GENERAL MANAGER, CONTRA COSTA WATER DISTRICT
PAUL HUEY, DEVELOPMENT ASSOCIATION

Mr. BEVILL. We also have our friend and colleague here, Congressman George Miller. George, we will be glad to hear from you.

STATEMENT OF CONGRESSMAN MILLER OF CALIFORNIA

Mr. MILLER. Mr. Chairman and members of the committee, like other members of Congress, I am accompanied by a delegation from back home. Supervisor Tom Powers is here from our board of supervisors, and Ernest Lasalle, President of the Contra Costa County Water District, along with John DeVito, who is the general manager of that water district, and Paul Huey, from our development association.

Mr. Chairman, you know all too well the battles that have been fought in California over who gets the water within the boundaries of that State. I represent a district which you might think of as a railroad switchyard. All the water comes through our district, and we move it west and we move it south.

Mr. BEVILL. I flew over your district in October, and I am familiar with your problems out there. As a matter of fact, I spent eight days in California.

Mr. MILLER. Mr. Chairman, if I had known you were flying over my district I would have gone to the mountaintop and waved as you went by.

Mr. Chairman, we have to be serious here this morning.

Mr. BEVILL. The subcommittee always takes seriously everything you say.

Mr. MILLER. My district, which has constantly been beseiged by people to take water from it, has a little gift that it would like to give to the Central Valley Project and to the State system. For years we have tried to provide enough releases from Federal and State projects to protect the drinking water supply of this district from salt water intrusion from San Francisco Bay. We live up the river and Bay system a little ways and we constantly have to release water to push the salt out so that the water would be safe for people to drink. You are talking about better than a half million people.

We have come upon, and there has been kicking around for a number of years, a plan to move that intake farther inland so you would not have to release as much water for the sole purposes of the protection of the intake. That relocation would develop additional water supplies within the entire system. Some people say we develop 100,000 acre-feet of water, some people say we could devel-

op 250,000 acre-feet of water. The Congress authorized the initiation of these important studies last year in P.L. 96-375. We are asking that you include $160,000 to initiate the studies on how best to relocate that intake to provide protection for the municipal users of the water, to provide protection for the industries that have to use those supplies, and at the same time see if it is possible to develop additional waters in the system through construction of the Los Vaqueros reservoir. I might say that this may be the cheapest proposal to develop new waters in the system that has come before this committee.

Later some people may talk to you about the peripheral canal in California, which would develop virtually the same amount of water that we are talking about by the simple relocation of the intake. The peripheral canal is estimated to run about $1.1 billion, and we are talking well under $100 million in our case. We are developing somewhere around 250,000 acre-feet of water in both cases.

It is also, I think, rather encouraging for the Federal Government to see that the local people feel so strongly about this project that the water district has recently approved the providing of 10 percent of the first year's funding to initiate these studies. That is the sort of cost sharing on local projects which I support, as do many others in Congress, and which would eliminate some of the more questionable projects which sometimes are proposed because local groups have not had cost sharing responsibilities in the past in many cases.

The only question is do you do it by building a new canal, or do you do it by the continual releases of water which later continue to flush the delta and flow out the Golden Gate, or do you develop a system so those waters can be used elsewhere in California, either north of the delta or south of the delta, and maybe in the delta.

Mr. BURGENER. South is better.

Mr. MILLER. Also I can't encourage you enough. I am sure that Mr. Lasalle and Mr. deVito will tell you that especially in a dry year, below normal rainfall year and even in normal years like 1979, we run into a health hazard. We end up actually warning elderly people that they cannot drink the water in this area, because of its high salt content. So there is some urgency in this request. I think if we started today, you are talking about a project that could take five to ten years by the time we develop the right of ways and get the work done.

Also the proposal to be studied includes the ability to store water off-stream, so that in a heavy runoff year we could take water out of the system and store it in Los Vaqueros reservoir. If the next rain year is not good, we can continue to share what little resources we have with the rest of the State, by drawing down on our own reservoirs. So it is really a means to provide a great amount of flexibility in a system that has been politically embattled for every drop of water in it. In fact I just got a letter the other day from what used to be the Bureau of Reclamation——

Mr. BEVILL. You and I can get Mo Udall to change it back.

Mr. MILLER. That would be very nice, Mr. Chairman.

—that the people who want water out of this system now far exceed the water that is in the system. So we are going to have to

look for these innovative ways to develop it, because I know Mr. Coelho wants more water out of this system.

My time may be up here at the table, but I think this proposal is important, because the choices that we are going to have to make in California. Tony's constituents, who in many instances have been at loggerheads with me over this, have supported this concept of moving the intake to provide that kind of flexibility in the system. So, I would hope that the committee would look favorably on this proposal because with these studies we think we can prove this is the most cost-effective way to develop those new water supplies for the State.

Also I know there will later be some recommendations to start some studies, some advanced studies, for the construction of the peripheral canal. I would hope that you would take the recommendations that our county will offer that this not be funded, for two reasons: One, there is no authorization in the law for the federal activity in the planning construction or operation of the peripheral canal; and two, we have a referendum pending in the State of California to determine if this is the way the people of the State want to go. That referendum will be held sometime late this year or next year, and at that time then we will have a clearer picture of that project, and I want to thank you for your time and your consideration.

I would hope that you would look favorably on initiating these studies for the relocation of the intake and the additional off-stream storage for our entire State water system. Thank you very much. You will be hearing from these other people.

[Mr. Miller's statement follows:]

STATEMENT OF CONGRESSMAN GEORGE MILLER

Mr. Chairman and members of the subcommittee, I am pleased to appear before you briefly today on behalf of several very critical water projects in California.

Specifically, I am requesting that this subcommittee vote to include $160,000 to initiate studies of the relocation of the Contra Costa Water District canal intake, and the proposed Kellogg and Los Vaqueros Reservoir units. These studies were authorized in Pub. L. 96-375, and it is urgent that we begin the preparatory work in the coming year.

The beneficiaries of these projects would include not only my own constituents in the seventh Congressional District, but water users throughout the state of California.

As this subcommittee knows only too well, we in California have occasionally had some differences of opinion on water policy. But there is no one, to my knowledge, who would not benefit from relocating the intake and building Los Vaqueros—and there is no one, I believe, who objects to proceeding at this time.

The current site of the Contra Costa canal intake is simply too vulnerable to salt water intrusion. In 1979, for example, the water quality at the current rock slough site was at a dangerous level for many people a full 31% of the year.

The water and power resources service noted a few years ago that these facilities are required "to meet water quality standards of the U.S. Public Health Service for municipal supplies."

This is a very low cost proposal. Relocating the intake could cost about $30 million, but would yield about 200,000 acre feet of water—water which could be used by a wide variety of other users in the State of California.

I would like to indicate just how cost effective this proposal is. The peripheral canal, which the State of California is, in its misguided way, thinking of building, would produce about 250,000 acre feet at a cost of $1.1 billion.

So, the proposal I bring to you today would deliver nearly as much water as the peripheral canal. But water from the peripheral canal would cost 29 times as much to generate as merely relocating the Contra Costa intake.

I want to emphasize that Contra Costa is no johnny-come-lately to the water program. In fact, the district was the first contractor for water from the Central

Valley project. Like other municipal users, Contra Costa will not only repay its share of construction costs, but will pay with interest.

Nor are these projects starting from scratch. The State of California is investigating both of these water improvements. In the past, Federal water officials, whose projects are directly involved in both the intake relocation and the new reservoirs, have been barred from participating because of the lack of authorization, which Pub. L. 96-375 has now provided them.

I want to re-emphasize that these two projects will improve the efficient operation of the Central Valley project for everyone; they will injure no one.

These projects will permit the more efficient management of the Central Valley project, and will open supplies of good quality water not only Contra Costa, but to many other potential users in the State.

It is important that the preliminary studies get underway. As I mentioned, the water quality at the current intake site is already hazardous during much of the year. If a drought or levee break should occur, the situation could become perilous for hundreds of thousands of bay area residents who have no alternative water supply.

Contra Costa recognizes the necessity of beginning immediately. In the spirit of cost-sharing on water projects which has been growing in the Congress, the district has recently approved providing 10% of the first year funding in order to expedite action on the studies. This is a move towards the fiscal responsibility we would hope States and local communities would assume in developing these kinds of projects in the future. Together with the funds already expended by the state on these projects, we can see a significant non-Federal interest in the canal intake relocation and Los Vaqueros projects which should be met with adequate Federal funding in Fiscal Year 1982 to undertake these studies.

Mr. BEVILL. As you know, this subcommittee will certainly do everything it can to try to carry out your request.

Mr. MILLER. Thank you very much.

VARIOUS CALIFORNIA PROJECTS

WITNESS

HON. TONY COELHO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BEVILL. We have our good friend Congressman Tony Coelho, who has just come in. We will hear from you at this time.

STATEMENT OF CONGRESSMAN COELHO OF CALIFORNIA

Mr. COELHO. Thank you, Mr. Chairman. First of all, I would like to thank the chairman and the staff for your visit in the last year to my congressional district, and listening to my folks that had some problems out there. I realize the time for this subcommittee is short and you are pressed. I would like to submit my statement for the record and just make a few brief remarks.

Mr. BEVILL. Permission is granted. It will be made a part of the record.

[Mr. Coelho's statement follows:]

Dear Mr. Chairman and Members of the Subcommittee:

I wish to thank you for the opportunity to testify today in support of funding for existing and proposed projects of great benefit to my district. Within our efforts to balance the federal budget should be consideration and support for wise investment. I approve of the Congress' efforts in this regard.

Mr. Chairman, I submit to you that funding for the projects I support, including various facilities within the San Luis Unit of the federal Central Valley Project in California, the Redbank and Fancher Creeks Flood Control Project, the Merced County Streams Group Project and the Delta-Mendota Canal would be wise investment for great public benefit.

In detail, I note my support for the following projects:

San Luis Unit, Central Valley Project

Westlands Water District and San Luis Drain

The Westlands Water District is a public body organized and operated in accordance with the provisions of the Water Code of the State of California. The District manages the sale and delivery of water from the San Luis Unit of the federal Central Valley Project, and its service area comprises some 600,000 acres of land situated on the west side of the San Joaquin Valley.

The President's budget provides for $4,700,000 for continuation of work on the San Luis Drain, $400,000 for the Westlands Water District distribution system, and $100,000 for the Westlands drainage collector system. I urge the Subcommittee's approval of the President's recommendations, and I note that the additional authority that will be needed to complete the distribution and drainage systems will be sought upon successful completion of contract negotiations between Westlands and the United States. The amounts budgeted for these items will finish work under contracts that are essentially complete.

The $4.7 million for the San Luis Drain will fund enlargement of Kesterson Reservoir -- a regulating reservoir, wildlife marsh and evaporation basin which is an integal part of the Drain. About 100,000 acres within the the San Luis Unit Service Area have a perched saline water table within 10 feet of the ground water surface -- a situation that calls for continued and expedited work on completion of the Drain. As farmers install drain tiles to restore productivity to their lands, the drain water will be ponded in an enlarged Kesterson Reservoir pending completion of the Drain to a final discharge point.

I feel that it is important to bring the Subcommittee up to date on the matter of the issuance of a discharge permit for the disposal of subsurface saline agricultural drainage water into the Western Sacramento-San Joaquin Delta. This matter is presently pending before the State Water Resources Control Board, and the Interior Department's Water and Power Resources Service (WPRS) is the applicant in that proceeding.

There are legislative precedents which are pertinent to WPRS' pending permit application. One is this Subcommittee's consistent action in conditioning appropriations for the San Luis Drain on the discharge of drainage waters being done in an environmentally safe manner. Another is the recent act of October 3, 1980, Public Law 96-375 (95 Stat.1505) which, among other things, authorized the "San Joaquin Valley Drainage Investigation with a study area in the San Joaquin River Basin, Tulare Basin, and the Sacramento-San Joaquin Delta-Suisun Bay Area of California."

Before the issuance of a discharge permit, the State Board will rightfully require studies aimed at assuring that disposal of drain water will not be environmentally damaging. In order allow expeditious conduct of these important studies, I urge that this Subcommittee approve an additional $1,400,000 appropriation to the Water and Power Resources Service for fiscal year 1982, under the authorization contained in P.L. 96-375. Appropriations of $350,000 to WPRS for fiscal year 1981 would greatly expedite these vital studies.

Delta-Mendota Canal

I support the President's budget recommendation of $988,000 for work on the repairs needed on the Delta-Mendota Canal. This canal services 1.1 million acres of prime agricultural cropland in my area, and is a vital facility of the Central Valley Project.

Corps of Engineer Projects

Redbank-Fancher Creeks Flood Control Project

The Corps of Engineers has completed the project report and environmental impact report for this project, which is without doubt a straightforward flood control project with significant benefits and broad state, federal, local and bipartisan support. During the last Congress, I cosponsored legislation authorizing the project that was included in the House-passed H.R. 4788, and although that legislation was not enacted, the specially-worded authorization reflected the awareness of the Congress of the feasibility and special needs of the project.

Along with my colleague, Congressman Pashayan, I have again introduced legislation this Congress providing for final authorization. Timely appropriations to complete the pre-construction planning for this project is critical, and will prevent as much as a two-year additional delay which, if allowed to occur, will cost taxpayers as much as a 20-percent increase in project costs. Federal capability has been demonstrated for the $400,000 necessary to complete the pre-construction planning, and I urge its appropriation.

Merced County Streams Project

This project will provide for flood control for about 55,000 acres of productive agricultural land and urban area and also will protect Castle Air Force Base, a major installation of the Strategic Air Command. The project has been shown to be feasible with a favorable benefit-cost ratio, and will prevent an average annual estimated $6 million worth of flood damage.

I wholeheartedly support the appropriation of $1,244,000 as included in the President's budget to allow the Corps to continue its work on pre-construction planning of the project.

Mr. Chairman and Members of the Subcommittee, again, thank you for this opportunity to testify and to enlist your support of these worthy projects. Thank you.

-30-

Mr. COELHO. I have several constituents here who will be testifying later, Mr. Chairman, on specific projects. I would like to just make a few general comments, and that is that I applaud the work of this subcommittee in regards to water projects. As we all know, water is one of the most precious commodities that we have today, and that it is the work and the foresight of this committee that has permitted us to do things that we are doing.

We are facing a tremendous problem in the future in that if we don't continue our advance planning, we could end up with a water shortage that would make the current energy problems look miniscule. So I applaud the members of this subcommittee and what they have done in the past, and pledge my cooperation to help you in any way possible on projects that you feel are important for the future of our country.

In brief, I would like to note my support for the President's budget recommendations of $1.2 million for continued work on the Corps of Engineers Merced County Streams Project, and urge the subcommittee to approve an appropriation of $400,000 to continue the pre-construction studies for the Corps' Redbank and Fancher Creeks Flood Control Project.

Federal capability has been shown for this amount, and this timely appropriation will prevent further delays on this worthy project. I would also like to express my appreciation for the subcommittee's past support for funding the San Luis unit in the Central Valley Project and the San Luis Drain in particular. I approve the President's budget recommendation providing, among other things, $4.7 million for continuation of work on the San Luis Drain, $400,000 for the Westlands Water District Distribution System, and $100,000 for the Westlands Drainage Collector system.

In addition, I urge this subcommittee to approve an appropriation $350,000 in fiscal year 1981 and $1.4 million in fiscal year 1982 to the Interior Department's Water and Power Resources Service to allow work to be done on the studies that are required to assure that disposal of drain water into the Sacramento-San Joaquin Delta will not be environmentally damaging. This is a matter of concern to this subcommittee, I know, and these additional appropriations would respond to these concerns.

Again, Mr. Chairman, I appreciate the cooperation of your subcommittee and you in particular, and anything, again, that I can do to be helpful I would appreciate and anything you can do to be helpful I would appreciate.

Mr. BEVILL. We appreciate your statement. It is a very good statement.

VARIOUS CALIFORNIA PROJECTS

WITNESSES

HON. DON H. CLAUSEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA
BOB BEACH, WATER AGENCY MANAGER
ANNA SPARKS, COMMISSIONER, HUMBOLDT COUNTY
JIM GAST
NICK ESPOSITI, SUPERVISOR, SONOMA COUNTY
LES WESTFALL

Mr. BEVILL. I see that we have now another good friend and colleague here, Congressman Don Clausen, the ranking minority member of the House Public Works Committee. We work very closely with you and we are always pleased to have you, Don. Go right ahead if you wish.

STATEMENT OF CONGRESSMAN CLAUSEN OF CALIFORNIA

Mr. CLAUSEN. Thank you, Mr. Charman and members of the Appropriations Subcommittee. I am sure we can start off by saying that we don't envy you your task this year. We all have this major responsibility to try to come up with the kind of prioritizing in our budget requests that will be consistent with the current fiscal situation. Before getting into my remarks, I would like to ask unanimous consent that I be permitted to submit my testimony for the record and that it be incorporated in full.

Mr. BEVILL. Permission granted.

[Mr. Clausen's statement follows:]

STATEMENT OF CONGRESSMAN DON H. CLAUSEN

Mr. Chairman, I want to express my sincere appreciation to you and the distinguished members of the public works appropriations subcommittee for extending to me this opportunity to offer testimony in support of appropriations for the following flood control, navigation and water conservation and development projects for inclusion in the budget for fiscal year 1982.

I have reviewed the proposed reductions submitted by President Reagan, and in keeping with his goals of balancing the budget and reducing government spending, I am supporting only those expenditures which are required to complete projects in progress, to maintain existing facilities and which support commerce.

Project and appropriation request

Construction:	
Crescent City Harbor	$1,720,000
Warm Springs Dam	20,800,000
General Investigations: Crescent City Harbor	200,000
Advanced engineering and design:	
Bodega Bay	155,000
Noyo River and Harbor	240,000
Operation and maintenance:	
Crescent City Harbor	1,347,000
Coyote Valley Dam	1,306,000
Warm Springs Dam	867,000
Noyo River and Harbor	436,000
Humboldt Harbor and Bay	1,642,000

I also want to bring to the Subcommittee's attention the following projects and activities which "capabilities" have been stated for, but have not been included in the Budget requests. I strongly urge that these projects be included for funding in the appropriations bill.

BODEGA BAY

I am asking the Subcommittee to give special consideration to this project. The Corps is in the final states of completing the General Design Memorandum (GDM) for a Small Navigation Project at Bodega Bay. The Corps effort will augment contributions by the Economic Development Administration and the California Department of Boating and Water Ways, with the final result being a 200 berth commercial fishing boat marina. The Corps has expressed a capability of $155,000 to complete the GDM. In order that this project not get another year behind its scheduled fiscal year 1983 construction start, I am requesting that $155,000 be added on by the Subcommittee.

PETALUMA RIVER

Most recently, I was advised by the Petaluma Area Chamber of Commerce, and other involved persons that excessive schoaling and siltation is occurring at the entrance to the Petaluma River. This lower reach of the Petaluma River Project is on a 12 year dredging cycle with the last dredging taking place in 1977. Thus, the next dredging will not take place until 1989. This year the Corps just completed the dredging of the river channel. Now we are faced with a situation where vessels might not be able to get in to use the channel. The Corps has previously expressed a $1.5 million capability for this activity and I strongly urge the Subcommittee to include that level of funding or direct the Corps to re-program the necessary funds.

NAPA RIVER

This dredging project will begin in June of this year, which is 4 months later than anticipated. There are already appropriated funds in the fiscal year 1981 Budget for this project, but the Corps is concerned that because of the late start, there will be a greater accumulation of silt and thus, more dredge material than estimated. The corps has stated a capability of $500,000 for this purpose and I request the Subcommittee provide that amount.

Mr. CLAUSEN. I would like to introduce some of the people that are here with me who will be testifying later on, some of which will be on water projects and some of which will be on navigation. I have seated next to me Supervisor Nick Espositi from Sonoma County, in whose district the Warm Springs Project is located, with which you are all familiar. He is on my left. With him in the audience is Bob Beach, who is the Water Agency Manager.

Bob, do you want to stand. On navigation projects we have Commissioner Anna Sparks from Humboldt County, and Jim Gast, and later Les Westfall will be testifying on the navigation projects.

Mr. BEVILL. We are pleased to have each of you.

Mr. CLAUSEN. My testimony this morning will focus essentially on the request for flood control, navigation, and then the water

conservation and development projects for inclusion in fiscal year 1982.

I have reviewed the proposed reductions that are submitted by the President, and in keeping with his goals of balancing the budget and reducing government spending, I am supporting only those expenditures which are required to complete projects in progress, to maintain existing facilities, which support commerce and economic development. Having said that, Mr. Chairman, you stated earlier that we do share this responsibility, we being the authorizing committee, yourselves on the Appropriations Committee, and we are trying to go through the process of identifying those projects that truly will meet what we perceive to be the ongoing and increasing requirements for infrastructure building, and river and harbor navigation projects are going to take on increasing importance as we try to address the movement of energy sources throughout the land as well as those infrastructure requirements on coastal communities needed to sustain—and I mean sustain—a viable fishing economy in those areas, be it sports or commercial.

And so it is to that end, in addition to the operation and maintenance requirements of some of the in-place facilities that we place the emphasis on my testimony.

I am convinced that if we do our job and do it properly, in addressing these infrastructure requirements, we can in fact be a part of the President's overall economic recovery program, and I think that I know a little about each one of you individually, as I have worked with you in the committees, and I believe that is consistent with what your philosophy has been in the past, and I think it has stood the tests of time.

We genuinely believe that these are not necessarily just spending for spending's sake. We believe that they are investments in the building of the infrastructure necessary to sustain and build viable economic growth centers throughout the country.

Now, the final note that I would like, and this goes to the question of water projects. Again, we are in a similar category. I just returned from New York, Mr. Chairman, where we held in-depth hearings, and I can tell you what is happening up there. They have been exposed to a drought problem that we experienced in the West, Dick and Jerry, and Clair being from California having had that kind of an experience, and while we have perceived the water problems of the country to be essentially a Western problem, it is no longer. It is now a national problem.

I am going to predict that the next major crisis, resource crisis in this country, is going to be the water resource crisis. We have to move in the direction of a total water management program, and it is not going to be done on the basis of the hit-and-run, hit-and-miss kind of operations of the past. I think that our record will stand that test as we go through, in establishing the kind of budget priorities necessary to address this particular problem. So, Mr. Chairman, I will submit my recommendations for the record and then be in close touch with you.

Mr. BEVILL. It has been said that it will take us until the year 2000 to solve our energy problem in this country and then we are going to be faced with a water problem, which is just what you are saying.

Mr. CLAUSEN. It is there, and there is going to have to be some new prioritizing in the construction grant program, as you know. It is in real trouble. We are going into hearings on our oversight committee and will make that available to you and the other appropriations committee.

Mr. MYERS. A good statement.

VARIOUS CALIFORNIA PROJECTS

WITNESSES

HON. JERRY LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

ROBERT O. TOWNSEND, SUPERVISOR, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

DAVID McKENNA, SUPERVISOR, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

Mr. BEVILL. Congressman Lewis, we will recognize you.

STATEMENT OF CONGRESSMAN LEWIS OF CALIFORNIA

Mr. LEWIS. Thank you, Mr. Chairman. I am not going to take much time at all because of the people in the audience who have traveled so far to get your attention. As you know, I served on the committee last year with Mr. Clausen. On the Appropriations Committee I am getting a new insight on problems of spending or not spending our dollars, but let me say two things, Mr. Chairman, first on the serious side: The work of your subcommittee is as important as any of the work going on around here, and for some years now there has been resistance to spending down those paths that involve the infrastructure that Mr. Clausen has mentioned. I think it is fundamental that we recognize the priorities of your committee. I want you to know that maybe one of the reasons I am sitting on this side of the aisle in the committee today is that you are going to have me vote in support of your efforts in that regard.

Now, beyond that, in the West we have got a number of problems. Most important, we would like to have some of the committee see these problems firsthand. The Santa Ana River Basin, which is one of the critical areas of concern, is not far from a place called Palm Springs. If you should happen to be in the West, I would very much like to invite you to my district to get firsthand exposure to this difficulty.

Mr. BEVILL. I plan to make my next campaign out there.

Mr. LEWIS. You will be welcomed.

I would like to introduce people from my district who will be with you later in the day: Supervisor Robert Townsend, representing the Western San Bernardino County, and Supervisor McKenna, also from San Bernardino County.

Raise your hands, gentlemen.

Mr. BEVILL. Good to have you.

Mr. LEWIS. It is my intention to spend time with each of the members personally. I appreciate your support and willingness to listen. I will submit a statement for the record. Thank you.

Mr. BEVILL. We appreciate the fine work you do here in the Congress and the good support you have always given our subcommittee. We will include your statement in the record.

[The statement of Congressman Jerry Lewis follows:]

STATEMENT BY CONGRESSMAN JERRY LEWIS

Mr. Chairman, my district is in southern California and is comprised of most of San Bernardino and Riverside Counties, and a great proportion of the serious flood threats in Southern California is posed by rivers which run through my district. There are three projects which I wish to emphasize at this time: The Cucamonga Creek Improvement Project, the Santa Ana Flood Control Project, and the Whitewater River Project.

The Cucamonga Creek Improvement Project lies geographically in Representative David Dreier's district; it is, however, a project of great importance to me and to the entire West End of San Bernardino County. Twelve years ago, flooding in this area caused loss of life and damage exceeding $12 million. Funding in fiscal year 1982, for $25.5 million, will carry this project to its final phase prior to completion. Begun in 1974 to deal with floods such as the 1969 flood and the 1980 storms which caused nearly $10 million in damage, is scheduled to be completed in 1983.

The flood potential of the Santa Ana River poses the greatest such threat west of the Mississippi River. The Regional Division of the Corps of Engineers has just completed Phase I, the General Design Memorandum. The $485,000 recommended and included in the President's fiscal year 1982 budget provides for the continuation of the survey of the Santa Ana River Main Stem, which included flood control projects in San Bernardino County as well as certain streams in other counties of the Santa Ana River Basin.

The danger posed by this river and flood plain can scarcely be overestimated. Despite the existence of the Prado Reservoir and limited channel improvements downstream, there is the potential of standard project flood on the Santa Ana River causing $9 billion damage to about 117,000 acres along the Santa Ana River and also Santiago Creek in Orange County. The major portion of the area subject to flood damage is located in Orange County, a highly urbanized and densely populated area east of Los Angeles. Your support of the current program and for ongoing and early funding of the Phase II study, covering advanced engineering and design plans, will be greatly appreciated.

The third major area of importance is the Whitewater River Project. Flooding from the main stem of this river would affect the cities of Palm Springs, Cathedral City, Palm Desert, Indian Wells, Indio, Coachella and others. The preliminary estimate of damages from the February 1980 Flood is $6 million. In September, 1976, damages reached over $18 million.

Several alternatives have been studied as remedies to the flood threat; they include channelization, one-dam and two-dam plans. In addition, a flood warning system is being studied to complement actual construction activity. Of the three engineering alternatives, the channelization plan provides both the highest benefit/cost ratio and beneficial side-effects. The comprehensive Environmental Quality plan offers higher levels of flood and environmental protection than the dam alternatives. This plan addresses several objectives:

The Channel plan would provide SPF protection to the Whitewater River along its developed portions.

It would eliminate 100 percent of the blowsand damages downwind from Palm Drive/Vista Chino.

It provides environmental preservation and enhancement of sand dune ecosystems (blowsand management area) and the Whitewater marsh at the Salton Sea.

It preserves and enhances habitat of the (federally listed: threatened) Coachella Valley fringe-toed lizard (blowsand management area).

It accrues benefits by preserving and enhancing unique blowsand and marsh habitats. The area is frequented by five federally listed species of birds, including the bald eagle.

Thank you for the opportunity to present this statement to the House Appropriations Subcommittee on Energy and Water Development. The threat of loss of life and flood damage is acute: the time to act, and to fund these projects, is now—before the next killer flood.

Mr. LEWIS. Thank you, Mr. Chairman.

Mr. MYERS. He has been talking to us for years so now he is part of us.

Mr. CLAUSEN. Mr. Chairman, thank you very much. I hope that you—I know that you will, you and the staff—have a chance to read and pay specific attention to the specifics of the testimony of those who have come 3,000 miles to make their presentation.

Mr. BEVILL. Yes, we certainly will.

Mr. LEWIS. Thank you very much.

Mr. BEVILL. We are always impressed when we have a room full of people who travel round-trip 6,000 miles to be here. That is very impressive, and it impresses the subcommittee, certainly.

Mr. BURGENER. Mr. Chairman, I have two letters from Congressman Badham that should appear at this point in the record.

Mr. BEVILL. They will be made a part of the record at this point.

[Two letters from Mr. Badham follow:]

ARMED SERVICES COMMITTEE
SUBCOMMITTEES:
PROCUREMENT AND MILITARY NUCLEAR SYSTEMS
INVESTIGATIONS
HOUSE ADMINISTRATION COMMITTEE
SUBCOMMITTEES:
OFFICE SYSTEMS
ACCOUNTS

Congress of the United States
House of Representatives

ROBERT E. BADHAM
40TH DISTRICT, CALIFORNIA

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WASHINGTON, D.C. 20515
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March 24, 1981

Honorable Clair W. Burgener
343 Cannon HOB
Washington, D.C. 20515

Dear Clair:

This is to request your assistance in adding to the 1981-82 House Energy and Water Development Appropriation Bill $7 million construction general funds for the design, construction and monitoring of a sand bypass in Oceanside. Authority for the project exists under Public Laws 85-500 and 87-9 and House Document 76, 89th Congress, 1st session.

I know that you are very concerned, as am I, about upholding the Administration's pledge to trim federal expenditures. The proposed bypass will, I believe, save federal dollars in the long run by eliminating costly and duplicative studies inherent in the Corps of Engineers lengthy bureaucratic process. It is also cost-effecitve in the short term in that it will alleviate the need for frequent federal maintenance dredging of the harbor, (at a cost of $1.6 million last year; an average of $570,000 annually for the past 20 years).

The purpose of the bypass is to restore the natural movement of sand which was interrupted by the construction of breakwaters at Camp Pendleton by the federal government. Congress has always acknowledged responsibility for the resulting erosion problem.

I know that you are well aware of the great harm to Oceanside which has been caused by the beach erosion. Over $34 million in losses due to the erosion for 1980 alone have been documented. The additional social and economic costs to the community resulting from loss of its beach cannot be quantified. For a town which since the 1800's has staked its idenity as a beach resort, the loss of the beach has been a devastating blow.

The citizens of Oceanside and the San Diego region as a whole are unanimous in their desire to have a bypass funded and installed. Experts in the field of coastal engineering agree that the bypass has a high probability of success. It would be wasteful, in my opinion, to commit this project to further study and delay.

The approval of the sand bypass appropriation means a great deal to both of our constituencies. I firmly believe that this appropriation is in line with the President's fiscal priorities: it is a cost-effective system and will provide a much needed shot-in-the-arm for the local economy. Furthermore, this is a clear case of the need to cut through costly red-tape in meeting local desires.

Cordially,

Robert E. Badham
Member of Congress

REB:tm

ARMED SERVICES COMMITTEE
SUBCOMMITTEES:
PROCUREMENT AND MILITARY NUCLEAR SYSTEMS
INVESTIGATIONS

HOUSE ADMINISTRATION COMMITTEE
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Congress of the United States
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March 24, 1981

Honorable Clair Burgener
343 Cannon House Office Building
Washington, D.C. 20515

Dear Clair:

Your assistance and support in having the Appropriations Committee include in the F.Y. 1982 Appropriations Bill an item of $100,000.00 for initiation of the West Newport Beach (Costa Mesa) Small Craft Harbor General Investigation by the U.S. Army Corps of Engineers is requested.

This investigation was authorized by Senate Resolution on 9 December 1975 and is fully supported by:

The City of Newport Beach, California

The City of Costa Mesa, California

The California Marine Affairs and Navigation Conference

The California Marine Parks and Harbor Association

The Orange County Coast Association

The Southern California Marine Association

...and others

Cordially,

Robert E. Badham
Member of Congress

REB:ehn

ALL PROJECTS

WITNESSES

SCOTT FRANKLIN, CHAIRPERSON, CALIFORNIA WATER COMMISSION
CHARLENE ORSZAG, CALIFORNIA WATER COMMISSIONER
DAVID KATZ, PRESIDENT, STATE RECLAMATION BOARD
ALBERT T. HENLEY, GENERAL COUNSEL, SANTA CLARA VALLEY WATER DISTRICT
LINDA PERALTA, DIRECTOR, SANTA CLARA VALLEY WATER DISTRICT
RONALD R. ESAU, ASSISTANT GENERAL MANAGER, SANTA CLARA VALLEY WATER DISTRICT
FRED ROHNERT, VICE CHAIRMAN, SAN BENITO WATER CONSERVATION AND FLOOD CONTROL DISTRICT
GEORGE THOMAS, MANAGER, SAN BENITO WATER CONSERVATION AND FLOOD CONTROL DISTRICT
CARL NELSON, ASSISTANT DIRECTOR, ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY
DAVID McKENNA, SUPERVISOR, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
ROBERT O. TOWNSEND, SUPERVISOR, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
AL REID, ASSISTANT ADMINISTRATIVE OFFICER, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
C. J. DiPETRO, CHIEF ENGINEER, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
KENNETH EDWARDS, CHIEF ENGINEER, RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
NICK ESPOSTI, SUPERVISOR, SONOMA COUNTY WATER AGENCY
ROBERT BEACH, GENERAL MANAGER, SONOMA COUNTY WATER AGENCY
TWYLA THOMPSON, SUPERVISOR, YOLO COUNTY AND PRESIDENT OF WESTSIDE CANAL ASSOCIATION
FLOYD MARSH, SUPERVISOR, COLUSA COUNTY
GEORGE F. PRIDE, SUPERVISOR, GLENN COUNTY
WILLIAM McANLIS, MANAGER, YOLO COUNTY FLOOD CONTROL AND WATER CONSRVATION DISTRICT
RALPH NISSEN, PRESIDENT, GLENN COLUSA IRRIGATION DISTRICT
DONALD D. SCHONAUER, PRESIDENT, ORLAND ARTOIS WATER DISTRICT
FRANK ENOS, SECRETARY-MANAGER, ORLAND ARTOIS WATER DISTRICT
GEORGE BARBER, SUPERVISOR, SAN JOAQUIN COUNTY
EVELYN COSTA, SUPERVISOR, SAN JOAQUIN COUNTY
CHARLES DIXON, COUNTY ADMINISTRATOR, SAN JOAQUIN COUNTY
GERALD SHERWIN, COUNTY COUNSEL, SAN JOAQUIN COUNTY
TOM MADDEN, COUNCILPERSON, CITY OF STOCKTON
ARNOLD RUE, COUNCILPERSON, CITY OF STOCKTON
JOHN S. HARNETT, GENERAL MANAGER, EAST BAY MUNICIPAL UTILITY DISTRICT
MARSHAL JONES, CONSULTING ENGINEER, STANISLAUS COUNTY
LAWRENCE M. BAGLEY, MAYOR, CITY OF OCEANSIDE, CALIFORNIA
RAY BURGESS, COUNCILPERSON, CITY OF OCEANSIDE
DONALD J. RILEY, HARBOR SUPERINTENDENT, OCEANSIDE SMALL CRAFT HARBOR DISTRICT
TOM POWERS, SUPERVISOR, CONTRA COSTA COUNTY

HOWARD HAILE, CHIEF ENGINEER, LOS ANGELES FLOOD CONTROL DISTRICT
DOUGLAS HARRISON, MANAGER, FRESNO METROPOLITAN FLOOD CONTROL DISTRICT
ED H. HOWE, PRESIDENT, KINGS RIVER WATER CONSERVATION DISTRICT
JEFF L. TAYLOR, GENERAL MANAGER, CHIEF ENGINEER
JAY ANDERSON, SECRETARY-MANAGER, MERCED IRRIGATION DISTRICT
JOE PLAGENZA, PRESIDENT, BOARD OF DIRECTORS, MERCED IRRIGATION DISTRICT
JOHN DEVITO, GENERAL MANAGER, CONTRA COSTA COUNTY WATER DISTRICT
JACK FORD CONSULTANT, FALLBROOK PUBLIC UTILITY DISTRICT

Mr. BEVILL. You were here once before, weren't you?

STATEMENT OF SCOTT E. FRANKLIN

Mr. FRANKLIN. Yes, Mr. Chairman. In the interests of brevity, I will just submit a statement.

I would just like to say one thing, that I appreciate the position that your committee is in, and we would like to work very closely with you for this. I would just like to make one other comment, and that is that we have with us today Miss Charlene Orszag, a new member of the California Water Commission, and Mr. David Katz, who would like to make a brief statement on behalf of the State Reclamation Board. I would like to have my testimony entered into the record, if possible.

Mr. BEVILL. It will be made part of the record.

[Mr. Franklin's statement follows:]

STATEMENT OF THE
CALIFORNIA WATER COMMISSION
BEFORE THE

U. S. SENATE, COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)

AND BEFORE THE

U. S. HOUSE OF REPRESENTATIVES, COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)

BY

SCOTT E. FRANKLIN,
CHAIRPERSON,
CALIFORNIA WATER COMMISSION

March 26, 1981

Mr. Chairman and members of the Committee: I am Scott E. Franklin, Chairperson of the California Water Commission, an official agency of the State of California. The Commission is composed of nine representative citizens from throughout the State who are charged by statute with representing State and local interests before this Committee.

I appreciate the opportunity to appear before you with the official recommendations of the State of California for fiscal year 1981-82 appropriations. As in the past, I am one of several California representatives planning to make a coordinated presentation. I will make a general statement highlighting our overall program and then introduce the various supporting representatives who will speak on behalf of specific projects.

As we enter this difficult era of the eighties, we still have visionary goals that make us optimistic about our future in the water resources field. Although we see before us a time of limitations and restrictions, we must not stop in our constant search for better and improved methods of using our finite resources.

We must concentrate our efforts carefully, selecting and managing those projects and studies that are most vital to our common goals, so that we may reap the greatest yield from our efforts.

1981 could be a dry year because of light runoff projected from a scant Sierra snowpack. However, due to storage capabilities in existing reservoirs, it is expected that California will make it through the coming summer in terms of an adequate water supply. We are not in a drought yet, but hydroelectric power production will be short about 25% of normal production due to the light projected runoff.

Energy is in critically short supply and new programs must be developed to find and utilize efficient, clean, and environmentally sound energy sources, and innovative projects such as small hydro, solar, geothermal, and cogeneration warrant your support for funds. For instance, we have encouraged installation of hydroelectric generators at existing facilities as one approach to our ever increasing energy needs. We, therefore, confirm our commitment to such programs now.

77-001 O - 81 - (Part 9) - 65

I feel California is unique in that the California Water Commission, the California Departments of Water Resources and Fish and Game work closely together to solve water storage and flood control problems in ways which minimize adverse impacts on fish and wildlife resources. Examples of water projects which protect or enforce these natural resources are the Suisun Marsh Protection Facilities, the Peripheral Canal and Buckhorn Mountain (Grass Valley) Debris Dam on the Trinity River.

The California Water Commission is concerned about natural resources and encourages creative water development planning which results in projects that balance economic development with the preservation of recreation, fish and wildlife.

The attached tabulation contains our specific recommendations, and I will mention a few of the projects which reflect our efforts to develop environmentally sensitive projects through extensive public participation.

The Commission supports the federal capability for the Cottonwood Creek Project which includes as project features, flood control, water supply, recreation, fishery enhancement and hydroelectric power potential. The Commission also is supporting funding for the Enlarged Shasta study. Increasing the capacity of Shasta Lake would provide additional flood control, water supply hydroelectric power potential.

We support the timely completion of the Cucamonga Creek and Walnut Creek flood control projects. The Santa Ana River poses one of the most serious flood threats in California possibly the nation, and we support early funding of Phase II studies for Alternative 6, the "All River Plan", including the acquisition of the 100-acre marsh at the mouth of the Santa Ana River.

The Commission reaffirms its support of joint federal-state efforts to cooperate in feasibility studies and planning efforts such as the Delta Support Studies, and the Environmental Impact Statement for the Peripheral Canal. We support funding of the federal share of the costs of construction of Suisun Marsh facilities as a protective measure for fish and wildlife resources. We support construction of the Grass Valley-Buckhorn Mountain Debris Dam on the Trinity River. The dam and assorted programs will provide stream rectification for the Trinity River Division of the Central Valley Project. We urge funding for Federal participation in these programs.

The Commission supports the concept of the San Luis Drain to maintain a salt balance in the westside of the San Joaquin Valley. Extension of the drain both to the north and south of Kesterson Reservoir is dependent upon reauthorization of the San Luis Drain.

The Commission supports adequate funding for the San Felipe Unit. The project is moving forward and any decrease in funding level will result in delays. It will increase the cost of the project. We support funding of the San Benito County Water Conservation and Flood Control District distribution system loan. This facility is an integral part of the San Felipe Unit.

We also support continuing construction of the Tehama-Colusa Canal.

The Commission supports appropriations for the San Francisco Bay to Stockton Ship Channel, the Sacramento Ship Channel and the San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal Survey.

The California Department of Water Resources (DWR) and the Corps of Engineers have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship Channel projects.

The Commission supports the funding of detailed engineering studies for deepening the Sacramento Ship Channel. The Commission supports funding for metering flows and water quality in the Bay as agreed to by the Corps and the State.

The investments made today will not only provide immediate benefits, but also savings for the future. The projects we can complete today will save billions of inflated dollars tomorrow and eliminate waste of our precious natural resources.

I urge this Committee to favorably consider our recommendations for appropriations for California's energy, flood control, and water resources programs in F.Y. 1981-82.

I would like to have my statement and the attached tabulation made part of the record. Now, with your permission, Mr. Chairman, I will present the other representatives.

S U M M A R Y

Requested Amount

Fiscal Year

1982

Project		
San Francisco Bay to Stockton Ship Channel	$1,400,000	1) Commence Construction of Stockton Channel; 2) Continue preparation of draft GDM and EIS for Richmond Reach; 3) Continue hydrological studies of hydraulic salinity barrier for Baldwin Channel
(John F. Baldwin and Stockton Ship Channels)		

March 26, 1981

TESTIMONY

My name is Paul F. Hughey. I am General Manager of the Contra Costa County Development Association, an official Economic Development Agency of Contra Costa County, California.

My organization would like to express our appreciation for the continued appropriations the Committee has provided to enable proper planning, design and a limited amount of construction for the San Francisco Bay to Stockton Ship Channel improvement project. This very important improvement is vital to the long range economic viability of the large area it serves. We also greatly appreciate the manner in which the Corps of Engineers is carefully considering the environmental impact of this project within the guidelines provided by the Congress. We approve of the careful analysis of environmental, economic and social factors as they relate to this project and we will cooperate fully in providing any information or assistance the Corps may require to enable proper judgement on initiating further construction.

Background

The Development Association filed a brief with the Corps of Engineers in 1958, requesting a study of the feasibility of improving the main shipping channel between San Francisco Bay and the Port of Stockton. As a result, the study was funded by the Congress under an appropriation sponsored by the late Congressman John F. Baldwin. This project, described in House Document No. 208 of the 89th Congress, 1st Session, was approved by the Congress in September 1965. As a part of this project, the San Francisco Bar has been deepened from 50' to 55' and the main shipping channel into San Francisco widened. Some minor additional construction was also provided near the Port of Richmond and on the levee system of the upper San Joaquin River. For the past few years, however, the Corps has been engaged in studies to enable it to prepare the Environmental Impact Studies required by law.

In order to expedite work on portions of this overall project, the project has been divided into five phases or sections. Commencing at the entrance to San Francisco Bay, Phase 1, the deepening of the San Francisco Bar to 55' has been completed.

Phase 2 consists of deepening the West Richmond Channel from 35' to 45' for a distance of approximately three miles to connect the naturally deep waters of San Francisco Bay and West San Pablo Bay. The corps is continuing preparation of the Draft GDM and EIS for this phase scheduled to be completed by January, 1982. The State of California, Congressman George Miller, the Contra Costa County Board of Supervisors, and local interests all support this phase of the overall project and it should proceed expeditiously. It will provide the needed deeper channel for the Port of Richmond which has placed its first container berth in operation, provide a better approach to the Chevron, USA, Richmond Refinery wharf, and provide a needed deeper channel for the U. S. Naval Fuel Supply Depot at Point Molate, near Richmond, and

the bulk liquid facilities of the Port of Richmond at Point San Pablo. It is expected that construction funds will be requested in FY83.

Phases 3 and 4 consists of deepening the existing 35' channel through San Pablo Bay and lower Suisun Bay Channel to 45'. Corps model studies indicate that this phase will induce an increase in salinity levels in the Delta. Therefore, the Corps is prepared to continue further engineering and model studies on various types of underwater salinity barriers or sills in the Carquinez Strait to mitigate the effects of the project. The Corps has the capability of $600,000 for work on phases 2, 3 and 4.

It should be noted that the Commandant of the U. S. Naval Shipyard, Mare Island, has advised the Corps of Engineers that they have an operating requirement for a 36' channel. The San Francisco District of the Corps is preparing a draft EIS. This project will proceed with DOD funding.

Phase 5 consists of deepening the Stockton Channel and upper Suisun Bay Channel from the existing 30' to 35' from Point Edith, upstream of Martinez, to the Port of Stockton. This phase has all necessary permits and approvals and only awaits funding for commencement of construction. The Corps has the capability to the extent of $800,000 to commence construction of this phase.

The Economy

The San Francisco Bay is known throughout the world as one of the world's great harbors. In 1978, the latest year for which Corps of Engineers figures are available, some 56 million tons of cargo passed through the Golden Gate. Almost two-thirds of this total passed over the public and private docks of Contra Costa County and the Port of Benicia in adjacent Solano County via the existing John F. Baldwin Ship Channel.

All six of the petroleum refineries in Northern California, representing some 800,000 barrels per day of throughput, lie on this channel. Also on this channel is the world's largest sugar refinery, C&H at Crockett, importing almost 1 million tons of sugar each year. Steel plants, chemical plants, paper mills, a gypsum plant and expanding general cargo facilities, such as the electric power generating plants of the Pacific Gas and Electric Company are partially dependent upon shipment of fuel oil as they reduce the use of natural gas for boiler fuel. These two power plants alone represent some 30% of all the electric generating capacity in Northern and Central California.

Also served by this channel are three important naval installations; the Naval Fuel Supply Depot at Point Molate, near Richmond; the U. S. Naval Shipyard at Mare Island, Vallejo; and the U. S. Naval Weapons Station at Concord which is shifting to containerization which will require a deeper channel. The importance of a safe and adequate

shipping channel to our Navy is obvious. It might be noted that the Corps does not include national defense installations in computing the cost-benefit ratio of projects.

Mr. Chairman, given the present serious energy problems, balance of payments, and inflationary economic situation, it would seem obvious that everything possible should be done to reduce transportation costs, improve efficiency, and minimize environmental impacts.

In 1979, some 1,200 tankers entered San Francisco Bay. Over 250 of these vessels had a draft of 35 feet or more which is the dock side depth of all of the petroleum refineries and terminals on the channel. These vessels have to anchor in South San Francisco Bay and have a portion of their cargo lightered off before they can proceed partially loaded to the refinery or terminal docks. This is an environmentally unsound practice, since it is known that the greatest risk of oil spillage occurs when it is necessary to transfer cargo. A deepening of the channel would enable these ships to proceed directly to their docks, thereby reducing time and transportation costs and reducing environmental hazard.

Conclusion

Mr. Chairman, the long-range viability of the San Francisco Bay Area regional economy is dependent upon the completion of this project. The last significant improvements to this main shipping channel were completed in the 1930's. The world shipping fleet has changed dramatically since that time. The ships are much larger in every respect and unless this channel is improved, the region cannot remain competitive to the detriment of our nation. Given the importance of international trade, the balance of payments and the very large sums collected in customs receipts by the San Francisco District each year, true national interests are involved.

We request the Committee to appropriate the amount of $1.4MM which is the Corps capability. In the event the Corps capability is adjusted upwards, we would request the higher amount to enable a more rapid conclusion to the scheduled work.

Mr. Chairman, we thank the Committee for its attention to our concerns. Thank you.

STATE OF CALIFORNIA—RESOURCES AGENCY
EDMUND G. BROWN JR., Governor
DEPARTMENT OF WATER RESOURCES
CALIFORNIA WATER COMMISSION
SACRAMENTO

Address All Communications to
The Chairman of the Commission
P. O. Box 388
Sacramento 95802
Phone (916) 445-8750

March 13, 1981

TO: ALL INTERESTED PARTIES

SUBJECT: RECOMMENDATIONS FOR F.Y. 82 WATER PROJECTS AND CONGRESSIONAL HEARINGS FOR F.Y. 1981-82

Our February 27, 1981 notice included information on the House and Senate Hearings by the Committee on Appropriations, Sub-Committee on Energy and Water Development on March 26, 1981.

The date for the hearings is firm. It will be on Thursday, March 26, 1981.

There is a late change in the location of the Senate Hearing Room:

Thursday, March 26, 1981
2:00 p.m.
Room 1318 - Dirksen Office Building

There is no change in the House Hearing time or location as previously noticed.

Attached is a tabulation presenting the Commission's final recommendations for F.Y. 82.

Thank you for your cooperation.

Sincerely,

Scott E. Franklin

Scott E. Franklin
Chairperson

Attachment

CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
1.	Alhambra Creek Contra Costa	$ 23,000 (850)	$ (300)	(0)	(0)	Under Study
	Local interests will assess proposed alternatives before supporting additional funds.					
3.	Corte Madera Creek Marin	19,000	7,000	(0)	(0)	0
	Local interests are not able to finance their costs.					
4.	Cottonwood Creek Shasta	407,000 (11,200)	(5,275)	(3,000)	(4,200)	(4,200)
	State will contract with Corps to purchase water from this project. Issues involving acquisition of lands for wildlife mitigation, access to private lands for purpose of fish and wildlife studies, and acqusition of lands needed for replenishment of fish spawning gravels need to be resolved.					
5.	Cucamonga Creek San Bernardino	113,000	65,766	25,500	25,500	25,500
	State Supports appropriation of $5 for post-project fish and wildlife evaluation studies to begin in 1981.					

Amounts in parentheses () are for pre-construction planning.

CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
6.	Dry Creek (Warm Springs Lake) Sonoma	274,000	201,987	20,800	36,000	20,800
	Fish and wildlife mitigation issues should be resolved as soon as possible.					
7.	Goleta and Vincinty Santa Barbara	37,200 (2,170)	(500)	(520)	(520)	(520)
	Commission support $15 for fish and wildlife planning and post project evaluation of mitigation.					
8.	Merced County Streams Merced	83,100 (5,700)	(4,456)	(1,244)	(1,244)	(1,244)
	Continued Commission support is contingent upon inclusion of a 2,800 acre wildlife easement area on lower reaches of Bear Creek.					
9.	New Melones Lake	370,000	309,404	12,700	28,000	12,700
	The Commission reaffirms its position that the appropriations should be conditioned to provide that New Melones Reservoir shall be operated in accordance with the provisions of Decision 1422 of the State Water Resources Control Board. Commission urges expeditous acquisition of riparian habitat and flood easements downstream of the dam, and resolution of downstream salmon problems related to release schedules, flow, and temperature.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
10.	Pajaro River; Uvas Carnadero Santa Clara	940 (285)	(260)	(0)	(680)	Support
	Resources Agency 2/27/80 letter to Corps outlines State-federal mitigation program under which project can proceed. Commission supports such authorization.					
11.	Red Bank and Fancher Creeks Fresno	(42,730) (4,000)	(0)	(0)	(400)	Support
	Commission supports funding for continuing planning and engineering studies.					
12.	Sacramento River and Major and Minor Tributaries Several	11,900	11,322	200	200	200
13.	Sacramento River Bank Protection Several	96,000	42,367	3,400	3,400	3,400
	Resources Agency 2/27/80 letter to Corps outlines State-federal mitigation program under which project can proceed. Commission supports such authorization.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
14.	Sacramento River, Chico Landing-Red Bluff Several	12,200	5,645	0	0	Under Study
15.	San Francisco Bay to Stockton Ship Channel	166,000	9,409	1,400	1,400	1,400

DWR and the Corps have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship channel projects.

The Corps should determine the Stockton Ship Channel deepening project's input on the dissolved oxygen problems in the San Joaquin River if any, and propose methods of mitigation if appropriate. We urge the Corps to complete an agreement with the Department of Fish and Game.

15A.	Sacramento Ship Channel	1,250	0	0	400	400

Based on the letter of agreement between DWR and the Corps dated 3 February, 1981, as described in "San Francisco Bay to Stockton Ship Channel" (Item 15), CWC supports the funding of detailed engineering studies for deepening the Sacramento deep water channel.

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
16.	San Luis Rey River San Diego	22,000 (2,000)	(1,464)	(300)	(300)	(300)
17.	Santa Maria Levees Rehabilitation Santa Barbara	12,600	8,075	4,525	4,525	4,525
	Commission supports $25 for post project evaluation of fish and wildlife mitigation measures.					
18.	Santa Paula Creek Ventura	34,600	4,281	310	310	310
	Commission supports expenditure of $5 for fish and wildlife planning.					
19.	Sweetwater River San Diego	18,100	1,414	0	0	0
	Commission will support project if agreement among Corps, U.S. Fish and Wildlife Service, California Department of Fish and Game, and California Department of Transportation is negotiated and Congress authorizes mitigation measures.					
20.	Walnut Creek Contra Costa	77,500	26,226	10,000	10,000	10,000

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
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(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
21.	Wildcat and San Pablo Creeks Contra Costa	12,800	1,110	0	0	Under Study
	Project has been deferred due to lack of local interest.					
23.	Morrison Creek Phase I Sacramento	2,200	(650)	(650)	(650)	Under Study
24.	Santa Ana River Main Stem Phase I Several	2,200	1,970	0	0	Support
	Commission supports Alternative 6, the All River Plan including the preservation of the 100-acre marsh at the mouth of the Santa Ana River. Commission supports early funding of Phase II studies and allocation of $15 for fish and wildlife studies.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
	SURVEYS					
24A.	Alameda Creek (Upper Basin)	1,270	870	150	150	150
24B.	Cache Creek	1,400	0		300	Under Study
24C.	Calleguas Creek Ventura	1,665	915	150	150	150
	Commission supports the allocation of $15 for pre-project fish and wildlife studies in F.Y. 82.					
27.	Guadalupe River Santa Clara, Alameda	1,463	1,388	0	73	Support
	Commission has supported investigation. The Commission will support future funding after feasibility report is reviewed and approved.					
27A.	Hansen Dam Los Angeles			0	0	500,000
	Commission adopted a report dated March 6, 1981 recommending funding of a study to remove sediment and silt from Hansen Reservoir. The report recommends authorization of water conservation, recreation, and vegetative management functions. The Los Angeles District Corps of Engineers is preparing a reconnaisance report on alternative remedial measures. The City of Los Angeles by Resolution No. ___ supports the study. The California legislature is considering AJR 14 (Richard Katz) supporting the study. Fish and wildlife impacts will need funding. The Commission estimates a need for $500,000 for F.Y. 82.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
28.	Los Angeles County Drainage Area Los Angeles	3,210	1,573	500	500	500
	Commission supports $15 for fish and wildlife studies.					
29.	N. California Streams Several	7,145	5,946	98	500	98
	Commission feels the Colusa levee study and Russian River gravel mining study should be given top priority. The Garden Bar Reservoir study should be undertaken only if the investigation is funded at a level in excess of $175,000. Corps and U.S. Fish and Wildlife Service should define the fishery resource study program for the Russian River.					
30.	Sacramento River and Tributaries, Bank Protection and Erosion Control Several	2,400	1,812	300	300	300
	This investigation could serve as a vehicle to resolve some of the environmental issues surrounding bank protection work. The Commission supports adequate funding to ensure that the study is responsive to all issues including developing construction techniques and maintenance standards which will minimize adverse environmental impacts. Commission recommends completing survey in 1981-82.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
31.	Sacramento-San Joaquin Delta Several	1,750	1,516	190	190	190
32.	San Diego County Streams	2,089	1,899	0	200	0
	If the investigation is funded, the Commission supports an allocation of $15,000 for fish and wildlife studies.					
33.	San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal Several	7,145	5,238	0	255	255
	San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal CWC supports $255 thousand for metering flows and water quality in the Bay as agreed to by the Corps and the California multi-agency letter of understanding.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
34.	San Francisco Bay Shoreline Several	1,560	650	700	700	700
	Commission support conditioned on a State-Corps letter of understanding that initiation of Phase II Studies will not begin until after review of Phase I studies, including an appraisal evaluation of tidal flooding in the Suisun Marsh. An Corps of Engineers-California Department of Fish and Game agreement has been executed regarding the relative benefits claimed for the protection of diked historic tidelands.					
35.	San Joaquin River Basin Several	6,855	4,691	1,240	1,240	1,240
36.	San Leandro Bay Alameda	645	50	0	150	150
37.	San Lorenzo River Santa Cruz	440	250	0	150	0

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
39.	Santa Ana River and Orange County Riverside, Orange, San Bernardino	7,120	5,602	485	760	485
	Commission supports funding adequate to accelerate the investigation and supports an allocation of $15 for fish and wildlife studies at Lake Elsinore..					
39A.	Santa Barbara County Streams, Santa Barbara	1,280	559	150	150	150
	Commission recommends an allocation of $5 for fish and wildlife studies.					
40.	Walnut Creek Basin Contra Costa	810	574	0	90	Under Study
41.	Whitewater River Riverside	2,270	2,270	0	0	25
	Commission supports $25 for fish and wildlife studies.					

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
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(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
41A.	Statewide Assessment of Flood Plain Managment in California		0	0	0	150
	Total			88,512		90,042

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CALIFORNIA WATER COMMISSION

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FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	RECLAMATION PROGRAMS				
	Sacramento River Division				
43.	Tehama-Colusa Canal and Facilities Tehama Glenn, Colusa Yolo	212,000	165,590	11,091	11,091
44.	Tehama-Colusa Canal Distribution System Glenn, Yolo	51,000	40,563	7,950	7,950
45.	Tehama-Colusa Fish Fac. Red Bluff Recreation Tehama	21,016	20,854	0	0

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
46.	Permanent Operating Facilities Tehama Glenn	6,839	6,011	1,004	1,004
47.	Corning Canal Relift Pumps, Safety Fencing and Automation of Tehama Colusa Canal Tehama	3,260	2,060	1,483	1,483
	Commission supports $50 for fish and wildlife studies to improve fish screens at the Red Bluff diversion dam, study overall problems encountered by salmon at the diversion. Adequate funds should be expended in F.Y. 82 to provide fencing and other measures along the canal to protect wildlife and to construct a fish screen on the Corning Canal.				
	Auburn-Folsom South Unit				
48.	Auburn Dam and Reservoir	1,179,252	228,109	2,841	2,841
49.	Auburn Powerplant Placer	183,705	8,200	0	0
50.	Auburn Powerplant Switchyard Placer	10,570	124	0	0

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
51.	Recreation Facilities Placer	26,747	6,131	0	0
52.	Fish and Wildlife Studies		0	0	0

The Commission supports economic, environmental and fish and wildlife studies recommended by former Secretary Cecil Andrus.

The Commission opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam.
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed;
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board;
4. The State has approved the design of the dam finally selected.

53.	Foresthill Divide (Sugar Pine Dam) Placer	50,450	35,956	1,426	1,426

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
54.	Folsom South Canal	270,934	39,881	0	400
	Same conditions for Items 48 to 52.				
55.	Service Facilities		3,549	0	0
	San Luis Unit				
56.	San Luis Canal-Flood Protective Work and subsidence correction	48,200	28,996	9,800	9,800
57.	Other San Luis Facilities (O'Neill P.P. and San Luis Canal Turnouts) Several	26,716	26,723	500	500
58.	Relift Pumping Plants and Turnouts-Westlands WD Merced, Fresno, Kings	70,800	40,466	145	145
59.	San Luis Drain Several	225,000	46,104	4,700	0

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
60.	Westlands WD Distribution System Several	220,000	159,705	400	0
61.	Westlands WD Drainage Collector System Drain Several	80,600	17,027	100	0
62.	Service Facilities Several		715	0	0

Since Water and Power Resources Service will have expended all funds allowed under the Westlands monetary authorization, the Commission reaffirms in general its opposition to additional funds for Items 59, 60, 61 and 62 until the following conditions have been met.

1. The features of the Unit are properly authorized by Congress.

2. The water service, distribution system, and San Luis Drain contracts with Westlands are amended to include the payment provisions recommended conceptually by the San Luis Task Force.

3. The Water and Power Resources Service agrees that the federal Central Valley Project and the State Water Project will be operated to meet the identical water quality standards in the Delta.

4. The Westlands Water District complies with Reclamation Law.

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Miscellaneous Project Facilities				
63.	Delta-Mendota Canal Raise Lining and Rehabilitation Merced	74,849	71,961	988	988
64.	Friant-Kern Canal Rehabilitation and Betterment Work Several	95,700	95,103	365	365
65.	Trinity River	8,300	7,655	275	275
65A.	Trinity River Buckhorn Mountain Project Trinity, Humboldt	6,000		0	6,000

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CALIFORNIA WATER COMMISSION

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NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Trinity River Division				
65B.	Whiskeytown Powerplant Shasta	2,251	65	0	Support
	Commission supports adequate funding for mitigation of fish and wildlife impacts and development of a salmon and steelhead restoration plan for Clear Creek.				
	San Felipe Division				
68.	Pacheco Tunnel Continue Construction Merced, Santa Clara	82,546	58,503	12,018	12,018
69.	Pacheco Pumping Plant and Switchyard	40,820	3,138	3,670	6,470
70.	Pacheco Conduit	44,100	1,772	1,621	7,721
71.	Santa Clara Facilities Santa Clara	104,800	10,904	15,766	17,466
72.	Hollister Conduit	22,100	4,076	1,980	1,980

Amounts in parentheses () are for pre-construction planning.

CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
74.	Other features Pre-construction Several		476	1,995	1,995
	The Commission urges the Congress to provide that diversions of water from the Delta by the Water and Power Resources Service be subject to federally approved Delta water quality standards. The Commission affirms that it is desirable that the WPRS operation in the entire area conform to provisions of reclamation Law, including those provisions which relate to residency and acreage limitations.				
74A.	San Benito County Water Conservation and Flood Control District San Benito	19,770	200	3,840	3,840
	Other Projects				
79.	Contra Loma Res. Rec. Facilities Contra Costa	124 Local sponsor matches federal funds	124	60	60
	Washoe Project				
79A.	Stampede Powerplant Nevada	3,192	1,996	975	975

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Klamath Project				
79B.	White Lake Division Siskiyou	961	4	20	20
80.	Orland Project Safety of Dams-East Park Dam and Stony Gorge Dam - Glenn	10,608	3,784	800	800
81.	Coachella Canal Replacement (Lower Colorado Region) Imperial	47,037	47,029	1,500	1,500
	Commission supports expenditure of $1500 for wildlife mitigation measures and an additional $20 for resolution of the deer drowning problem if necessary.				
81A.	Santa Margarita (Lower Colorado Region) San Diego		0	0	Support
	Commission supports funding to update feasibility studies including $25 for fish and wildlife studies.				

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Loan Program				
84.	Glenn-Colusa Irrigation District Glenn, Colusa	17,000	16,985	585	585
88.	Yolo-Zamora Water District Yolo		0	0	Support
	Issues relating to adequacy of a water supply and fish and wildlife mitigation measures need resolution.				
88C.	Colusa County Water Dist. Colusa	13,436	0	0	Support
88D.	Glide Water District Glenn	4,632	0	0	Support
88E.	Oakdale Irr. Dist Stanislaus, San Joaquin	13,815	0	0	0

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
88F.	Yuba County Water Agency Yuba	28,236	0	0	Support
88G.	Ramona Municipal Water District San Diego	17,000	0	2,500	2,500
	Appraisal Investigations				
89.	Boca-Prosser Powerplants Nevada County	207	136	0	0
	Commission supported the investigation and supports early construction.				
90.	Red Bluff Diversion Dam Powerplant Tehama County	153	126	0	0
	Commission supported the investigation and supports early construction. Commission supports $50 for fish and wildlife studies identified under Items 43-47, Tehama Colusa Canal.				

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
91.	Keswick Powerplant Enlargement Shasta County	117	112	0	0
	Commission supported the investigation and supports early construction.				
92.	Stony Gorge-East	139	135	0	0
	Commission supported the investigation and supports early construction.				
	Feasibility Investigations				
93.	Kellog Unit Reformation Delta Division Contra Costa	525	0	0	160
	Commission supports funding of feasibility investigation of Los Vaqueros Reservoir and relocation of Contra Costa Canal intake.				
	State and WPRS have executed a memorandum of understanding dated December 12, 1980 regarding a joint investigation of the Las Vaqueros-Kellog project including relocation of Contra Costa canal intake. Commission supports $10 for fish and wildlife studies.				

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
94A.	Shasta Dam Enlargement Shasta	7,000	0	500	500
	State and WPRS signed 12/16/79 letter of intent to jointly study enlargement of Shasta Dam.				
96.	Ventura County Water Project Ventura	816	812	0	Delete
	Commission has supported the investigation. WPRS has no need for funding request until Phase II studies are authorized.				
	Special Investigations				
98.	Minor work in connection with completed projects Several	1,916	376	110	110
	Stanislaus River Division				
98A.	New Melones Studies	600		0	Support

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
99.	Delta Support Studies Several	10,000	6,058	775	1,312
	Commission supports funds needed for the WPRS to catch-up in providing its share of the costs of these studies.				
99A.	Delta Corn Requirements Study - San Joaquin	150	0	0	50
	Funds of $150 for 3-year study will allow WPRS to equal State's contribution.				
99B.	Peripheral Canal Environmental Impact Statement and Advanced Planning			0	400
99C.	Suisun Marsh Facilities solano County	18,500	0	0	2,500
	State is nearing completion of initial facilities. Commission supports funding for federal participation.				
100.	Environmental and Interagency Coordination Activities, Mid-Pacific Region Several	9,642	7,109	475	475

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
101.	Fish and Wildlife Management Study	827	571	475	475
103.	Geothermal Resources (Lower Colorado Region) Several	16,924	8,812	0	25
	Commission supports $38 for fish and wildlife studies.				
103A.	Geothermal Resources (Mid Pacific Region)	443	263	30	30
104.	Wind Energy Study Central California-Nevada	452	190	230	230
	Commission supports funding adequate to accelerate the investigations.				
105.	Technical Assistance to States	702	87	75	75
	Colorado River Salinity Control Project				
106.	Paradox Valley Unit	51,001	11,831	1,448	1,448

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
107.	Grand Valley Unit	146,025	21,036	7,713	7,713
108.	Las Vegas Wash Unit Nevada	61,847	18,397	90	90
109.	Colorado River Water Quality Improvement Feasibility Investigations Multi-State	29,780	17,450	210	210
	Commission supports entire program. $210 is for California portion including $25 for fish and wildlife studies.				
110.	Central Valley Conservation Study			0	Support
	Commission supports preparation of a water conservation plan by Water and Power Resources as requested by Governor Brown in his July 18, 1980 letter to Secretary Cecil Andrus.				
111.	Water Management Study (San Felipe Service Area) Santa Clara, San Benito			0	100

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CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
112.	Solar Energy Opportunities Study	453	40	0	130
113.	Energy Conservation Study	538		0	150
114.	San Francisco Bay Area Regional Water Reuse Study Several	2,600		0	150
115.	Lower Colorado River Water Conservation and Efficient Use program Several	2,700	445	600	600
116.	Palo Verde Hydropower Riverside	75	50	25	25

Local Agency will handle through Department of Energy

Amounts in parentheses () are for pre-construction planning.

CALIFORNIA WATER COMMISSION

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
117.	Water Conservation Opportunities Imperial Irrigation Dist. Imperial	840	505	265	265
	Commission supports an allocation of funds sufficient to study the fish and wildlife imports i.e. loss of riparian habitat and effect on the Salton Sea.				
	Total			113,999	119,401
118.	Department of Agriculture Agricultural California allocation Conservation Program.	$190,000 is for a nationwide appropriation.			901 $4,830 is

Amounts in parentheses () are for pre-construction planning.

STATEMENT OF DAVID KATZ

Mr. KATZ. Mr. Chairman and members of the commmittee, I am President of the California State Reclamation Board, a State agency with responsibility for furnishing the required Federal assurances for channel and levee projects in the Central Valley of California. We have a direct and continuing interest in providing an integrated and complete system of flood protection by means of both reservoirs and channel and levee projects. I have submitted a written report for the record and due to the limited time available, I will touch only on the highlights of that report on my oral testimony.

In the Sacramento Valley, the Sacramento River Bank Protection Project is vital to the preservation of the great Sacramento River system. We are sharing the costs on a ⅓ State-⅔ Federal ratio and strongly urge the approval of $3,400,000 for this project.

Construction of the Cottonwood Creek Project, which is on the largest uncontrolled tributary of the Sacramento River, would provide badly needed flood control benefits to the Sacramento Valley. A $4,200,000 appropriation is badly needed for this project.

We would also like to express our support for Merced County Streams, Sacramento River, Major and Minor Tributaries and New Melones Lake projects.

Several of the proposed Surveys and New Starts are also vital to California. Probably the most important to our area of interest is the Sacramento River and Tributaries Bank Protection and Erosion Control Study. Results of this study will provide necessary information for a comprehensive treatment for 312 miles of the Sacramento River from Collinsville to Shasta Dam. Funding for full Corps of Engineers capability of $300,000 is strongly recommended.

As indicated in our statement which was submitted for the record, we are in support of a number of projects not discussed in this brief oral presentation due to time limitations.

We would urge, however, that full consideration be given to all recommendations contained in the written statement.

I wish to thank the committee for providing me this opportunity to express the views of my board and would ask that this statement as well as the written report previously referred to be made an official part of the hearing record.

Mr. BEVILL. It will be made a part of the record.

[The information follows:]

STATE OF CALIFORNIA

THE RESOURCES AGENCY

THE RECLAMATION BOARD

FLOOD CONTROL RECOMMENDATIONS IN THE CALIFORNIA CENTRAL VALLEY

FISCAL YEAR 1982

Presented to

SENATE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON PUBLIC WORKS

and

HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON PUBLIC WORKS

THE RECLAMATION BOARD
RESOURCES AGENCY
STATE OF CALIFORNIA

Summary of Recommendations
(in thousands of dollars)

Corps of Engineers Project	Corps Capability	President's Budget	Recommendations 1982
I. Construction and Advance Planning			
Cottonwood Creek	($4,200)	($3,000)	($4,200)
New Melones Lake	28,000	12,700	12,700
Merced County Streams	(1,244)	(1,244)	(1,244)
Morrison Creek, Phase I, G.D.M.	(650)	(650)	Support
Sacramento River Major and Minor	200	200	200
Sacramento River Bank Protection	3,400	3,400	3,400
Sacramento River, Chico Landing to Red Bluff	0*	0	0
Cache Creek Basin Investigation	(300)	0	Support
Redbank and Fancher Creeks	(400)	(0)	Support
TOTAL	$38,394	$21,194	$21,744
II. Surveys and New Survey Starts			
Northern California Streams	300	98	98
Sacramento River and Tributaries Bank Protection and Erosion Control	300	300	300
Sacramento - San Joaquin Delta	190	190	190
San Joaquin River Basin	1,240	1,240	1,240
TOTAL	$2,030	$1,828	$1,828

Amounts in parentheses ( ) are for Pre-Construction Studies.
*Because of lack of State support, Corps has not shown its capability.

U. S. Water and Power Resources Project	U. S. Water and Power Resources Capability	President's Budget 1982	Recommendation 1982
Auburn Dam	Unknown	$2,841	$2,841
Shasta Dam Enlargement		500	500

The Reclamation Board, as the State agency which furnishes required local assurances for Federal levee and channel projects in the Central Valley of California, respectfully submits this statement in support of appropriations of Federal funds for accomplishment of flood control works.

The Reclamation Board recommends and strongly urges appropriation of funds in the amounts listed in the summary. While all projects are important to the health, safety and well-being of Central Valley residents, the projects and the surveys described as follows are particularly critical:

I. Construction and Advance Planning -

A. Cottonwood Creek:

The project works, authorized in 1970, consist of two dams, with 2,000,000 acre feet of multi-purpose storage. The 1979-80 flood season again indicated the need for control on Cottonwood Creek, the largest uncontrolled tributary of the Sacramento River below Shasta Dam.

The State will contract with the Corps of Engineers to purchase water from the project. Issues involving acquisition of lands for wildlife mitigation, access to private lands for purpose of fish and wildlife studies and acquisition of lands needed for replenishment of fish spawning gravels need to be resolved.

The Reclamation Board recommends appropriation of $4,200,000 in 1982 for the Cottonwood Creek Project.

B. New Melones Lake:

New Melones Dam was authorized in the 1944 and 1962 Flood Control Acts. Initial construction was started in 1966 with work beginning on the main dam and appurtenances in 1974.

The New Melones Lake Project is located on the Stanislaus River about 45 miles east of Stockton. The project, when completed, will provide flood control, irrigation, power, general recreation, enhancement of fish and wildlife, and other benefits. The project consists of a dam, lake and powerplant.

The project will provide flood protection to 35,000 acres of highly developed agricultural land along the Stanislaus River. In conjunction with other projects on the Lower San Joaquin River and Tuolumne River, it will materially aid in reducing flood stages along the Lower San Joaquin River and in the San Joaquin Delta.

The Reclamation Board recommends appropriation of $12,700,000 in 1982 to continue the acquisition of riparian habitat and flood easements downstream of the dam. This appropriation should be conditioned upon the provisions of Decision 1422 of the State Water Resources Control Board.

C. Merced County Streams:

This project, authorized in 1970, will provide flood protection for Castle Air Force Base, the City of Merced and adjacent suburban and agricultural lands at an estimated Federal cost of $73,400,000. Funds are required in 1982 to continue the pre-construction planning. The project is contingent upon inclusion of a 2,800 acre wildlife easement area on the lower reaches of Bear Creek.

The Reclamation Board strongly recommends an appropriation of $1,244,000 in 1982 for the Merced County Streams Project.

D. Morrison Creek - Phase I:

A study of Morrison Creek and its tributaries was authorized in 1963. The study area includes Morrison Creek, its principal tributaries which are Elder and Laguna Creeks and various smaller streams. Runoff from the stream group area drains into the Sacramento - San Joaquin Delta. The drainage area includes portions of Sacramento and adjoining suburbs, the communities of Elk Grove and Florin and important military establishments.

State authorization requires assurances from the County of Sacramento, which have not been received. The County of Sacramento is in the process of establishing flood plain management along portions of the Morrison Creek Stream Group. In addition, the County has purchased some property within the project area

for park purposes. These two actions have caused substantial changes in the original authorized plan. The Reclamation Board supports appropriations that will permit necessary project reformulation.

E. Sacramento River and Major and Minor Tributaries:

Improvement of Sacramento River Major and Minor Tributaries was authorized in 1944 and further amended in 1950. This project provides for revetment for protection of bypass levee slopes against erosion. The bypass levee revetment features of the project will provide protection to flood plains adjacent to the bypasses and will decrease requirements for levee repairs under emergency conditions.

The Reclamation Board recommends appropriation of $200,000 in 1982 for this project.

F. Sacramento River Bank Protection:

The project, authorized in 1960, is a long range, Federal - State effort, aimed at preserving the existing project levee system of the Sacramento River. These existing levees, which offer flood protection to the Central Valley over a reach of 185 miles, are very old and they are subject to constant erosion. The Sacramento River Bank Protection Project work consists of sloping and placing stone protection at those points which are identified each year as the most critical. Since 1963 some 612,000 lineal feet have been

strengthened in this fashion. On this project all costs are shared with the Federal Government paying two-thirds and the State one-third.

The Resources Agency by letter dated February 27, 1980, outlined the State and Federal mitigation program under which the project can proceed. Federal authorization of this mitigation program is necessary before the Sacramento River Bank Protection Project can continue beyond Unit 36.

The Reclamation Board recommends approval of an appropriation of $3,400,000 for 1982 for the Sacramento River Bank Protection Project.

G. Sacramento River - Chico Landing to Red Bluff Project:

This project, authorized in 1958, comprises extension and modification of the existing Sacramento River Flood Control Project by the construction of bank protection and minor channel improvements along the Sacramento River between Chico Landing and Red Bluff.

The Board is reluctant to participate in future units of this project until the Sacramento River and Tributaries Bank Protection and Erosion Control Investigation is completed.

The Board will consider refunding for the Chico Landing to Red Bluff Project, provided it can be demonstrated that specific sites would have a detrimental effect on the Sacramento River Flood Control Project if the bank protection work is not done.

H. Cache Creek Basin:

The Corps of Engineers has completed their Feasibility Report regarding water resources development in the Cache Creek Basin. The report recommends enlarging the outlet channel of Clear Lake and constructing a bypass channel to reduce flooding of development around the lake, enlarging and raising of levees around the existing settling basin near the mouth of Cache Creek to increase the basin's sediment storage capacity, and establishment of a National Wildlife Refuge in the existing Cache Creek Settling Basin at a total cost of $17,960,000.

This report states that a major flood problem exists along the rim of Clear Lake. Historical inflows to the lake, temporarily raise the lake level causing significant damage to lakefront development. Serious flood damages occurred in 1958 and 1970, causing estimated damages of $900,000 and $500,000 respectively. This problem can be economically solved by increasing the discharge capability of the lake's outlet channel.

Also, the storage capacity of the Cache Creek Settling Basin, which was constructed in 1937 to control sediment inflow to the Yolo Bypass of the Sacramento River Flood Control Project, is now nearly exhausted and sediment deposition from Cache Creek is again affecting the flood carrying capacity of the Bypass and the maintenance of downstream navigation and flood control works. The settling basin's

storage capacity would be increased and a 3,600 acre National Wildlife Refuge would be established in the basin as a part of the National Migratory Bird Management Program.

Congress has not yet authorized this project; however, the $300,000 Corps' capability in Fiscal Year 1981/82 would enable the Corps of Engineers to proceed with design studies during this year. This would accelerate the project completion when Congress authorizes and funds the construction phase.

The Reclamation Board strongly supports authorization of the Cache Creek Basin Project.

I. Red Bank and Fancher Creek:

The Corps of Engineers has completed their Feasibility Report regarding water resources development on Redbank and Fancher Creeks, Fresno County. The report recommends single purpose flood control improvements on Redbank, Fancher and Pup Creeks and Alluvial Drain; and dual purpose flood control and recreation facilities on Big Dry Creek. The plan provides for enlargement of the existing Big Dry Creek Dam and Reservoir, a new dam on Fancher Creek and detention basins on Redbank and Pup Creeks and Alluvial Drain.

The report states that significant flood problem exists in the expanding Fresno - Clovis metropolitan area. Flooding occurs throughout the

study area along Redbank, Fancher, Big Dry, Dog and Pup Creeks and Alluvial Drain when channel capacities are exceeded. The most recent serious flooding in January and February, 1969, caused an estimated $4.7 million in damages to agricultural lands, residences and commercial and industrial properties.

The flood problem can be economically dealt with by construction of the proposed flood control features. Also, recreational features could be incorporated in the plan for enlarging Big Dry Creek Dam and Reservoir.

Congress has not yet authorized this project; however, the $400,000 Corps' capability in Fiscal Year 1981/82 would enable the Corps of Engineers to proceed with design studies during this year. This would accelerate the project completion when Congress authorizes and funds the construction phase.

The Reclamation Board strongly supports authorization of the Redbank and Fancher Creeks Project.

II. Surveys and New Survey Starts -

A. Northern California Streams:

This project, authorized in 1958 and 1962, is a study of all the streams in Northern California flowing into the Pacific Ocean, including the Sacramento River and its tributaries in regard to flood control measures. Throughout the years there have been many widespread and destructive floods. When flooding occurs, heavy damages are inflicted on homes, agricultural lands and public utilities. The cost of flood-fighting, clean-up and repair and restoration is usually several million dollars each time a flood occurs.

The flood events of the past demonstrate the continuing need for flood management measures in the basin and growing water requirements show the need for water conservation measures.

The Reclamation Board recommends inclusion of $98,000 for 1982 for the Northern California Streams.

B. Sacramento River and Tributaries - Bank Protection and Erosion Control:

This study, authorized in 1970, is an investigation of erosion problems along some 312 miles of the Sacramento River from Collinsville to Shasta Dam and along the lower reaches of the principal tributary streams.

The local interests believe that various factors, including reservoir control, have worsened erosion problems along the banks of the streams in the area. Assistance has been requested in providing needed bank protection. Also due to the greatly increased use of

the Sacramento River by recreation boats, erosion by wave-wash has become a significant problem.

The study will consider protective measures to stabilize stream channels, reduce bank erosion and preserve riparian vegetation. This investigation could serve as a vehicle to resolve some of the environmental issues surrounding bank protection work.

The Reclamation Board strongly recommends an appropriation of $300,000 and also completion of the Sacramento River and Tributaries Study, Bank Protection and Erosion Control in Fiscal Year 1981/82.

C. Sacramento - San Joaquin Delta:

This study, authorized in 1950, is to determine the advisability of reclaiming certain tracts continually subject to inundation by tidal actions and to consider closing some channels to flood flows and navigational use in order to reduce levee maintenance.

The Sacramento - San Joaquin Delta consists of about 500,000 acres of highly productive agricultural lands segregated by interconnecting waterways into about 100 tracts. The entire Delta, which was reclaimed from swamps, is subject to tidal action. Many existing levees in the Delta are on unstable peat foundations that continually subside. There have been several major levee failures in recent years.

The Reclamation Board strongly recommends an appropriation of $190,000 in 1982 for the Sacramento - San Joaquin Delta Study.

D. San Joaquin River Basin:

This study, authorized in 1964 and initiated in 1968, encompasses the southern portion of the Central Valley, including part of the Delta - Central Sierra Area and all of the San Joaquin and Tulare Lake Basins. The study will investigate the problems of flood control, irrigation, municipal water supply, power, recreation, and fish and wildlife and water quality. The study area is the site of many complex water supply and water transportation problems. Flooding is a major problem in the study area. During the severe floods of 1969, the area experienced approximately $100 million in damages. Projects to be considered include: dams and reservoirs, stream diversion, bank protection and levee and channel improvement.

The Reclamation Board recommends appropriation of $1,240,000 in 1982 for continuation of this study.

U. S. Water and Power Resources Service

Auburn Dam:

Auburn Dam, part of the Central Valley Project, was authorized in 1965. Auburn Dam and Reservoir is located on the North Fork of the American River adjacent to the City of Auburn. The dam height when constructed will be 700 feet. Auburn Reservoir will have a capacity of

2,300,000 acre feet. The Reservoir will add 250,000 acre feet of flood control space to the American River system.

The population centers of Sacramento, North Sacramento, Arden, Brighton, Carmichael, Fair Oaks, Folsom and Rancho Cordova, lie partially within the natural American River flood plain. The present Folsom Dam and levee system does not provide adequate flood protection against a Standard Project Flood. The part of the metropolitan Sacramento area that would be flooded by the Standard Project Flood is estimated to have a population of about 130,000 people according to the 1970 census. Auburn Dam and Reservoir will provide additional flood protection to the population centers of the metropolitan Sacramento area.

The Reclamation Board urges adequate funding for planning activities, including studies to define appropriate fish and wildlife mitigation measures. These mitigation measures should be identified prior to initiation of final design. The level of funding was not determined.

The Reclamation Board opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam;
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed;
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board;
4. The State has approved the design of the dam finally selected.

The Reclamation Board recommends appropriation of $2,841,000 in 1982 for planning activities which include studies to define appropriate fish and wildlife mitigation measures.

Shasta Dam Enlargement:

The State of California and the Water and Power Resources Service signed on December 16, 1979 a letter of intent to jointly study enlargement of Shasta Dam.

The Reclamation Board recommends appropriation of $500,000 for work on this study.

Mr. BEVILL. Mr. Franklin, I am not trying to rush you but I just want to remind you we are going to have a quorum call here in about seven or eight minutes. Actually, your time will have expired at that time.

Mr. FRANKLIN. Yes, sir.

Mr. BEVILL. You see the influence of your California delegation here.

Mr. FRANKLIN. Mr. Chairman, your committee has always been extremely courteous to the people from California. We want you to know we appreciate it.

Mr. BEVILL. We realize you all have come a long ways here to present your case, and we certainly want to listen to you. Congressman Burgener has just said he is going to stay here and not respond to this quorum call, so that will give you a little more time. You may proceed.

Mr. FRANKLIN. Thank you. Our next speaker is Mr. Albert Henley, General Counsel of Santa Clara Valley Water District.

STATEMENT OF ALBERT HENLEY

Mr. HENLEY. I represent the San Felipe Committee. The chairman has heard vigorous statements from our representatives. I think we are proud of our representatives in Congress from the San Felipe area.

Mr. BEVILL. You certainly do. You have some of the finest members of Congress here, and we have two of them on the committee.

Mr. HENLEY. I understand.

Mr. MYERS. It is good to see you once again.

Mr. HENLEY. Thank you. I will ask that my written statement be made a part of the record.

Mr. MYERS. It will be made a part of the record.

[The information follows:]

SAN FELIPE COMMITTEE
5750 ALMADEN EXPRESSWAY • SAN JOSE, CALIFORNIA 95118 • TELEPHONE: (408) 265-2600

STATEMENT

OF

SAN FELIPE COMMITTEE

By Albert Henley

March 26, 1981

Before the

United States House of Representatives
Committee on Appropriations
Sub-Committee on Energy and Water Development
Honorable Tom Bevill, Chairman

SUMMARY

The San Felipe Committee requests augmentation of the President's Budget figure for Fiscal Year 1981-82 as follows:

President's Proposal	$37,050,000
Augmentation	10,600,000
Capability	$47,650,000

Mr. Chairman:

My name is Albert Henley. I represent the San Felipe Committee, a confederation of local public agencies in four California Counties. These agencies will be the recipients, that is to say the purchasers under contract, of water from the San Felipe Division of the Central Valley Project.

We fully recognize and support the necessary effort to control federal expenditure. In our view, however, the reduction of the San Felipe appropriation so greatly below capability is an unfair distribution of the burden of funding cuts the new Administration proposes and is, we believe, the product of unfamiliarity with the project.

The San Felipe Division of the Central Valley Project is under construction; there is no question of abandonment, the project will be completed, put to use and -- through sales of water to us -- paid for.

The question before your Committee, Mr. Chairman, is of stretch-out or delay in that construction program.

It is our contention that slowing the work by pinching back appropriations is not in the local interest, nor the national interest, nor (and this is a principal point I want to make) within the guidelines and intent of the Reagan Administration.

It is not in the local interest because we need the water; we are behind schedule now and, even assuming normal rainfall, we already foresee a condition of inevitable groundwater overdraft before San Felipe water appears. It is not in the local interest because we are spending large borrowed sums to build transmission systems which will meet the federal turnouts. If the federal turnouts are late we will be left with unproductive facilities, that is, lines which do not produce the revenue we counted on to service the bonds we issued to fund them.

For example, one of our members, the Santa Clara Valley Water District, has underway at this time a $107 million locally-financed distribution and treatment program for domestic and industrial service which is predicated on scheduled deliveries of the federal water. Delays will cause considerable economic and supply hardship to this County, its 15 cities and 1.3 million citizens.

The problem faced by our members representing the Watsonville subarea in Northern Monterey and Southern Santa Cruz Counties provides another example of local need and interest. There a long-term condition of seawater intrusion is destroying the aquifers relied on by the residents. They had looked to wastewater reclamation as a source of supply which would permit them some delay in contracting for their San Felipe portion. It does not appear that federal funding for regional wastewater treatment plants is now expectable. Thus, they see early San Felipe availability as more necessary than ever.

Delay is not in the national interest because the cost daily escalates. Of course, this condition impacts upon us eventually as we must repay the swollen federal outlay. We are committed to the repayment by contract but the National Treasury will not begin being repaid until the system is operable.

Finally, delay in construction is not within the Reagan Administration's budget guidelines. The vastly disproportionate cut now proposed in the San Felipe appropriation for FY 81-82 (22.2% below capability as opposed to an average of 7.9 Service-wide) is simply the result, as we see it, of mistake.

The following is quoted from page 5-6 of the President's "A Program For Economic Recovery", February 18, 1981:

> "The Administration will propose an 11% reduction in the planned construction program of the Corps of Engineers-Civil, Water and Power Resources Service, and Soil Conservation Service.

> This reduction will not delay the realization of hydroelectric, municipal water supply, navigation, or urban flood control features, but will defer some less critical parts of projects such as the development of recreation areas and some rural flood control and irrigation deliveries." [Emphasis added]

The great majority of the San Felipe Division's production will in fact provide a "municipal water supply", and possible but limited "hydroelectric" energy. Any "recreation" potential is entirely incidental. No part of the appropriation is slated for use to develop "recreation areas".

We are convinced, in short, that this Division has been mistakenly perceived as an irrigation project. It is primarily an urban water supply project with a part of the supply under contract to agricultural areas. It therefore fits the definition of projects of which realization is not to be delayed under the Administration's proposal to you.

We appreciate the courtesy of the Committee in receiving this statement.

Albert Thomas Henley
Legislative Representative

Mr. FRANKLIN. Our next speaker is Linda Peralta, Director of that district, and Mr. Ron Esau, Assistant General Manager.

STATEMENT OF LINDA PERALTA

Ms. PERALTA. My comments are so brief I am not going to sit down. I can't play oneupsmanship with Mr. Mineta and Mr. Panetta. I just want to emphasize the urgency with which they spoke. We share that. In fact, our county, 1.3 million people, share that urgency. Thank you.

[Ms. Peralta's statement follows:]

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STATEMENT

OF

LINDA PERALTA

Member
Board of Directors
Santa Clara Valley Water District
San Jose, California

March 26, 1981

Before the

United States House of Representatives
Committee on Appropriations
Subcommittee on Public Works
Honorable Tom Bevill, Chairman

SUMMARY

The statement urges augmentation of the President's 1981-82 Budget of $680,000 for the Corps of Engineers' Pajaro River: Uvas-Carnadero Project, Santa Clara County, California.

This study has been funded for three years at a Federal cost of $545,000 and a local cost of $23,000. Potential damages of $23,000,000 have been identified.

BACKGROUND

The Uvas-Carnadero Creek Project is located in Gilroy in the southern part of Santa Clara County, California. The Uvas-Carnadero Creek portion of the Pajaro River Basin Study was completed in August 1975. The proposed project is a single levee to prevent flood flows from entering the southern part of the City of Gilroy. In June 1976, a public meeting was held by the Corps of Engineers in Gilroy.

The Corps first received funding for the design phase of this project in FY 1979 and has received funding in all subsequent years. The Corps has completed a Draft Phase 1 General Design Memorandum which recommended a $3.2 million (Federal share $1.2 million) project with a benefit/cost ratio of 3.1 to 1. At a public hearing in Gilroy in February 1981 the community expressed strong support for the project.

The proposed project would protect about 600 existing homes, a high school and a number of commercial and industrial establishments from flooding.

To date $568,000 has been expended to study this flooding problem, and an economical solution is available quickly. While recognizing the national economic goals it is important that this critical flood protection be provided for the urban area of the City of Gilroy.

STATUS OF STUDY

The Corps has started Phase II of the General Design Memorandum, can complete design, and initiate construction of this needed facility in FY 1982 if the necessary funding is provided. Completion of construction would be in 1983.

RECOMMENDATION

Community development has long contemplated completion of this protection project. Given the high benefit/cost ratio this is a very efficient use of public funds. We, therefore, very urgently recommend an augmentation to the FY 1982 appropriation for the Corps of Engineers of $680,000 for award and initiation of construction of the Pajaro River: Uvas-Carnadero Creek Project.

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STATEMENT

OF

LINDA PERALTA

Member
Board of Directors
Santa Clara Valley Water District
San Jose, California

March 26, 1981

Before the

United States House of Representatives
Committee on Appropriations
Subcommittee on Public Works
Honorable Tom Bevill, Chairman

SUMMARY

The statement urges augmentation of the President's 1981-82 Budget in the amount of $73,000 for the Corps of Engineers' Survey of Guadalupe River and Adjacent Streams, Santa Clara and Alameda Counties, California.

This study has been funded for eight years at a Federal cost of $1,388,000 and a local cost of $300,000. Potential damages of $61,000,000 have been identified.

Julian Street, San Jose, California December 23, 1955

BACKGROUND

Guadalupe River and Coyote Creek (one of the adjacent streams) are major waterways that flow through the highly urbanized area of Santa Clara County, California. Historically, these streams have flooded the downtown areas of San Jose and Alviso beyond local capability to prevent. For example, the estimated damages from a one percent or 100-year flood, which would inundate the urban center of San Jose, is $61,000,000. It is estimated that a 50-year flood would cause $33,000,000 worth of damage under existing conditions. The probability of such floods occurring before implementation of flood prevention measures is quite high. A 50-year flood has an 18 percent chance of occurring during a 10-year period; a 100-year flood has about a 10 percent chance of occurring during this same period. There is strong potential, therefore, that a damaging flood will occur before the problem can be resolved.

STUDY SYNOPSIS

In 1971, the community asked the Corps of Engineers to reactivate its 1945 study. The Plan of Study was completed in 1973. The initial problem definition and alternative screening was completed in 1974. More detailed problem definition and alternative definitions for the Guadalupe River and Coyote Creek were completed in 1978. The third phase, study of freshwater flooding in the Baylands, was completed in 1979. The stage 2 report has just been completed on the combined Guadalupe River and Baylands.

In an effort to accelerate the completion of this project, the local people through the Santa Clara Valley Water District have provided a substantial amount of technical and financial assistance since 1972. Special planning studies have been completed by the District for inclusion into the Corps' studies at a cost of over $300,000.

To date, therefore, over $1.7 million has been expended on this study. The necessity to reduce Federal expenditures to meet economic goals is recognized. Nevertheless, projects such as the Guadalupe River, where costly studies are nearly complete and economic feasibility has been established, should be adequately funded.

RECOMMENDATION

The very high flood risk and potential damage, the impacts of inflation, and the minor expenditure now required lead us to urgently request that Congress appropriate the Corps' capability of $73,000 to complete the feasibility report for the Guadalupe River and Adjacent Streams Study in FY 1982.

Mr. FRANKLIN. Our next speaker is Mr. Fred Rohnert and then Mr. George Thomas from the San Fernando Water District.

STATEMENT OF FRED ROHNERT

Mr. ROHNERT. I will be very brief. We urgently request the approval of the House of Representatives of the $35 million which the Water and Power Resources Service has determined it can efficiently invest in the San Felipe Division in fiscal year 1981-1982. We also request the appropriation of $3,840,000 as a second advance on the Public Law 130 loan agreement to initiate construction of the water distribution system of the zone of benefit.

The contemplated allocated funds for the San Felipe Division are now cut by over 30 percent, which is considerably more than other ongoing Western projects. We completely support the President's proposed program of government expense reduction, but we firmly believe that the San Felipe Project should receive its proportionate share of the 1981-82 final Western water development allocation. Thank you very much.

[Mr. Rohnert's statement follows:]

Presentation To

UNITED STATES HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT

Honorable Tom Bevill, Chairman

March 26, 1981

SAN BENITO COUNTY WATER CONSERVATION AND FLOOD CONTROL DISTRICT

Hollister, California

My name is Fred W. Rohnert. I am Vice-President - Director of the San Benito County Water Conservation and Flood Control District and President of the Pacheco Pass Water District. Mr. George Thomas, Manager of San Benito County Water Conservation and Flood Control District has accompanied me here today. I was born in San Benito County and have been engaged in agriculture there all of my life.

These two Districts have instructed me to urgently request the appropriations totaling $35,000,000 for Water and Power Resources Service facilities and $3,~~480~~ 840,000 for the initial water distribution sub-system to be constructed by the District as recommended by the California Water Commission. The $35,000,000 is for various facilities being constructed by the Water and Power Resources Service including the Pacheco Tunnel, Pacheco Pumping Plant and Switchyard, Pacheco Conduit, Santa Clara Conduit and Tunnel, Hollister Conduit and other features including Planning and Ground Preparation. The $3,~~480~~ 840,000 is the second advance on the P. L. 130 loan agreement of $19,900,000 which the San Benito County Water Conservation and Flood Control District has with the Water and Power Resources Service. This is for the purpose of constructing the water distribution system in Sub-area 001 of Zone VI, the zone of benefit for imported San Felipe water. The District is contributing $2,059,000 to the $21,959,000 cost of the distribution system.

We call your attention to the presently proposed budget for the San Felipe Division for 1981-82. This Division was cut approximately 30% from its original request which is considerably more than other ongoing projects in California. My Board of Directors completely

support the President's proposed program of government expense reduction but they firmly believe that the San Felipe Division should receive its proportionate share of the final California allocation.

The Pacheco Tunnel has 2/3 of a mile of its 5.3 miles yet to be drilled. There are seven other ancillary systems to the San Felipe Division, all of which should be completed just prior to availability of water from the Tunnel. This will provide the earliest possible cash flow and initiation of pay back to the Water and Power Resources Service.

The water from the San Felipe Division is desperately needed to sustain an existing agricultural economy and community in San Benito County - Not bring new lands into production.

The zone of benefit (Zone VI) consists of family farms with the owners living thereon and the cities of Hollister and San Juan Bautista. This area now obtains its total water requirements by pumping from underground aquifers which are rapidly being depleted thru overdraft and water quality is deteriorating in quality. This condition exists even though water from Hernandez Dam (18,000 acre feet), Pacheco Dam (6,000 acre feet) and all treated waste water from Hollister and San Juan Bautista is being percolated into the underground.

Water use is increasing within the zone of benefit. Population has increased by 33% during the last 10 years according to the 1980 census with many new households. Agriculture is consuming more water thru production of increasing intensive crops. High water requiring crops such as garlic, lettuce, onions, bell peppers, tomatoes, vegetable and flower seeds and sugar beets are replacing

apricots, pears, prunes and walnuts.

The declining water table and the instusion of water bearing toxic quantities of boron and chlorides have already caused a change of 13,000 acres of high quality land to low income hazardous dry farming techniques. These lands will be returned to intensive agriculture with the availability of San Felipe high quality water.

Land subsidence will be curtailed or perhaps eliminated by replenishing underground water storage thru percolation of San Felipe water into stream beds. This stored water will be available in such years when San Felipe water may not be available in the required quantity.

San Felipe water will replace municipal and industrial local water which is below public health standards because of high chloride content.

The construction of the San Felipe Division will supply sorely needed jobs in San Benito County with an unemployment rate of 20.7% as of January 1981. The annual average unemployment rate for the 1980 year was 14.3%.

San Felipe water will be supplied directly to 19,700 acres under pressure sufficient for sprinkler irrigation. The pressure will be mostly provided by the head efficiently developed by large capacity pumps which will lift the water from San Luis Reservoir 250 feet to the Pacheco Tunnel entrance. Fire control will also be augmented by this pressurized water. The remainder of the water needs will be supplied by San Felipe and local run off waters percolated into the underground thru stream beds.

The people of Zone VI (the zone of benefit within San Benito County Water Conservation and Flood Control District) thru plebiscite have overwhelmingly affirmed a contract with the Water and Power Resources Service to purchase water and to obligate themselves to borrow $19,900,000 thru a Public Law 130 loan to construct the necessary distribution facilities.

The California Water Commission has endorsed and supports the request we have made for the 1981-82 budget.

San Benito County urgently requires supplemental water as soon as possible to maintain the quality of life of its citizens by insuring the stability of its major industry -- agriculture.

We earnestly request the Congress of the United States to appropriate $35,000,000 as established by the Water and Power Resources Service to finance proposed work on the San Felipe Division Project for the fiscal year 1981-82.

We also request the Congress to approve $3,~~480~~ 840,000 as the second advance on an approved P. L. 130 loan to initiate construction of the San Benito County Water Conservation and Flood Control District Zone VI distribution system.

We thank the committee for granting us a hearing before you today.

Addendum: A report to the California Water Commission by its engineer Mr. Orville Abbott is attached to this statement.

SAN BENITO FLOOD CONTROL AND WATER
CONSERVATION DISTRICT P.L. 130 LOAN
SUMMARY

THE DISTRICT

The District includes all of San Benito County, California. The area to be benefited by the San Felipe Division of the Central Valley Project is in the northern part of the County. The benefited area includes the County's two largest cities, Hollister and San Juan Bautistia.

The District was organized in 1953 by an act of the California Legislature.

LAND

Irrigable Area:

The distribution system to be built with funds from the loan requested in this application will benefit about 48,200 acres considered the project benefit area, either by direct delivery by assuring the groundwater supply due to reduction of pumping by others, or by percolation. Of this total, 38,326 acres are irrigable.

Agricultural Land Use:

A Water and Power Resources Report, prepared for the Hollister Subarea in 1973, indicates the following percentage distribution of crops:

Field	4.4%
Forage	3.3%
Truck	38.7%
Fruits and Nuts	52.5%
Vineyards	1.1%
TOTAL	100.0%

There has been, and continues to be, a rapid conversion of orchards to truck crops, primarily tomatoes.

Land Ownership:

There are several excess land owners in the area to be served directly by the distribution system. These ownerships are less than 1000 acres each and it is expected the owners will comply with excess land provisions to qualify for service from the system. Also, in the area benefited by percolation, there are few property owners with excess land.

Boron Area:

Several thousand acres, once highly productive, have been heavily affected by irrigation with the high boron groundwater existing in that particular area. This area is expected to be restored with the use of San Felipe Division water.

WATER

Ultimate Requirement and Supply, Acre-Feet per Year:

	Agri	M & I	Total
Ultimate Requirement	84,290	12,000	96,290
Groundwater Yield (Without San Felipe Percolation)		53,750	
Groundwater Overdraft		360	
Cienega Valley Import		570	
San Felipe Supply		43,800	
San Felipe Losses		2,190	
Ultimate Supply			96,290

Quality:

The groundwater in an area of about 5,700 acres has boron of a greater concentration than 1.5 parts per million. This is the maximum level considered acceptable for agriculture in the area. The groundwater in the rest of the project benefit area varies in quality, but is generally considered acceptable for agriculture. Presently, groundwater is the sole source for M & I use, although hardness is a deficiency. Total dissolved solids are about 600 parts per million, with carbonates as high as 350.

PHYSICAL PLAN

Purpose:

The District plans to distribute water received from the WPRS, San Felipe Division of the Central Valley Project, so as to benefit 48,200 acres including the Cities of Hollister and San Juan Bautista. This benefit will be accomplished in some areas by direct distribution, in some areas by groundwater pumping reduction in or adjacent to the direct distribution area, and in some areas by percolation of San Felipe water.

Federal Facilities:

The WPRS will deliver water through the Hollister Conduit. This pipeline will be 19 miles long, beginning near the end of the westerly terminous of the Pacheco Tunnel and pipeline conveying water from the San Luis Reservoir. Water will be stored in the off season in the proposed San Justo Reservoir, with a capacity of 10,700 acre-feet.

District Facilities:

Planned is a closed pipe distribution system capable of delivering agricultural water at 60 pounds per square inch to about 20,000 acres with provisions to expand to an additional 2700 acres, and capable of delivering raw water to the Cities of Hollister and San Juan Bautista and to percolation points.

Agricultural Distribution:

Within the 20,000-acre distribution system area, a turnout will be provided for each parcel or group of parcels of 20 acres or more in size. Water will be delivered at a minimum pressure of 60 pounds per square inch. Design flows provide for exclusive surface distribution in some areas and conjunctive use with groundwater in some areas.

Municipal Distribution:

One direct delivery point will be provided for Hollister and one for San Juan Bautista. The cities will provide treatment.

Cost:

With a 7.5% per year allowance for cost escalation, the total project capital cost is estimated to be $21,959,000. This is to be financed with a P.L. 130 loan of $19,900,000 and a District contribution of $2,059,000.

Schedule:

The distribution system is scheduled for completion in December, 1984, and the Federal facilities are scheduled for completion in January 1986, with full operation of the system during the 1986 irrigation season.

COSTS

Water Purchases:

The District's water service contract with the United States provides that initial prices will be $16.50 for agricultural water and $61.00 for municipal and industrial water. The contract provides for adjustments in these prices for cost changes beginning in 1991 and each five years thereafter.

Pumping Power Costs:

The District hopes to purchase electrical energy for its pumping stations from the United States, but the loan application is based on the assumption that the power will be purchased from the local public utility. The current rate calculates to $4.80 per acre-foot for direct delivered agricultural water, $3.10 per acre-foot for direct delivered municipal and industrial water, and $1.70 for percolated water.

Federal Facilities:

Water and Power Resources Service estimates of operation, maintenance, and replacement of the Federal facilities are $4.00 per acre-foot.

District Facilities:

The cost of operation, maintenance, and replacement of the District facilities, with the exception of electrical energy, is estimated to be $2.70 per acre-foot.

AGRICULTURAL PAYMENT CAPACITY

Water and Power Resources Service estimates the District's agricultural payment capacity to be $50.00 per acre-foot.

Mr. FRANKLIN. Next is Carl Nelson, Assistant Orange County Environmental Management Agency.

STATEMENT OF CARL NELSON

Mr. NELSON. I would like to call your attention to a $9 million flood damage potential in Orange County, California, which is a result of deficiencies in Federal projects at Prado Dam. Despite certain problems with rules of procedure, I would urge your committee to recognize the special Federal interest in this poroject, the Santa Ana River main stem, and to find a way to augment the 1983 budget, so that the Phase II report of the Corps of Engineers could proceed on schedule so that the project can get underway before this great flood might occur again.

Thank you.

[Mr. Nelson's statement follows:]

COUNTY OF ORANGE

MURRAY STORM
DIRECTOR, EMA

C. R. NELSON
DIRECTOR OF PUBLIC WORKS

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March 26, 1981

FILE

HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS,
SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT (PUBLIC WORKS)
HONORABLE TOM BEVILL, CHAIRMAN

My name is Carl Nelson. I am here today representing the Board of Supervisors of Orange County, California, in support of the Santa Ana River Main Stem project. The project's Phase I General Design Memorandum is now under review by the Board of Engineers for Rivers and Harbors.

The views of the citizens of Orange County and of the Board of Supervisors have been presented to the staff of the Corps of Engineers in the numerous public meetings held in our area. We certainly appreciate the breadth of public review offered by the Corps of Engineers and the opportunity for continued input to the lengthy proceedings which we trust will eventually lead to Congressional authorization for construction of the work needed to mitigate this devastating flood threat, which has been described as the worst in the western United States.

For nearly thirty years the residents of Orange County were content with a sense of security that Prado Dam and Reservoir provided the ultimate in protection from the perils of flooding which, from time to time, had visited the area prior to the 1941 completion of the project by the U. S. Army Corps of Engineers. However, in 1969 the first major floods to test the dam resulted in peak discharges of only 60% of the 9300 cubic feet per second design discharge rate. The sustained discharge of approximately 5000 cubic feet per second for a period of several weeks quickly revealed that the downstream channel improvements, installed entirely at local expense, were incompetent to confine the river to its manmade banks, and only with the help of the Corps under Public Law 99 was there avoided an escape of flood waters into the thousands of homes and businesses which had been developed across the coastal plain during the intervening years since completion of the federal flood control project. As a consequence of the tremendous channel erosion experienced during the floods of 1969, the Orange County Flood Control District

embarked on a massive, locally funded program of grade stabilization and bank revetment to improve the capability of the Santa Ana River Channel in Orange County to resist the highly erosive flows discharged from Prado Dam. Between 1969 and 1981 approximately $25 million in property tax revenues for this purpose have been expended in the Santa Ana River for interim channel improvements.

Despite these expenditures, during the flood years of 1978 and 1980, additional large amounts of emergency assistance were requested and received from the U. S. Soil Conservation Service and U. S. Army Corps of Engineers to prevent the destruction and loss of levees, highways and bridges. Again, massive flooding from the controlled discharges from Prado Dam was narrowly averted.

Until the channel damaging flood of 1969, it had been assumed that Prado Dam and Reservoir had sufficient capacity for protection of the rapidly urbanizing central Orange County area. Then, concurrently with the locally funded channel improvement program, the Corps of Engineers' Los Angeles district office commenced a re-evaluation of the hydrology and reservoir regulation schedule for Prado Dam, and in 1970 began to discuss with local interests the probability that the dam could not control the runoff from a standard project flood, and that increased capacity would be needed both in reservoir storage and in downstream channel capacity. After this revelation it was not until 1975 that the review report and the environmental impact statement on the Santa Ana River Main Stem Project were completed. In the subsequent five years progress has reached the point of completing the Phase I General Design Memorandum.

As the impending threat of another great flood draws ever nearer, it is requested that the Congress of the United States recognize the special federal interest and the potential multi-billion dollar liability to the federal government in the event that a great flood should again occur prior to correction of the present deficiency in capacity of Prado Dam and Reservoir.

Thank you for the opportunity to appear before your committee and to present the enclosed March 3, 1981 Resolution of the Board of Supervisors reiterating its support for the "all river" plan and urging the Congress to act promptly in resolving this present flood hazard to thousands of residents of Orange County, California.

Mr. FRANKLIN. Our next speaker is Mr. Bob Townsend, member of the Board of Supervisors from San Bernardino County.

STATEMENT OF BOB TOWNSEND

Mr. TOWNSEND. Thank you, Scott.

Mr. Chairman, I think that our case has been adequately described by our Congressman Lewis and Congressman Dreier. We have prepared our testimony, which I will not go into. It looks something like this, Mr. Chairman, as we discussed in prior years on the Cucamonga Flood Control Project. That is what we are here supporting. It is in the President's message.

It is consistent with the Corps of Engineers capability, and we trust that you will support it and of course the California Water Commission is supporting it. Let me defer just a moment and take this little map right here and show you something that I think that your committee can be proud of. I want to commend you because this project is already completed clear up to the Ontario International Airport.

I think, Mr. Chairman, you were out there a few years ago with then Congressman Lloyd and viewed this. It is now completed farther up. When I stand and look at that particular project, and think of the saving of lives and the saving of property damages and the economy, I commend you for it, for your decision. I know that as Congressman Lewis has said to you, it is sometimes difficult to make the decisions that you have to make, but here is one that I think you should put a feather in your hat. I am greatly indebted to you and appreciate your concerns.

[Mr. Townsend's statement follows:]

STATEMENT OF MR. TOWNSEND

Mr. Chairman, members of the committee: I am supervisor Towsend of the San Bernardino County Flood Control District Board of Supervisors.

The opportunity to present this vital program for your consideration in the 1981-1982 budget is greatly appreciated.

CUCAMONGA CREEK

Is the ongoing Federal project and is one of the most vital flood control projects in Southern California. Illustrated by the Cucamonga Creek map are the construction stages of the project. Work, constructed or underway, is shown in solid dark lines. Colored in yellow is phase VI of the project which will complete the Cucamonga Creek Channel, including the culvert under the existing runway of the Ontario International Airport, together with the Demens Creek Channel and Debris Basin. Colored in green, blue and red are the final phases remaining to complete this multimillion dollar project, which was started in 1974. The $25.5 million recommended and included in the President's budget will complete phase VII (green) and phase VIII (blue) and initiate phase IX (red).

THE SANTA ANA RIVER AND ORANGE COUNTY REVIEW REPORT

You will recognize the growing flood problems along the Santa Ana river and its tributaries which affect more than one county. Illustrated on the base map and overlay of San Bernardino Valley are the major tributaries that need sufficient studies to build the necessary projects that can solve those problems.

The $485,000 recommended and included in the President's budget for fiscal year 1981-1982 will provide for the continuation of this important survey, which includes these tributaries as well as certain streams in other counties of the Santa Ana River basin.

On behalf of the board of supervisors, I wish to express our appreciation for your past, present and continuing support of the Federal flood control program of vital importance to life and property in San Bernardino County, California.

Mr. FRANKLIN. Mr. Chairman, I would like to also acknowledge that Supervisor Bob McKenna is here.

Mr. BEVILL. We are pleased to have you with us.

Mr. FRANKLIN. Our next speaker is Kenneth Edwards, Chief Engineer of the Riverside County Flood Control District.

STATEMENT OF KENNETH EDWARDS

Mr. EDWARDS. Mr. Chairman and members of the committee I want to be brief. I have submitted a detailed written statement. I would like to say that a year ago some of the most significant flooding that has occurred in Southern California and caused substantial damages along the San Jacinto River near the city of San Jacinto; along Temescal Creek in Colrona; and around Lake Elsinore.

The flood fighting done by the Corps of Engineers and our district cost in excess of $4 million. The flooding around Lake Elsinore, in addition to the direct flood damages, has caused significant loss of the economic base in this community. Recovery from this economic base loss is dependent upon developing and implementing a viable flood control plan to stabilize the maximum flood levels around the lake.

The President has recommended $485,000 for continuing surveys of the Santa Ana River Tributaries and Orange County Streams which includes the San Jacinto River, Lake Elsinore and Temescal Creek. The Corps of Engineers has testified before your committee indicating a capability for $760,000. I urge your committee to recommend that $760,000 be appropriated for the Santa Ana River and Orange County Surveys so that the Corps can move more rapidly, especially on the Lake Elsinore study.

In response to Congressman Lewis' request for Palm Springs, the President did not reocmmend any funding for continuation of the Whitewater River study. However, we are asking that $350,000 be made available, if possible, for the Corps to continue their work on that stream.

Thank you.

[Mr. Edwards' statement follows:]

Summary recommendations

Santa Ana River and Orange County: Continue surveys	$760,000
Whitewater River and Tributaries: Continue survey Whitewater River	350,000

Respectfully submitted.

KENNETH L. EDWARDS,
Chief Engineer, Riverside County Flood Control and Water Conservation District.

SANTA ANA RIVER AND ORANGE COUNTY

In 1965, the Corps of Engineers was authorized to review flooding problems on the Santa Ana River, its tributaries and streams in Orange County. The primary effort of the Corps of Engineers has been on the main stem of the Santa Ana River for which the Phase I Advanced Engineering and Design Studies are now complete. The Corps is now working on surveys of the tributary streams.

In February 1980, the most devastating floods in recent history were experienced along the San Jacinto River, a major tributary to the Santa Ana River. Substantial damages were inflicted on the city of San Jacinto and surrounding areas from the failure of the San Jacinto River levee which had been designed and constructed by the Army Corps of Engineers in 1962. In addition to those damages, large areas of valuable agricultural, dairy and residential properties, which are unprotected from

major flows in the river, were flooded, suffering major losses in crops, production, and direct structural damage. Major highways leading to the Hemet-San Jacinto Valley were flooded and washed out. Access to this valley with a population of about 55,000 people was limited for about 48 hours to one highway serving the area and even that route required traffic to drive through water 6 to 12 inches deep on Interstate 15E. Other damaging floods occurred along this stream in November 1965, December 1966, February 1969, and March 1978.

Lake Elsinore, which is a natural lake basin at the downstream terminus of the San Jacinto River, has risen to levels greater than any previous level recorded for the past 200 years. This has caused widespread damage to properties around the lake. It is estimated that about 283 homes and mobile homes located above the historic high water were damaged by continual rising water in the lake. The physical and economic damages to this small community are very large and the hardship being suffered by many people whose homes are affected by the rising water is immeasurable. This problem will remain for years because the outflow spillway channel from the lake through the town can only pass a relatively small flow, and high water levels in the lake reduce the amount of storage available for future flood events.

Temescal Creek in Corona experienced large flood flows in February 1980. Flood fight efforts by the Corps of Engineers prevented major damage to several industrial firms and a mobile home park. Even with this effort, damages in excess of one million dollars were sustained by private and public properties in Corona along Temescal Creek. Other damaging floods occurred along this stream in January and February 1969 and March 1978.

It is estimated that the Corps of Engineers, the Riverside County Flood Control District and other local agencies spent in excess of four million dollars in flood fighting efforts at these three locations in February 1980.

These streams are tributaries to the Santa Ana River and are all currently under study by the Corps of Engineers. The Corps has initiated studies of the critical Lake Elsinore flooding problem but will need substantial funding to complete this study as early as possible. The vitality of the eoncomy of the Lake Elsinore community area is dependent upon a solution to this serious flooding problem. The Corps has also initiated studies for the extension of the San Jacinto River levee and Temescal Creek in Corona. Funding in fiscal year 1982 is needed to complete these important studies along with other studies in Orange and San Bernardino Counties.

The President has recommended an appropriation of $485,000. However, the Corps of Engineers has testified that the Los Angeles District has a capability for $760,000 and this level of funding is needed to accomplish an early completion of the Lake Elsinore and San Jacinto River studies. I strongly urge that your committee recommend and the Congress approve $760,000 for Santa Ana River and Orange County surveys.

WHITEWATER RIVER

The studies the Corps of Engineers have made to date on the Whitewater River for flood control have not shown sufficient economic feasibility to warrant proceeding with a detailed project plan. This has been caused in large part by the placement of the Coachella Valley Fringe Toed Lizard on the threatened species list by the Department of Interior, Fish and Wildlife Service. One plan yet studied in significant detail is the environmental quality plan. The Los Angeles District of the Corps of Engineers believe such a plan could overcome the environmental concerns of the other plans studied and still show economic feasibility. No funds have been included in the President's proposed budget. An appropriation of $350,000 would allow the Corps to continue that study.

Mr. FRANKLIN. Our next speaker is Mr. Robert Beach, General Manager, Sonoma County Water Agency.

STATEMENT OF ROBERT F. BEACH

Mr. BEACH. Mr. Chairman, the President's budget includes $21 million for Lake Sonoma-Warm Springs Dam Project, and that will permit completion of the dam embankment, in spite of the fact that it is some $15 million less than the Corps' capability.

The recent President Reagan cuts reduced all the recreation money for the dam, and, while the board of directors of the water

agency recognized that in general this is necessary, there is one aspect that we would like to bring to your attention.

Part of the money deleted was $1.1 million for a boat ramp that extends down to the minimum pool, and we anticipate that the embankment will be completed as early as November of 1983, which could result in the inundation of the site for construction of the ramp. What we are seeking is the $19 million to be restored so the ramp can be constructed. It would not be operational because there are associated facilities, access roads and so on, but it would reduce the ultimate cost of the project.

[Mr. Beach's statement follows:]

STATEMENT OF ROBERT F. BEACH, GENERAL MANAGER, SONOMA COUNTY WATER AGENCY

Mr. Chairman and Members of the Subcommittee—I am Robert F. Beach, General Manager of the Sonoma County Water Agency (State of California) and here with me is Sonoma County Supervisor Nick Esposti. My comments today are directed to the $20.8 million included in President Reagan's proposed budget for the Warm Springs Dam-Lake Sonoma Project in Sonoma County, California. This project has been under construction for several years and the Corps of Engineers believes that the $20.8 million included in the proposed budget will permit the completion during fiscal year 1982 of the dam embankment and the other structural elements of the project.

The $20.8 million represents a $3.6 million reduction from the amount proposed in President Carter's budget. Deleted were all funds which would have permitted the commencement of construction of the various recreational and cultural facilities associated with the Project. The Directors of the Sonoma County Water Agency recognize the need for reducing federal expenditures and the Agency is prepared to bear its fair share of the consequences. There is one aspect of this reduction, however, which we feel has been overlooked, due to the time constraints under which the new administration reviewed the budget, which will ultimately result in an increase rather than a reduction in federal outlays. Of the $3.6 million cut, $2.2 million was to have been spent to construct a marina and access road. $1.1 million of this $2.2 million was for a 5-lane boat launch ramp near the dam. This ramp will extend to the bottom of the water conservation pool. The contract for the construction of the dam embankment calls for completion in April of 1983. However, the current construction schedule indicates that the embankment and its associated outlet works will be completed by November, 1982. If this occurs, filling of Lake Sonoma could commence during next winter. This would result in the inundation of the ramp site. The ramp construction will require not only the pouring of the concrete ramps but also extensive earthwork. Once this area is inundated and the soil saturated, the cost of performing this work will be much higher than if it is done in a timely fashion.

I would like to emphasize that we are not requesting all of the deleted recreational funds be restored or even all the funds for the marina complex. What we are asking for is the restoration of $1.1 million so that the ramp can be built before the site is under water.

The Warm Springs Dam-Lake Sonoma Project is essential to an adequate water supply for the agriculture of Sonoma and Mendocino Counties and the domestic needs of one-third of a million people in three counties. We appreciate the support the project has received from this subcommittee over the years.

Mr. FRANKLIN. Our next speaker will be Twyla Thompson, Supervisor from Yolo County and President of the Westside Canal Association. Also with Ms. Thompson are Mr. Floyd Marsh, Supervisor of Colusa County; Geroge Prude, Supervisor, Glenn County; Bill McAnlis of the Water Conservation District.

Mr. FAZIO. Mr. Chairman, I am going to have to break my silence here to welcome my constituents before the committee.

Mr. BEVILL. I can't think of anything more important.

Mr. FAZIO. I think they are rather important too. They know we have to be brief but I do want them to have a chance to say a few words.

77-001 O - 81 - (Part 9) - 70

Statement of Twyla Thompson

Miss Thompson. I am from Yolo County representing the Westside Gang. I am President of the Sacramento Valley Westside Canal Association. Congressman Fazio is a member of that gang. He is an honorary member. We would like to say thank you, gentlemen, God bless you, and good luck.

[Ms. Thompson's statement follows:]

Sacramento Valley Westside Canal Association

My name is Twyla Thompson. I am President of the Sacramento Valley Westside Canal Association (Association) and a Supervisor of Yolo County. Furthermore, I own and farm land near the terminus of the Tehama-Colusa Canal; so the completion of the canal and delivery of water is of foremost concern to us.

The Association represents the counties of Tehama, Glenn, Colusa, Yolo, Solano, Napa, and Lake, all of which are located on the west side of the Sacramento Valley. These counties contain the service area of the authorized Tehama-Colusa Canal and its extension, the West Sacramento Canal, a part of the Federal Government's Central Valley Project in California.

Thanks to the support of this committee over the years, plans for the delivery of supplemental water to the Tehama-Colusa service area that were conceived over thirty years ago are being brought to fruition. The impacts of the project are clearly evident in the service area where new and refurbished grain silos can be seen as well as the increase in the movement of agricultural products through the Port of Sacramento to overseas markets.

The appropriations requested are essential to bring forward the physical facilities to provide water that will ensure the financial integrity of the system constructed thus far, as well as that of landowners whose financial decisions over the last 20 to 30 years have been predicated on completion of the respective facilities for the delivery of water. Important also is that with supplemental surface water supplies available we can, through the conjunctive use of the surface and groundwater, manage more effectively the total water resources. At the same time, our energy requirements for pumping will be reduced substantially—the end result being similar to the implementation of numerous small hydroelectric projects which are being pursued aggressively today.

Also, the Association, respecting the needs of others within the total service area of the Federal-State water development system, supports those projects that are integral components of the overall water development system for the State.

In closing, it gives me great pleasure to say again, on behalf of the Association and all the people in both rural and urban areas alike, thank you for your efforts over the years and for your consideration of our request today. I would appreciate having this statement and supporting documents included in the record.

RESOLUTION NO. 81-191

(Resolution Supporting Adequate Federal
Funding of the Tehama-Colusa Canal
and Related Facilities Fiscal Year 1982)

RESOLVED: that the Board of Supervisors of the County of Yolo, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Yolo, State of California, this 10th day of March, 1981, by the following vote:

AYES: DeMars, Thompson, Marchand, Cameron, Black

NOES: None

ABSENT: None

s/ Robert N. Black
CHAIRMAN OF THE BOARD OF SUPERVISORS
COUNTY OF YOLO, STATE OF CALIFORNIA

ATTEST:

PETER McNAMEE, CLERK

By: _____
Deputy

(SEAL)

RESOLUTION NO. 81-57

RESOLUTION SUPPORTING ADEQUATE FEDERAL FUNDING
OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES
FISCAL YEAR 1982

BE IT RESOLVED that the Board of Supervisors of the County of Solano, State of California, hereby supports and urges the appropriation of funds, in accordance with the President's Budget for Fiscal Year 1982, to assure continued construction of the Tehama-Colusa Canal and related distribution facilities, and of loan programs and planning funds necessary in connection therewith.

I, JOHN S. BLACKLOCK, Clerk of the Board of Supervisors of the County of Solano, State of California, do hereby certify that the above and foregoing Resolution was regularly introduced, passed and adopted by said Board at a regular meeting thereof held this 10th day of March, 1981.

On the motion of Supervisor HEWITT and the second of Supervisor BRAZELTON, this Resolution was adopted by the following vote:

AYES: SUPERVISORS: BRAZELTON, CUNNINGHAM, HEWITT AND CHAIRMAN BRANN

NOES: SUPERVISORS: NONE

ABSTAINED: SUPERVISORS: NONE

ABSENT: SUPERVISORS: DAVIS

WITNESS my hand and Seal of said Board this 10th day of March, 1981.

JOHN S. BLACKLOCK
Clerk of the Board of Supervisors

By Susan A. Kruse
Deputy Clerk

RESOLUTION NO. 24-1981

Supporting Adequate Federal Funding of the Tehama-Colusa Canal and Related Facilities Fiscal year 1982

RESOLVED: that the Board of Supervisors of the County of Tehama, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

The foregoing Resolution was offered by Supervisor Johnson and adopted by the following vote of the Board:

AYES: Supervisors Johnson, Bundy, Flournoy and Frey

NOES: None

ABSENT OR NOT VOTING: Supervisor Crowley

STATE OF CALIFORNIA)
COUNTY OF TEHAMA) ss.

I, FLOYD A. HICKS, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California, hereby certify the above and foregoing to be a full, true and correct copy of a Resolution adopted by said Board of Supervisors on the 10th day of March, 1981.

DATED: This 10th day of March, 1981.

FLOYD A. HICKS, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California

By Lu Hobart
Deputy

RESOLUTION NO. 81.05

OF THE BOARD OF DIRECTORS OF THE YOLO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT SUPPORTING ADEQUATE FEDERAL FUNDING OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES FISCAL YEAR 1982

RESOLVED: that the Board of Directors of the Yolo County Flood Control and Water Conservation District, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Directors of the Yolo County Flood Control and Water Conservation District, State of California, this 3rd day of March, 1981, by the following vote:

AYES: Directors Gordon, Griffin, Miller, Orrick

NOES: None

ABSENT: Director Barth

s/ O. O. Orrick
Chairman, Board of Directors
Yolo County Flood Control and
Water Conservation District

ATTEST:

s/ Wm. L. McAnlis
Wm. L. McAnlis, Secretary

SACRAMENTO VALLEY
WESTSIDE CANAL ASSOCIATION
427 Cleveland Street Woodland, California 95695

March 13, 1981

U. S. House of Representatives
Committee on Appropriations
Sub-Committee on Energy & Water Development
Honorable Tom Bevill, Chairman

Dear Mr. Chairman:

Enclosed is our statement supporting appropriations for authorized and ongoing water resource works in the Sacramento Valley, California.

We would appreciate your careful attention to these funding requests.

Sincerely yours,

Twyla Thompson

Twyla Thompson, President
Sacramento Valley Westside
Canal Association

STATEMENT OF SACRAMENTO VALLEY WESTSIDE CANAL ASSOCIATION
IN SUPPORT OF FY 81/82 APPROPRIATIONS

SUMMARY

The Sacramento Valley Westside Canal Association supports and respectfully requests FY81/82 appropriations for financing the following:

Item	Amount ($1,000's)
Tehama-Colusa Service Area	
1. Tehama-Colusa Canal and Facilities	11,091
2. Tehama-Colusa Canal Distribution System	7,950
3. Tehama-Colusa Fish Facilities, Red Bluff Recreation Area	50
4. Permanent Operating Facilities	1,004
5. Corning Canal Relift, Pumps, Safety Fencing, and Automation of the Tehama-Colusa Canal	1,463
6. Loans to Districts:	
--Glenn Colusa Irrigation District	5,132
--Yolo-Zamora Water District	200
--Colusa County Water District	846
--Glide Water District	390
Federal Central Valley Project/State Water Project	
7. Auburn Dam and Reservoir	2,841
8. Cottonwood Creek	3,000
9. Delta Support Studies	775

BOARD OF SUPERVISORS, COUNTY OF LAKE

STATE OF CALIFORNIA

RESOLUTION NO. 81-95

RESOLUTION SUPPORTING ADEQUATE FEDERAL FUNDING OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES FISCAL YEAR 1982

RESOLVED: that the Board of Supervisors of the County of Lake, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Lake, State of California, this 16th day of March, 1981, by the following vote:

AYES: Supervisors Day, Larson, Couch, Combs and Wilcox

NOES: None

ABSENT: None

Chairman of the Board of Supervisors
County of Lake, State of California

ATTEST:

LOIS R. HESTERBERG, County Clerk

BY: _____
Deputy

APPROVED AS TO FORM: CHARLES D. HAUGHTON
County Counsel

BY: Charles D. Haughton
Deputy

The within instrument is a correct copy of the original on file in this office.
ATTEST: MAR 19 1981
LOIS R. HESTERBERG
County Clerk and ex-officio Clerk of the Board of Supervisors of the State of California in and for the County of Lake.
By _____
Deputy Clerk

BOARD OF SUPERVISORS, GLENN COUNTY, CALIFORNIA

RESOLUTION NO. 81 - 22

Resolution Supporting Adequate Federal
Funding of the Tehama-Colusa Canal
and Related Facilities Fiscal Year 1982

RESOLVED: that the Board of Supervisors of the County of Glenn, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Glenn, State of California, this 10th day of March, 1981, by the following vote:

AYES: Blacet, Hansen, Pride, Rumiano, and Edwards (Chairman)

NOES: None

ABSENT: None

CHAIRMAN, Board of Supervisors,
Glenn County, California

ATTEST:

COUNTY CLERK and Ex Officio Clerk
Board of Supervisors, Glenn County
California

RESOLUTION NO. 81- 24

BOARD OF SUPERVISORS
COUNTY OF COLUSA
CALIFORNIA

A RESOLUTION SUPPORTING ADEQUATE FEDERAL FUNDING OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES FOR FISCAL YEAR 1982

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of the County of Colusa, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Colusa, State of California, this 17th day of March, 1981 by the following vote:

AYES: Supervisors David G. Womble, Floyd Myers Marsh, Howard Foster and T. K. Marshall.
NOES: None.

ABSENT: Supervisor H. L. Peterson.

SEAL

T.K. MARSHALL, Chairman of the
Board of Supervisors

ATTEST:

Martha Nannen, County Clerk
and ex officio Clerk of the
Board of Supervisors

Mr. BEVILL. If you will submit the list of names, we will put those in the record.

Congressman Fazio, I have been to your district and enjoyed it very much. I thought we just had that old southern hospitality in the South, but I found it was out there in California.

Miss THOMPSON. I would even be happy to take you on a tour of the farm country.

Mr. BEVILL. I will be happy to take you up on that.

Mr. MYERS. He is quite a traveler.

Mr. FRANKLIN. In fact, we would like you all to come to California. You would enjoy it very much.

Mr. BEVILL. You are invited too.

Mr. FRANKLIN. Our next speaker is Mr. Ralph Nissen, President of the Glenn-Colusa Irrigation District.

STATEMENT OF RALPH A. NISSEN

Mr. NISSEN. Mr. Chairman, I have submitted a letter here to you. Everybody has a very little different problem, of course, but we have 984 loan projects approved in 1978. Funding was started on this, and suddenly we wake up and find just within the last few days that we have only a very small portion of the money that is necessary to fund this project.

We haven't had sufficient time here in Washington to be able to track down all of our problems. We appreciate and support the program for reducing overall costs in government. We feel that we hear people talking about a 20 percent cut, and being in trouble, but when it is $17 million and you only have $500,000, I think you are practically out of business.

[Mr. Nissen's statement follows:]

GLENN-COLUSA IRRIGATION DISTRICT,
Willows, Calif., March 17, 1981.

Subject: FY 1982 Appropriations—Rehabilitation Plan for Glenn-Colusa Irrigation District.

Hon. TOM BEVILL,
Chairman, House Appropriations Committee, Rayburn House Office Building, Washington, D.C.

(Attention: Mr. Hunter Spillan.)

GENTLEMEN: The rehabilitation plan for the Glenn-Colusa Irrigation District was authorized by Congress in 1978 under the provisions of the Small Reclamation Projects Act (P.L. 984) (70 stat 1044, as amended). Funds were appropriated by your committee in the amount of nearly $14 million through fiscal year 1980. However, there were delays in finalizing the repayment contract and in obtaining voter approval. Because of the delays, these funds were not used and now need to be reallocated.

The District's repayment contract was signed on September 11, 1980, and engineering designs were accelerated to maintain the master work schedule that was approved by WPRS last year. We understand that because of the delay, Congress reallocated the appropriated funds through last year's supplemental appropriations bill. Unfortunately, we were not aware of this action.

The amount of $585,000 currently in the President's budget is the amount that would have completed the appropriations for the total project ($17 million) in fiscal year 1982. With the reallocation last year, however, this is inadequate. A reappropriation will allow completion of final designs as indicated on the master schedule, and the awarding of construction contracts scheduled for this summer. By this fall, the District will have made construction contract commitments approaching $14 million. Time is of the essence, and the schedule should be maintained or the project will be inadequately funded due to escalation.

The principal feature of the project is the replacement of the 70-year-old Sacramento River pump station. The oldest part of the pump station experienced a

foundation failure in mid-September of last year. Fortunately, the failure occurred late in the irrigation season and past the critical demand period. The continued threat of failure and the need to improve pump efficiencies (less than 50 percent) suggest that the project should move to completion as rapidly as possible. The remainder of the canal improvements are to provide better water management control and to improve the overall water conveyance efficiencies for the total system.

We therefore request that the Committee support the reappropriation of the funds for fiscal year 1982 to keep the project on schedule.

Sincerely,

RALPH A. NISSEN, *President.*

Mr. FRANKLIN. Mr. Chairman, your committee had funded this program in the past.

Mr. BEVILL. Yes.

Mr. FRANKLIN. And it was utilized on another project.

Mr. BEVILL. I certainly hope I can help you on this.

Mr. NISSEN. Thank you.

Mr. FAZIO. Mr. Chairman, Mr. Nissen is a constituent of mine as well. Mr. Chaffee and I are going to work very hard to see if we can help you, but you do understand the strictures we operate under

Mr. NISSEN. We do. Please make it easier for me to go back home. Thank you, Mr. Chairman.

Mr. BEVILL. We will work with Congressman Fazio on that and do what we can.

Mr. NISSEN. Thank you.

Mr. FRANKLIN. Our next speaker is Frank Enos.

STATEMENT OF FRANK ENOS

Mr. ENOS. Mr. Chairman, my name is Frank Enos. I am President of the Tehama-Colusa Water Users Association. I have with me President of the Orland Artois Water District, Donald Schonauer, and Fred Pride, who are with us here on our trip. We are all part of the contingent here on the Westside Canal. I wish to have my statement made a part of the record, and I urge your committee to continue to approve appropriations for the investment in our distribution systems to utilize the water available from our Tehama-Colusa Canal. Thank you very much.

Mr. BEVILL. Your statement will be made a part of the record. We are delighted to have you with us.

[Mr. Enos' statement follows:]

RE TEHAMA-COLUSA CANAL PROBLEMS
TEHAMA-COLUSA CANAL WATER USERS' ASSOCIATION

I. Water Supply

A. The former Secretary of Interior Andrus, has declared no more water available for the Sacramento Valley Canals (Tehama-Colusa and Corning Canals) service area because of increased needs in the Delta. Following are some of the problems resulting.

1. Sacramento Valley areas thus are being denied water while exports through CVP and SWP continue. This is contrary to State policies enunciated in the "Counties of Origin" and "Watershed Preservation" acts. The Secretary thus agrees with the State on Delta policies but denies State policies with respect to priority and protection for areas where water originates. Since inception of the CVP in the middle 1930s the Interior Department and its Bureau of Reclamation have consistently assured the people of California that only surplus water would be exported through the CVP.

2. Denial of water for Sacramento Valley Canals service area is being done retroactively. The canal was authorized in 1953 and it is with the original authorization of the Sacramento Valley Canals that allocates a block of water for future contracting within the service area. After many stops and starts on construction of the canal it was finally completed in 1980. With the factors influencing progress on the Canals beyond their control the Districts have been unable to plan and proceed with the necessary distribution systems. Consequently the Districts have been unable to contract for the amounts of water they now need. Over the years, until the former Secretary announced his policy of no water, the Districts were assured that water was reserved for them in the original authorization and as soon as the full needs were established water contracts would be signed for the full amounts, this, now is being denied by the Secretary, while he allows continued export from the Delta, agrees to greatly increased CVP responsibility for Delta flows and talks of a first priority of 250,000 acre-feet for a supplemental water service contract for lands annexed to the Westlands Water District.

3. The foregoing policies of the former Secretary leave the Districts unable to obtain water and construct the necessary distribution systems. Consequently, landowners who have spent large sums developing their lands for irrigation are now left with no water supply. Most of them leveled land and installed groundwater wells to provide interim water pending availability of the Canal supply. Groundwater supplies are not adequate for more than a few years so now landowners are faced with loss of investments in the order of several thousand dollars per acre.

4. Continued delays in obtaining water and building distribution systems are pushing the Districts into difficult financial situations. Construction costs are inflating more rapidly than the farmers' incomes from their crops.

5. The Government now has some 165 million dollars invested in the Sacramento Valley Canals. The two Canals have capacities to deliver 625,000 acre-feet annually. Present contracts total 282,800 acre-feet. With Canal lossess estimated at about 50,000 acre-feet this leaves some 292,200 acre-feet yet to be contracted and sold. Generally this means that with only 282,800 acre-feet contracted for, of a total of 575,000, some $70,000,000 of the federal investment in the Canals cannot be returned to the government.

We urge the Secretary of Interior to reconsider the action of placing a moratorium on further contracting and allow Districts' in the "areas of origin" to contract for additional needed supply. We urge the Secretary of Interior make good that only "surplus" water from the Sacramento Valley Basin are offered for export south of the Delta. We urge the Secretary of Interior to consider the fact that the Sacramento Valley Canals system is currently being operated contrary to the original authorization as set forth by the Congress of the United States. These issues are of grave concern to the members of the Tehama-Colusa Water Users' Association and we wish your review and administrations future guidance in these matters.

SUMMARY OF WATER REQUIREMENTS

FOR TEHAMA-COLUSA AND CORNING CANALS
SERVICE AREAS

	Tehama-Colusa Canal	Corning Canal
Executed Contracts	282,800	43,800
Estimated Future Water Contract Needs	488,600	80,600
TOTAL SERVICE AREA REQUIREMENT -	771,400 acre ft./year	124,400 acre ft./yea
Approximate Canal Capacity	500,000	125,000
TOTAL FUTURE WATER DEFICIENCY -	221,400 acre ft./year	

TEHAMA COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Acres Irrigable	A.F./AC.	
Tehama Water District	400	134	134	2.99	
Kirkwood Water District	2,100	975	855	2.46	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					Water Requirement
Richfield Water District		580	530	2.36	1,250
Tehama County lands outside of districts within T. C. Canal Service Area		17,500	15,750	2.5(1)	39,375
TOTAL FUTURE WATER CONTRACT NEEDS FOR THAT PORTION OF TEHAMA COUNTY WITHIN T.C. CANAL SERVICE AREA					40,625
TOTAL FUTURE WATER CONTRACT NEEDS FOR THAT PORTION OF TEHAMA COUNTY WITHIN THE CORNING CANAL SERVICE AREA					80,600
TOTAL FUTURE WATER CONTRACT NEEDS FOR TEHAMA COUNTY					121,225

(1) Average demand assumed for Tehama County lands 2.5 A.F./Acre

TEHAMA COUNTY - CORNING CANAL SERVICE AREA

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Acres Irrigable	A.F./AC.	
Proberta Water District	5,500	3,005	2,486	2.2	
Thomes Creek Water District	8,400	2,417	2,307	3.6	
Corning Water District	25,300	13,148	10,887	2.32	
Elder Creek Water District	4,600	3,745	3,273	1.41	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					Water Requirement
Rawson Water District		3,575	1,940	2.5 (1)	4,850
El Camino Water District		7,631	5,800	2.5 (1)	14,500
Tehama County lands outside of districts within Corning Canal Service Area		27,200	24,500	2.5 (1)	61,250

TOTAL FUTURE WATER CONTRACT NEEDS FOR that portion of TEHAMA COUNTY within the CORNING CANAL SERVICE AREA 80,600 A.F.

(1) Average demand assumed for Tehama County lands 2.5 A.F./Acre

GLENN COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Acres Irrigable	A.F./AC.
Kanawha Water District	45,000	15,143	13,737	3.23
Orland-Artois Water District	53,000	30,031	27,459	1.93
Glide Water District	10,500	9,377	6,752	1.56

DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS

				Water Requirement
Orland-Artois Water District	30,031	27,459	1.32 (1)	36,250
Glide Water District	9,377	6,752	1.69 (1)	11,410
Capay Rancho Water District (3)	10,029	9,400	3.25 (1)	30,550
Glenn County lands outside of districts within T.C. Canal Service Area	61,100	54,990 (2)	3.25	178,720
TOTAL FUTURE WATER CONTRACT NEEDS FOR GLENN COUNTY				256,930 A.

(1) Average demand assumed for Glenn County lands 3.25 A.F./Acre.
(2) Assumed 10% of gross area non-irrigable.
(3) A portion of Capay Ranch Water District lies within Tehama County.

COLUSA COUNTY-TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Acres Irrigable	A.F./AC.	Water Requirement
Westside Water District	65,000	12,105	10,600	6.13	
LaGrande Water District	7,200	1,454	1,434	5.01	
Davis Water District	4,000	961	940	4.26	
County of Colusa	8,670	47,980	43,180	0.20	
Colusa County Water District (3)	62,200	40,680	36,120	1.72	
4-M Water District	5,700	2,313	1,767	3.22	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					
Holthouse Water District		1,860	1,670 (5)	3.25	5,430
Glenn Valley Water District		1,998	550	3.14	1,730
Cortina Water District		1,294	1,140	3.25 (1)	3,705
Colusa County Water District		40,680	36,120	0.78 (2)	28,170
Colusa County lands outside of districts within T.C. Canal Service Area		47,890	43,180 (4)	3.05 (1)	131,700
TOTAL FUTURE WATER CONTRACT NEEDS FOR COLUSA COUNTY					170,735 A.F.

(1) Average demand assumed for Colusa County lands 3.25 A.F./Acre
(2) Total demand for Colusa County Water District assumed to be 2.5 A.F./Acre
(3) Approximately 1,200 acres of Colusa County Water District lies within Yolo County
(4) Assumed 10% of gross non-irrigable
(5) Approximately 1,000 acres of the Holthouse Water District lies outside of the current Tehama-Colusa Canal Service Area
NOTE: This proposed Freshwater Water District which lies outside of the current Tehama-Colusa Canal Service Area will require approximately 1,000 acre feet.

YOLO COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Acres Irrigable	A.F./AC.	
Dunnigan Water District	19,000	10,657	9,650	1.97	
Future Water Contract needs for Yolo County lands outside of districts within T.C. Canal Service Area		11,260	10,140	2.0 (1)	Water Requirement 20,280 A.F.

(1) Average demand assumed for Yolo County lands 2.0 A.F./Acre

NOTE: Yolo-Zamora Water District which lies outside of the current Tehama-Colusa Canal Service Area has requested 40,000 A.F. of water from the Tehama-Colusa Canal.

Mr. FRANKLIN. Our next witness is Mr. George Barber, member of the Board of Supervisors, San Joaquin County.

STATEMENT OF GEORGE BARBER

Mr. BARBER. Mr. Chairman, I am accompanied today by Supervisor Evelyn Costa, County Administrator Charles Dixon, and Gerald Sherwin, and I am authorized to present the statement by the board. We have submitted a detailed statement for the record. I might add that we support Mr. Shumway's, my long-time colleague on the board of supervisors, remarks earlier. It is a pleasure to join with him today in presenting the report for our county.

I would just mention two projects very briefly that we are vitally concerned about. That is the Auburn-Folsom South Unit, Auburn Folsom South, and of course the New Melones Project, which, as Mr. Shumway pointed out, is now starting to wind up and hopefully be filed in a short period of time. In addition, Mr. Chairman, I also am going to speak just briefly on behalf of my neighboring county, the board of supervisors from Stanislaus County. Their water consultant is here in the audience today, and we are submitting a detailed report for the record on behalf of Stanislaus County.

Thank you.

Mr. BEVILL. Very good.

[Mr. Barber's statement follows:]

STATEMENT TO UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

On Behalf of
THE COUNTY OF SAN JOAQUIN
and the
SAN JOAQUIN COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT,
CALIFORNIA

March 26, 1981

Mr. Chairman and Members of the Committee:

My name is George L. Barber. I am a member of the Board of Supervisors of the County of San Joaquin, California. A resolution of the Board authorizing this presentation is attached.

In summary, the County of San Joaquin requests that the following appropriations be made to the Corps of Engineers and the Water and Power Resources Service for the fiscal year between October 1, 1981, and September 30, 1982, for projects of concern to the County:

Corps of Engineers - Construction	
New Melones Project	$12,700,000
Stockton Ship Channel	1,400,000
Corps of Engineers - Surveys	
Sacramento-San Joaquin Delta	$ 190,000
San Joaquin River Basin	1,240,000
Water and Power Resources Service - Construction	
Auburn Dam	$ 2,841,000
Folsom South Canal	400,000
Water and Power Resources Service - Investigations	
Delta Support Studies	$ 1,312,000
Corn Requirement Study	50,000
New Melones Studies	200,000

DETAILED COMMENTS

Corps of Engineers - Construction

New Melones Project.....$12,700,000

The New Melones Dam, Reservoir and Powerplant are complete for operational purposes. In calendar year 1980, the Project provided some flood control, power and fishery benefits, although restrictions on its operation have reduced these benefits substantially. Properly operated, the Project can prevent heavy damage this year through control of potentially heavy snow-melt run-off and can begin its authorized power functions so as to reduce dependence on foreign oil imports and to augment area generating reserves.

There is need to prepare for reservoir and downstream recreation and public access development and to move forward on reservoir clearing. The requested appropriation will permit these essential features to progress.

Stockton Ship Channel.....$ 1,400,000

The entire San Francisco Bay-Stockton Channel Project has been long delayed. As a result, an increasing percentage of deep-draft ocean vessels are unable to reach the Port of Stockton or must load lightly which increases shipping costs greatly and reduces efficiency.

The Board of Supervisors urges that work on the entire channel proceed as rapidly as possible and, especially that a full start be made on the actual channel deepening in fiscal year 1981-82.

Corps of Engineers - Surveys

Sacramento-San Joaquin Delta.....$ 190,000

These funds are needed so the Corps can complete its survey report being prepared to ascertain the extent of Federal-State-local participation in Delta levee rehabilitation and repair. In 1980, five Delta islands were inundated and disastrous losses in crops resulted. There is complete agreement that a systematic cooperative program of rehabilitation and repair is needed

to preserve the massive agricultural production of the Delta and to protect Delta water quality so important to both the State Water Project and the Federal Central Valley Project.

Completion of the Corps' survey report is the essential first step in developing such a program.

San Joaquin River Basin.....$ 1,240,000

San Joaquin County is particularly interested in the portion of this survey which deal with the Littlejohn Stream Group and New Hogan Dam. Littlejohn Creek and related streams are repeated sources of flood damage in the southeastern County, and our Board looks forward keenly to the development of plans for improving conditions in this area.

Water and Power Resources Service - Construction

Auburn Dam.....$ 2,841,000

A primary decision regarding the type of seismically-safe dam to be constructed was agreed upon in the Interior Department late last year. September, 1980, reports by the Water and Power Resources Service, indicate the authorized project is economically justified. Refinements in those economic studies, if the Secretary thinks they are needed, and final design and preparation of specifications for this much-needed project should be pressed forward during the current and 1981-82 fiscal years looking towards resumed construction as soon as possible.

Folsom South Canal.....$ 400,000

The most important of the Auburn-related programs is Folsom South Canal. This Canal now ends in Sacramento County about 10 miles north of the San Joaquin County line. The completed portion was designed to deliver over 400,000 acre-feet of water to eastern San Joaquin County. This area is almost wholly developed to pasture, vineyard, row, and orchard crops and is suffering critical groundwater overdrafts.

With Auburn Dam being economically justified as indicated in the Service report, parallel progress should be made on the

Canal. Negotiations looking towards allocation of water to parts of the service area can resume, the Environmental Impact Statement can be completed, and a start can be made on right-of-way surveys and other preliminaries to extension of the Canal to its originally-intended terminus at Lone Tree Creek in San Joaquin County.

The requested funds should be available so progress on the Canal can be resumed.

Water and Power Resources Service - Investigations

Delta Support Studies.....$ 1,312,000

A wide variety of analyses and studies are required in the Sacramento-San Joaquin Delta in connection with existing and potential problems. Many of these programs involve cooperation with the State of California since both the State Water Project and the Federal Central Valley Project use the Delta as a means of conveying water across the Delta to their export pumping plants.

The State expends funds in studying the effects of cross-Delta flows on water quality in the Delta and on export waters and in studying the effects of Project operations on fishery resources. The Service should have comparable funds with which to discharge its responsibilities toward the Delta.

Delta Corn Requirement Study.....$ 50,000

The State has been funding this program for the past two years without participation by the Water and Power Resources Service. The question posed concerns the quality of water required to all production stages for corn, a major crop grown in the Sacramento-San Joaquin Delta. Since such matters are important to the Water and Power Resources Service as operator of the Central Valley Project, it is believed the Service should bear part of the study endeavor.

New Melones Studies.....$ 200,000

Water currently is being stored in New Melones Reservoir in accordance with a recent Court decision. It is essential

that the Water and Power Resources Service be in position to enter into contracts for water service when adequate supplies have been stored. There are critical needs for supplemental water in the immediate Stanislaus River area to overcome groundwater overdrafts and to improve water quality. These needs and adequate storage to meet them can coincide by the time the essential studies of diversion and conveyance locations, contracting conditions and payment capabilities are completed in the 1981-82 or following fiscal year. Such contracts will aid materially in securing repayment of the reimbursable Federal investment and their negotiation should be expedited.

BEFORE THE BOARD OF SUPERVISORS OF THE SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, STATE OF CALIFORNIA

R-81-492

RESOLUTION APPROVING STATEMENTS TO BE SUBMITTED TO SUBCOMMITTEES ON ENERGY AND WATER DEVELOPMENT OF HOUSE OF REPRESENTATIVES AND SENATE APPROPRIATIONS COMMITTEES

- - - - - - - - - - - -

WHEREAS, the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States House of Representatives and the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States Senate will each separately hold hearings on March 26, 1981, on the budgets of the U. S. Army Corps of Engineers and the Water and Power Resources Service; and

WHEREAS, numerous projects contained in those budgets are of benefit to San Joaquin County;

NOW, THEREFORE, BE IT RESOLVED that Supervisor George Barber and Supervisor Evelyn Costa are hereby authorized and directed to appear before the aforementioned congressional subcommittees in Washington, D. C. in support of the appropriations for pending flood control, navigation, and water supply projects which will be of benefit to San Joaquin County and to present the attached statements.

PASSED AND ADOPTED this 17th day of March, 1981, by the following vote of the Board of Supervisors, to wit:

AYES: Supervisors Yoshikawa, Barber, Alva, Costa, Wilhoit

NOES: None

ABSENT: None

DOUGLASS W. WILHOIT, Chairman
Board of Supervisors
San Joaquin County Flood Control
and Water Conservation District
State of California

ATTEST: JORETTA J. HAYDE
Clerk of the Board of Supervisors
of the San Joaquin County Flood
Control and Water Conservation
District, State of California

By Cindy DuBruts

ENDORSED
FILED March 17, 1981
JORETTA J. HAYDE, Clerk

By Cindy DuBruts
Deputy

Mr. FRANKLIN. Our next speaker is Tom Madden, Councilperson from the City of Stockton, accompanied by Mr. Arnold Rue.

STATEMENT OF TOM MADDEN

Mr. MADDEN. Our congressman Norman Shumway has given you detailed information on our projects. Mr. Barber, Supervisor, has given you detailed information. We have submitted a written report for your committee and we thank you for your consideration. Thank you.

[Mr. Madden's statement follows:]

Statement by the City of Stockton, California

Mr. Chairman and Members of the Committee:

I am Councilman Tom Madden of the City of Stockton, California authorized by the Stockton City Council to make this statement before your honorable body today.

The City of Stockton supports the Corps of Engineers and Water and Power Resources Service surveys, flood control and reclamation projects in the following amounts:

1.	New Melones Lake	$12,700,000
2.	Deepening of the Stockton Ship Channel to 35 feet and realigning part of the Channel	$ 1,400,000
3.	Survey for the San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal	$ 255,000
4.	Sacramento-San Joaquin Delta Survey	$ 190,000
5.	San Joaquin River Basin Survey	$ 1,240,000
6.	The Auburn Dam and Reservoir	$ 2,841,000
7.	Folsom South Canal	$ 400,000
8.	Delta Support Studies	$ 775,000
9.	Delta Corn Replacement Study	$ 50,000

FLOOD CONTROL -- CORPS OF ENGINEERS

NEW MELONES LAKE----------$12,700,000

The President's budget contains $12,700,000 which is the amount we support. This money is for cultural preservation in the reservoir and acquisition of riparian habitat downstream of the dam. As these features will complement the project, this capability is supported. New Melones is a project which augments the supply of water within Central California and we urge that the project be utilized to its maximum potential, both for its flood control benefits and for the additional water supply which it will create.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING----------$ 1,400,000

The City supports the President's budget and the California Water Commission's recommendation of $1,400,000 for the San Francisco Bay to Stockton Ship Channel Deepening. The present Channel depth of 30 feet combined with the increasing size and draft of oceangoing vessels prevents maximum usage of this vital port facility which is not only used by merchant vessels but also by the U. S. Navy. Now vessels cannot carry full loads when sailing on the Channel, but they will be able to when the Channel is deepened to 35 feet. That improvement will make Port usage more cost effective for the shippers.

The Port of Stockton is one of the large employers in San Joaquin County affecting directly or indirectly approximately 4,000 to 5,000 jobs with a payroll of $50 million. Unless proposed improvements to the Stockton Ship Channel are made, the Port of Stockton will fall behind in being a leading employer thus increasing the persistent unemployment for Stockton. The Corps of Engineers has studied the environmental impacts of this project and determined there are "no adverse effects". Therefore, construction should progress as soon as possible.

SURVEYS -- CORPS OF ENGINEERS

The City of Stockton urges appropriations for the following surveys, all of which affect the Stockton area:

SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WASTE DISPOSAL	$ 255,000
SACRAMENTO-SAN JOAQUIN DELTA	$ 190,000
SAN JOAQUIN RIVER BASIN	$1,240,000

WATER AND POWER RESOURCES SERVICE

AUBURN DAM AND RESERVOIR----------$2,841,000

The City Council supports the President's budget amount and the California Water Commission's recommendation of $2,841,000 for the Auburn Dam and Reservoir. The Council also urges Congress to do the following:

1. To maintain support of a reauthorized Auburn Dam.

2. To recommend the earliest possible completion of any economic and environmental studies needed to support such reauthorization in the current session of the Congress.

3. To recommend appropriation of sufficient funds for fiscal year 1981-82 to complete studies on and final designs of Auburn Dam and to participate in Division of Dam Safety review thereof.

FOLSOM SOUTH CANAL----------$ 400,000

The Council supports the California Water Commission's recommendation of $400,000 for Folsom South Canal. These funds are needed to complete the Canal EIS, to participate in Memorandum of Understanding negotiations, to process pending litigation to a conclusion, to carry on studies required for contract negotiation with local Districts and to take initial steps toward land

acquisition and negotiation of water contracts. The City of Stockton is in a critically overdrafted groundwater basin. The water agencies in the basin are taking steps now to develop alternative groundwater management plans looking toward correcting the overdraft when supplemental water is available. The American River water, under the Memorandum of Understanding allocations between the Canal and the Lower River, offers a practical and energy-efficient source of water and should be developed to provide supplemental water to this area at the earliest possible time.

DELTA SUPPORT STUDIES----------$775,000

The City Council supports the Water Commission's recommendation for this level of studies by the Water and Power Resources Service for Delta studies.

DELTA CORN REPLACEMENT STUDY----------$ 50,000

Since this study may benefit agricultural production proximate to Stockton, which has an agribusiness economy, the California Water Commission's recommendation is supported.

Resolution No. 38,088

STOCKTON CITY COUNCIL

WHEREAS, on March 26, 1981, appropriate committees of the Congress of the United States will conduct hearings to consider Federal appropriations for flood control, reclamation, and navigational projects and surveys for fiscal year 1981-82, and

WHEREAS, several projects and surveys to be considered at said Congressional hearings will be of benefit to the City of Stockton and its environs, and

WHEREAS, the expeditious construction of said projects and completion of said surveys is required to protect the health, welfare and safety of the residents of this area; now therefore,

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF STOCKTON, AS FOLLOWS:

That the City of Stockton does hereby support the appropriations by the Congress of the United States of funds for fiscal year 1981-82 for the planning, continuation and completion of flood control, reclamation, and navigational projects and surveys; namely, NEW MELONES LAKE, SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING, SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WATER DISPOSAL SURVEY, SACRAMENTO-SAN JOAQUIN DELTA SURVEY, SAN JOAQUIN RIVER BASIN SURVEY, THE AUBURN DAM-FOLSOM SOUTH CANAL, DELTA SUPPORT STUDIES, AND DELTA CORN REPLACEMENT STUDY, which affect the City of Stockton and its environs; be it

FURTHER RESOLVED, that the representatives of the City of Stockton be and hereby are authorized to appear before appropriate committees of the Congress of the United States on March 26, 1981, for the purpose of making presentations consistent with this resolution; be it

FURTHER RESOLVED, that the City Clerk of the City of Stockton is hereby authorized and directed to send copies of this resolution to the Honorable Alan Cranston, the Honorable S. I. Hayakawa and the Honorable Norman Shumway.

PASSED, APPROVED and ADOPTED this 16th day of March, 1981.

s/ DANIEL A. O'BRIEN
DANIEL A. O'BRIEN, Mayor
of the City of Stockton

ATTEST:

s/ JOHN M. JARRETT
JOHN M. JARRETT, City Clerk
of the City of Stockton

I, John M. Jarrett certify that this document is a true and correct copy of Resolution No. 38,088 adopted by the City Council of the City of Stockton on March 16 19 81 and on file in the office of the City Clerk of the City of Stockton.

Date: March 17 1981 JOHN M. JARRETT City Clerk of the City of Stockton

By [signature] DEPUTY

STOCKTON FOUNDED JUNE 1849 INCORPORATED JULY 1850

Mr. FRANKLIN. Our next speaker is Mr. John S. Harnett, General Manager, East Bay Municipal Utility District.

STATEMENT OF JOHN S. HARNETT

Mr. HARNETT. Mr. Chairman, members of the subcommittee, I would appreciate inclusion of the statement which I have submitted for the record, and I would like to indicate that we strongly support the recommendations of the commission with regard to additional funding of the Auburn Dam, the Folsom South Canal, and the delta support studies, and I would particularly like to mention just briefly the Corps survey report in the Sacramento-San Joaquin Delta. I am sure all of you read during the past year the flooding of the upper Jones Tract and the subsequent loss of the Santa Fe embankment in that area.

Our three aqueducts which bring water to over one million people on the East Bay were damaged as a result of that, and we just got by by a whisker. We could have lost the whole system at that time, which would have really been a serious calamity. There is a urgent need for the Corps to complete that study on the levees of the delta there. It is about 80 percent complete, and we understand was the victim of a recent budget cut. We hope that you will be able to restore those funds ($190,000) to complete that particular study.

Thank you.

[Mr. Harnett's statement follows:]

STATEMENT OF JOHN S. HARNETT
GENERAL MANAGER
EAST BAY MUNICIPAL UTILITY DISTRICT
AT HEARINGS BEFORE THE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
UNITED STATES HOUSE OF REPRESENTATIVES
ON PUBLIC WORKS APPROPRIATIONS BILL OF FY 1981-82

March 26, 1981

Honorable Tom Bevill, Chairman

Mr. Chairman and Members of the Committee:

SUMMARY

The East Bay Municipal Utility District supports the recommendations of the California Water Commission with regard to recommended appropriations for the Federal Flood Control and Reclamation Programs in California for Fiscal Year 1981-82. Specifically, the District urges appropriations for the following projects: reference California Water Commission Summary dated March 6, 1981.

No. 31	Completion of the Corps Survey Report concerning the Sacramento-San Joaquin Delta	$ 190,000
No. 48	WPRS Engineering and Economic Studies concerning Auburn Dam and Reservoir	2,841,000
No. 54	WPRS EIS and other preliminary work concerning the Folsom-South Canal	400,000
No. 99	WPRS Delta support studies	1,312,000

The East Bay Municipal Utility District supplies water for municipal and industrial purposes to a 300 square mile area in Alameda and Contra Costa Counties, located on the eastern side of San Francisco Bay. This water is served to 1.1 million people who reside in that area.

The District has a direct interest in the completion of the Auburn-Folsom South Project for two reasons: first as a contractor for project water and, second, as an indirect beneficiary in that part of the service area which encompasses the lower Mokelumne River. This latter interest relates to the substantial groundwater pumping in that area which results in increasing seepage losses from the Mokelumne River. Much of the seepage loss must be made up by releases of water stored by the East Bay Municipal Utility District for its own use, and, as the losses increase, the safe yield of the District's Mokelumne River Project is reduced proportionately. Since the Mokelumne River Project supplies 95 percent of the District's water, the project yield is of major concern.

An imported surface supply from the Auburn-Folsom South Project has been the expected solution to this problem for many years. Furthermore, the District provides storage, on an interim basis, to agricultural interests along the lower Mokelumne River, who also have looked to this project to meet their long-term

water requirements. Without the Auburn Dam and the Folsom South Canal, their water requirements will eventually have to be met from increased groundwater pumping. This was exactly the situation that occurred during the recent drought which resulted in alarming declines in the groundwater table.

Recently the District has been working with San Joaquin County interests to examine the feasibility of utilizing the groundwater basin conjunctively with a surface supply brought to the area by an extension of the Folsom South Canal constructed by either the Water and Power Resources Services or by local interests. The first phase of this study will be to develop a model and analyze the characteristics of the groundwater basin.

The District urges the Congress to support funding for Auburn Dam in the amount of $2,841,000 to enable completion of economic studies and to initiate final design and preparation of specifications for the much needed project. The Congress is further urged to support appropriation of $400,000 for the Folsom South Canal to provide for completion of the Environmental Impact Statement and for right-of-way surveys plus other preliminary efforts necessary to move toward completion of the canal.

The District also requests Congress to appropriate funds needed so the Corps can complete its survey report intended to ascertain the extent of federal, state and local participation in Delta levee rehabilitation and repair. There is an increasing incidence of flooding in the Delta islands due to levee failure with great financial loss to agriculture and other facilities. In 1980 a levee failure and resulting failure of a railroad embankment in the Jones Tract gravely endangered the security of this District's Mokelumne Aqueduct system and the water supply to over one million people in the East San Francisco Bay Area. A cooperative program of rehabilitation and repair is needed to preserve the agricultural production, water and transportation facilities, and to protect Delta water quality which is vital to the operations of the State Water Project and the federal Central Valley Project. Completion of the Corps report is an essential step in developing such a program. The District urges the appropriation of $190,000 to complete the Corps survey report.

The District also supports the appropriation of $1,312,000 for Delta support studies to be made by the federal Water and Power Resources Service. A great deal of data is required concerning the Sacramento-San Joaquin Delta with regard to existing and potential problems. The state and federal government must necessarily coordinate their planning and operations in the Delta. Since both the State Water Project and the federal Central Valley Project utilize the Delta to convey water to their export pumping plants, the Service should have comparable funds to work with the state and to meet its responsibilities toward the Delta.

STATEMENT TO UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
(PUBLIC WORKS)
HONORABLE TOM BEVILL, CHAIRMAN

On behalf of

THE STOCKTON-EAST WATER DISTRICT

February 25, 1981

Mr. Chairman and Members of the Committee:

The Stockton-East Water District is located in Eastern San Joaquin County, California, and extends from the Sierra Nevada on the east, to the edge of the Sacramento-San Joaquin Delta on the west.

The District encompasses 114,500 acres, of which about 75,000 acres is irrigated farmland. The total population of the District is nearly 200,000 or approximately 58 percent of the population of San Joaquin County, including the City of Stockton. The population of the District is expected to reach 320,000 by the year 2020.

The District provides surface water both for agricultural and municipal uses. In addition to the supply of water for agriculture, the District operates a water treatment plant, which was commissioned in March, 1977, for the wholesale supply of treated water to the City of Stockton, the County of San Joaquin, and the California Water Service Company; which together, including their

own sources of groundwater, supply the City of Stockton and surrounding areas. The purpose of the treatment plant is to reduce the overdraft on the groundwater by supplying good quality treated surface water to areas previously served by the groundwater basin. This plant is being paid for by local revenue bonds.

Presently, the District's source of surface water is from New Hogan Dam on the Calaveras River which source is now fully developed. Under contractual arrangements between Stockton-East Water District, Calaveras County Water District, and the Water and Power Resources Service, almost the entire yield of New Hogan Dam is presently utilized by Stockton-East Water District. However, 43.5% of that yield is reserved for Calaveras County Water District when use can be made of the water by that District.

The District's present water needs are being partially satisfied by overdrafting the groundwater supply by an average of about 59,000 acre-feet annually[1/] above the safe groundwater yield. The State of California Department of Water Resources has designated eastern San Joaquin County as an area of critical overdraft.

Stockton-East Water District, in its Water Action Program[1/], has determined the need for supplemental surface water for the year 2020 to be 126,000 acre-feet annually; this is expected to increase to 145,000 acre-feet annually by the year 2030.

In short, the Stockton-East Water District's source of surface supply will eventually be reduced by about 43% while the District's present surface supply is insufficient to curtail the

1/ Bookman-Edmonston Engineering, Inc., Water Action Program, (September, 1978).

continuing overdraft of groundwater, let alone recharge and restore the groundwater level.

Two Federal Flood Control and Reclamation Programs are of primary concern to the District; namely, New Melones Reservoir and the Auburn Dam and Folsom South Canal. The Stockton-East Water District supports the appropriations in the Presidents' Fiscal Year 1981-82 Budget Request for these two projects.

The District further encourages early approval of the Water and Power Resources Service's recommendations contained in the Stanislaus River Basin Alternatives and Water Allocation Special Report, dated September, 1980, which provides for an interim water supply to the Stockton-East Water District, firm and interim supplies to Central San Joaquin Water Conservation District, and the potential for a County-wide solution to our supplemental water needs for many years to come. It is imperative that New Melones be filled to accomplish these objectives; and to realize its full multipurpose potential for hydroelectric power, irrigation and domestic benefits, and alleviation of groundwater overdrafts.

The District also urges that sufficient funds be appropriated, within the guidelines of the new administration, to resolve the current dilemma preventing construction of the Auburn Dam and Folsom South Canal so that a permanent solution to Eastern San Joaquin County's water needs can be implemented in a timely manner.

Mr. FAZIO. Thank you very much. I certainly understand what you are saying.

Mr. FRANKLIN. Mr. Chairman, our next speaker is Marshal Jones, consulting engineer.

Mr. JONES. I am done.

Mr. FRANKLIN. The next speaker is Mr. Larry Bagley, Mayor, City of Oceanside.

STATEMENT OF LAWRENCE M. BAGLEY

Mr. BAGLEY. Thank you. I am Larry Bagley, the Mayor of Oceanside. We have submitted a written statement, and rather than go through it, I hope that will be made part of the record.

[Mr. Bagley's statement follows:]

CITY OF OCEANSIDE

MAYOR
LARRY M. BAGLEY

DEPUTY MAYOR
JOHN C. CASEY

COUNCIL MEMBERS
WILLIAM D. BELL
MELBA BISHOP
RAY BURGESS

March 26, 1981

PRESENTATION TO THE ENERGY & WATER DEVELOPMENT SUBCOMMITTEES OF THE APPROPRIATIONS COMMITTEES OF THE UNITED STATES SENATE AND THE UNITED STATES HOUSE OF REPRESENTATIVES

Oceanside Corps of Engineers' Projects

Gentlemen:

I am Lawrence M. Bagley, Mayor of the City of Oceanside, California. I am most appreciative of the opportunity to be heard today and to testify on the need for Congress to provide $800,000 in this coming year's budget, which has been requested by the Corps of Engineers, to complete our harbor expansion study and to continue their harbor dredging project.

I realize that you cannot recall all of the innumerable projects that come before you, but as a reminder -- Congress, by passage of Public Law 87-9, recognized that the devastating erosion, which has plagued our City beaches and has resulted in millions of dollars in lost tourist revenue to Oceanside, is directly attributed to the construction of the Camp Pendleton Military Boat Basin in 1942. The Corps of Engineers has completed the Beach Erosion Study, and we will be appealing to Congress for construction funds in the near future. Meanwhile, shoaling of the harbor entrance is a constantly developing hazard due to the design of the Marine Corps Boat Basin and dredging is vital to maintaining harbor operations and restoring sand to the public beaches of Oceanside.

The harbor expansion study, which the Corps of Engineers has been working on for a number of years, will be completed with the allocation of $100,000.

We are asking you to provide the necessary follow-on appropriations for these two important projects.

Respectfully submitted,

Lawrence M. Bagley

Lawrence M. Bagley
Mayor
City of Oceanside, California

HARBOR EXPANSION STUDY

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Appropriation Prior to FY 1981	Allocation FY 1981	Balance to Complete	President's Budget FY 1982	Corps of Engineers Capability FY 1981
$680,000	$580,000	0	$100,000	$100,000	$100,000

PROJECT HISTORY & DESCRIPTION

In a combined effort undertaken in 1962 in cooperation with the U. S. Army Corps of Engineers, the City of Oceanside constructed the present small craft harbor adjacent to Camp Pendleton's Del Mar Boat Basin, sharing a common entrance. Designed to accommodate 559 boat slips and to provide a harbor of refuge, this project was also expected to permanently restore the City's attractive beach area to the South. Soon after the construction was completed, the City beach erosion problem became evident again and by 1965 was so severe that the beach was totally lost. Sand accumulation at the harbor entrance created such a hazard to navigation that the Corps of Engineers initiated dredging operations which were used to help mitigate the beach erosion. Annual dredging is now required to keep the harbor fully operative.

The harbor facilities have been increased to accommodate over 800 boats at this time. However, studies indicate an existing berthing deficit of over 700 slips for the Oceanside tributary area. The Corps of Engineers has undertaken a study to determine the advisability of utilizing the harbor's turning basin to accommodate present and future needs. The design would also help to ameliorate the shoaling problem at the entrance. The City has funded conceptual design planning for the expanded harbor area which is being used in the Corps of Engineers' study. The City urges an allocation of $100,000 for the completion of this very important project.

Prepared By: HARBOR STAFF

HARBOR DREDGING PROJECT

(Operations and Maintenance)

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Actual Obligations FY 1980	Estimated Obligations FY 1981	President's Budget FY 1982	Corps of Engineers Capability FY 1982
$ Continuing	0	$983,000	0	$700,000

PROJECT HISTORY & DESCRIPTION

Since its founding prior to 1900, the City of Oceanside has been noted for its desirable climate and ocean-related attractions, particularly the wide and expansive sandy beach adjacent to the downtown area. However, in 1942, the regular southward littoral drift of sand was interrupted by the construction of the wartime Del Mar Boat Basin and its jetty at the newly-established Camp Pendleton. By 1949, this interruption resulted in destruction of almost all of the Oceanside Beach. This problem has confronted the U. S. Army Corps of Engineers almost constantly since that time. In 1955, the Corps released a report concerning the severe erosion problem and proposed cooperative projects to replenish the sand on the Oceanside Beach. In 1956, the United States Government accepted the responsibility for creating the beach erosion and proceeded two years later to dredge 800,000 cubic yards of sand to be discharged on the Oceanside Beach. Recognizing dredging as no solution for the problem, the Corps conceived modifications to the Del Mar Boat Basin entrance which included construction of the Oceanside Small Craft Harbor and deposit of over 3,000,000 cubic yards of sand for restoration of the beach in 1962. The beach erosion problem soon returned requiring almost continuous annual dredging to maintain the common harbor entrance and improve the deplorable beach condition.

Dredging operations by the Corps in 1977-78 restored project depth to the Harbor and deposited over 300,000 cubic yards of sand on the eroded beach. Unfortunately, this 300,000 cubic yards, as well as more of the original beach were subsequently lost to violent storms and exceptionally high tides. Continuation of an effective dredging program by the Corps is vital. The City of Oceanside requests approval of the $700,000 required for fiscal year 1982 dredging.

Prepared By: HARBOR STAFF

CITY OF OCEANSIDE

MAYOR
LARRY M. BAGLEY

DEPUTY MAYOR
JOHN C. CASEY

COUNCIL MEMBERS
WILLIAM D. BELL
MELBA BISHOP
RAY BURGESS

March 26, 1981

PRESENTATION TO THE ENERGY & WATER DEVELOPMENT SUBCOMMITTEES
OF THE APPROPRIATIONS COMMITTEES OF THE UNITED STATES SENATE
AND THE UNITED STATES HOUSE OF REPRESENTATIVES

San Luis Rey River Flood Control Project

Gentlemen:

I am Lawrence M. Bagley, Mayor of the City of Oceanside, California. I am most appreciative of the opportunity to be heard today and to testify on the urgency for the Congress to provide in this coming year's fiscal budget, the Planning allocation of $300,000 requested by the Army Corps of Engineers and the California Water Commission to fund Phase I engineering and design for this project.

We are most appreciative that Congress in 1965 had the foresight to initiate plans for averting major flood disasters through passage of the Flood Control Act. The U. S. Army Corps of Engineers in 1968 completed a comprehensive study of the lower San Luis Rey River Floodplain which included a preliminary flood control project plan to protect a major area of Oceanside from extensive damage. Planning has been exceedingly slow due to the lack of funding.

The winter storms of January, February, and March of 1980, which caused great hardship and destruction, highlighted the need to control these floodwaters. The citizens of Oceanside experienced extensive flooding of homes and factories -- loss of property and loss of wages. Portions of the road system were destroyed causing some homes to be completely cut off from effective Police and Fire protection. If the magnitude of the storms had been any greater, the results would have been catastrophic. The urgency of prompt completion of this project is clear.

Recent allocations of Congress have assisted the Corps of Engineers toward this goal. Now the community of Oceanside requests your continuing cooperation by providing these urgently needed funds for an "on schedule" completion of the San Luis Rey Flood Control Project.

Respectfully submitted,

Lawrence M. Bagley

Lawrence M. Bagley
Mayor
City of Oceanside, California

SAN LUIS REY RIVER FLOOD CONTROL PROJECT

Advanced Engineering and Design

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Allocation Prior to FY 1981	Estimated Cost Through FY 1981	Balance to Complete	Budget FY 1982	Corps of Engineers Capability FY 1982
$2,300,000	$1,054,000	$1,364,000	$636,000	$300,000	$300,000

PROJECT HISTORY AND DESCRIPTION

The San Luis Rey River, with a tributary drainage area of 558 square miles, is one of the largest in San Diego County. Numerous destructive floods have been recorded, but the flood of 1916 was the most extreme. The flood overflow area of 3,800 acres is the residence or job site for over 6,000 citizens of the community and is valued in excess of $73 million. Most of the valley development has occurred since 1916, thereby increasing the potential damage from such a flood to $9 or $10 million. The floods of 1978, 1979, and 1980, have been particularly disastrous in terms of loss of life, loss and damage to property, outright destruction of residential and commercial land, and loss of industrial production and wages. The magnitude of the destruction is without parallel in the City's history. Control of these floodwaters is urgently and imperatively needed.

The Corps of Engineers completed a flood control project study in 1968 which recommended a control channel 7 miles in length from the ocean to protect this area of Oceanside which was estimated to cost $10 million. The City of Oceanside immediately zoned the control channel area to preserve the project right-of-way. Although the City has grown rapidly during the last 11 years, especially in the flood overflow area, no further progress toward the project was made until 1976 when funds for advanced engineering and design were appropriated. An update of the estimated project cost now appears to be approximately $23 million.

The Corps is proceeding with a review of the 1968 report as a prerequisite of preconstruction planning. The proposed allocation for fiscal year 1982 is $300,000. Each year the project costs and the probability of a disastrous flood are steadily rising. The City is most anxious to see an allocation for FY 1982 ($300,000) confirmed and completion at the earliest possible date.

Prepared by: CITY ENGINEERING DEPARTMENT

Mr. BAGLEY. I would like to say, though, I have been listening to the request and the need for some haste. Over ten years ago I was here with the former Mayor on this same project, and it was at about the same status it is now, but because of new regulations, new standards, it is a much bigger project today than it was then. It is still as needed as it has ever been, and we do want the Corps to finish up the survey report and get into advance design on this flood control channel. We want to work with them to hopefully reduce the projected costs which are predicted now.

Thank you.

Mr. FAZIO. Thank you very much, Larry.

Mr. FRANKLIN. Our next speaker is Mr. Tom Powers, Supervisor of Contra Costa County. Mr. Powers.

STATEMENT OF TOM POWERS

Mr. POWERS. Mr. Chairman, it is a pleasure to be here again. Tom Powers, Chairman of the Board of Supervisors in Contra Costa County. As you know, that is Congressman Miller's district, and we are also proud to be just south of Congressman Fazio's district. One of the projects which I would like to stress is one of the eight projects listed in the written testimony that you have summarized on the second page. It is a project on which we share a joint powers agreement with the County of Solano, the San Francisco Bay-to-Stockton Ship Channel. It is a navigation project, and we fully support it, particularly the lower reach of that project, which is close to being in a position to go forward with construction.

I would like to emphasize, too, Project No. 4 on the list, which is called the Wildcat, and San Pablo Creek Flood Control Project. We are only asking a sum of $100,000 to go forward with a design study. I might say we were concerned last year, and I know your committee was, because of local matching share, and so was the Corps. We went to work and we found a half million dollars and we plan to get some additional matching money for this particular project, a very serious impact on the area in my district, and it is a very large project. We will try to do our share, and we hope that you can appropriate at least that sum of money for it.

Thank you very much for allowing me to testify. I hope it will give you a lot of help in the work that you will have cut out for you in the future.

[Mr. Power's statement follows:]

77-001 O - 81 - (Part 9) - 73

STATEMENT OF

BOARD OF SUPERVISORS
CONTRA COSTA COUNTY, CALIFORNIA

CONCERNING FEDERAL APPROPRIATIONS FOR THE FOLLOWING PROJECTS IN FISCAL YEAR 1981-82

ALHAMBRA CREEK PROJECT

SAN FRANCISCO BAY TO STOCKTON-SHIP CHANNEL PROJECT

WALNUT CREEK PROJECT

WILDCAT-SAN PABLO CREEKS PROJECT

SACRAMENTO-SAN JOAQUIN DELTA SURVEY

SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WASTE DISPOSAL

WALNUT CREEK BASIN INVESTIGATION

PERIPHERAL CANAL ENVIRONMENTAL IMPACT STATEMENT AND ADVANCED PLANNING

TO THE

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS, SUB-COMMITTEE ON ENERGY AND WATER DEVELOPMENT

HONORABLE TOM BEVILL, CHAIRMAN

MARCH 26, 1981

SUMMARY

Requested Amount

Project	Fiscal Year 1981-82	Remarks
1 - Alhambra Creek	-0-	We request this project remain unfunded until the community has reviewed the completed Study Report and has made a decision.
2 - San Francisco Bay to Stockton Ship Channel	$ 1,400,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
3 - Walnut Creek	$10,000,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
4 - Wildcat and San Pablo Creeks	$ 100,000	We request this project be funded to allow the Corps of Engineers to revise their design report to implement the County's modified plan.
5 - Sacrament-San Joaquin Delta Survey	$ 190,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
6 - San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal	$ 255,000	We support the Federal Capability and California Water Commission's recommended appropriation.
7 - Walnut Creek Basin Investigation	$ 90,000	We request this project be funded to the Federal Capability of $90,000 to allow the Corps of Engineers to complete the Basin Investigation Study Report.
8 - Peripheral Canal Environmental Impact Statement and Advanced Planning	-0-	We request this project remain unfunded due to the referendum vote pending in California.

TESTIMONY

My name is Tom Powers. I am the Chairman of the Board of Supervisors of Contra Costa County, California.

The Board would like to express the appreciation of Contra Costa County and its citizens for the significant accomplishments in Public Works projects made possible by the foresight of your Committee in providing appropriations for flood control, water conservation and navigation projects. These projects have provided long-term benefits to the people of the County and are expected to continue to grow in importance in the future. We also wish to express our appreciation to the Corps of Engineers for their careful consideration of environmental problems based on the guidance issued by the Congress; we shall continue to cooperate with their efforts to execute projects in a manner that will preserve and enhance the social, economic, and environmental amenities in our County.

Contra Costa County presents testimony on eight projects that affect our area for funding in the Fiscal Year 1981-82 program. I request that our entire statement be entered in the record of this hearing.

ALHAMBRA CREEK

The Corps of Engineers has recently completed a detail study on possible solutions to the Alhambra Creek flooding problem. The report is currently being reviewed by the community. We request the project remain unfunded until they decide if one of the solutions should be implemented.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL
SACRAMENTO-SAN JOAQUIN DELTA SURVEY
SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA
WATER QUALITY AND WASTE DISPOSAL

These three projects dealing with navigation, water quality and delta levee stability are of considerable importance to our County as evidenced by our previous years testimony. We fully support these Corps of Engineers' projects and the recommended appropriations for Fiscal Year 1981-82. If the recommended appropriations are subsequently revised upward due to new developments, the County would favor the higher amount to provide for maximum progress toward completion.

WALNUT CREEK

The Corps of Engineers are receiving bids today for a two year contract to construct the next unit of this project. The work on Lower Pine and Galindo Creeks will eliminate a long standing flooding problem that has plagued residents of the County. We support funding of the $10,000,000 included in the President's Budget which is supported by the Corps of Engineers and the California Water Commission.

WILDCAT AND SAN PABLO CREEKS

This flood control project is needed to eliminate the almost annual flooding that occurs in the North Richmond area of our County. The existing depressed physical and socio-economic conditions of the area cannot be changed until the flooding situation is corrected. The original flood control plan developed by the Corps of Engineers proved too costly to implement, both in land and local funding. The County Flood Control District has been working with the Corps of Engineers to reformulate a more conventional plan. The new plan, developed by the district at a local cost of $60,000 reduces the total project costs for the lower reaches of the project from $18.7 million to $11.7 million, and specifically the local share of the project costs from $3.5 million to $1.5 million. Also at the local level we are retaining a consultant firm to prepare a draft EIR/EIS document to compare the two plans. Both plans will be presented to the community this summer. Due to the severe flooding problem with its impact on community rehibilitation and the significantly lower local costs, we believe the community will support the new plan. Consequently, we are requesting a Fiscal Year 1981-82 federal appropriation of $100,000 to provide the Corps of Engineers with funding to revise their design report and process the new Environmental Impact Statement once we have obtained community support.

WALNUT CREEK BASIN INVESTIGATION

The Walnut Creek Basin Investigation is a feasibility study to determine if drainage problems on eleven creeks in the Diablo Valley area of our County might qualify for federal flood control assistance. The study has never been completed. We are currently developing plans for several of these creeks at considerable local cost. We feel the changed environment since the study was started and the new plans being developed by the district have an excellent chance of yielding several economically feasible projects. We therefore request a federal appropriation in Fiscal Year 1981-82 in the amount of the Corps of Engineers capability of $90,000 to permit completion of the study.

PERIPHERAL CANAL ENVIRONMENTAL IMPACT STATEMENT AND ADVANCED PLANNING

The construction of the Peripheral Canal is very much in question in California as the project will be subject to a referendum decision in Fiscal Year 1981-82. We question the expenditure of any federal funds to prepare an Environmental Impact Statement or to perform advanced planning on a project that is subject to a referendum vote on its future. Consequently, we are against any federal appropriation in Fiscal Year 1981-82 for this project.

Thank you for the opportunity of giving this testimony.

Mr. FAZIO. Let me say as chairman of the committee, I will guarantee it, but not when I go back there.

Mr. MYERS. You had better move fast, then.

Mr. FRANKLIN. Mr. Chairman, our next witness is Mr. Howard Haile, who is the Chief Engineer of the Los Angeles County Flood Control District.

STATEMENT OF HOWARD H. HAILE

Mr. HAILE. Mr. Chairman and members, I have filed my statement. I would like to just briefly support the budget that the President has recommended for the Los Angeles County Drainage Area Review. This has been an ongoing thing. We would hope you would support the continued allocation of $500,000, and to support the continued allocation of funds to the Corps to adequately maintain the features of the Los Angeles County Flood Control System for which it is responsible. I would like to echo the pesentation of your colleague Ms. Fiedler regarding Hansen Dam. It is a real problem to us. We certainly strongly support that.

Thank you for the opportunity.

[Mr. Haile's statement follows:]

Los Angeles County Flood Control District

A PRESENTATION OF THE FLOOD CONTROL NEEDS IN LOS ANGELES COUNTY

FISCAL YEAR 1981-82

STATEMENT OF HOWARD H. HAILE, CHIEF ENGINEER, LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, CALIFORNIA, SUBMITTED TO THE SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE HOUSE COMMITTEE ON APPROPRIATIONS.

Summary of recommendations by Los Angeles County Flood Control District concerning the President's Budget allocations to the U.S. Army Corps of Engineers:

1. Los Angeles County Drainage Area Review - Support recommended allocation of $500,000.

2. Operation and Maintenance - Support continued allocation of funds to the Corps to adequately maintain features of the Los Angeles County flood control system for which it is responsible, including removal of debris from the Hansen Reservoir.

Mr. Chairman and Gentlemen:

The past year saw a pleasant absence of the disastrous floods which befell Southern California in 1978 and 1980. Rainfall totals approached normal with moderate intensities and damage in relatively limited situations. The major fires in November 1980 destroyed approximately 25,000 acres of valuable watershed. The fear of the classic fire-flood sequence caused us to concentrate our fall efforts on the protection of life and property directly below these burned watersheds. The February/March 1981 storms caused considerable debris production in the fire areas. We are currently concentrating our efforts on removal of this debris.

We believe efforts must continue to insure residents of Los Angeles County the best practicable protection, whether it be by means of flood control structures or by means of flood plain management. We have recommended your Committee support the President's Budget recommendations for Los Angeles County. The proposed allocation will provide for the continuation of one major planning study previously supported by your Committee..

This study is known as the Los Angeles County Drainage Area Review. This is a review of the adequacy of the existing flood control system protecting metropolitan Los Angeles. Portions of this system are based on design criteria developed in the 1930's and are known to be inadequate in the light of the tremendous growth of our County since that time. It is imperative that these weaknesses be identified in detail and corrected so that residents and

businesses may be protected from the threat of flood disaster. Of particular concern are the Tujunga Wash and Arroyo Seco systems. Partially as a result of the 1971 earthquake and the 1978 and 1980 floods, Hansen Dam, the Corps' primary flood control element on Tujunga Wash, has filled with sediment to the point where we are highly concerned about the ability of the system to handle a design flood. On the Arroyo Seco, Devil's Gate Dam and the Arroyo Seco Channel are both old and deficient by modern standards. The review of these systems to clearly establish their capability and identify the risks involved is urgently needed.

The Hansen Dam situation identified above is representative of the general problem of ongoing maintenance of an aging flood control system. The cost of removing rock and mud, which has been collecting for 40 years, could be as much as $200 million. We are very much aware of the importance of maintenance and have expended considerable effort on our own system to keep it in operable condition. We urge that you provide adequate support to the Corps to avoid deterioration and expensive future corrective measures.

The District has an extensive system of flood control facilities downstream of Hansen Dam. Debris accumulation behind Hansen Dam is encroaching upon the dam operating capacity and is reducing operational flexibility. Silt-laden flows are being passed - these flows have seriously impaired the recharge capability of downstream spreading grounds and adversely affect the water-carrying capability of the downstream low-flow channels. This causes excessive expenditures for the performance of normal maintenance - the costs for which the District and its taxpayers must bear. For all of these reasons, we strongly urge the continued support of the LACDA Review to fully assess the needs and determine methods of rectification of the deficiencies.

On behalf of the citizens of Los Angeles County, I would like to express appreciation for the continuing support of this Committee. We are most appreciative of the Federal involvement in the construction and operation of flood control facilities in Los Angeles County.

March 26, 1981

Mr. FRANKLIN. Our next witness is Mr. Doug Harrison, the Manager of the Fresno Metopolitan Flood Control District of Fresno County.

STATEMENT OF DOUG HARRISON

Mr. HARRISON. Mr. Chairman, I am appearing in support of the Red Bank Flood Control Project, as submitted on behalf of the cities of Fresno Flood Control District, the County of Fresno Irrigation District, in addition to our own district. We appreciate the dedication of the committee today and the previous support the committee has given us, and ask that our detailed comments be made part of the record.

[Mr. Harrison's statement follows:]

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

STATEMENT OF DOUG HARRISON, FRESNO, CALIFORNIA

Mr. Chairman, and Members of the Committee:

My name is Doug Harrison and I serve as the General Manager-Secretary of the Fresno Metropolitan Flood Control District of Fresno County, California, the local sponsor for the Redbank-Fancher Creeks Flood Control Project. I am also authorized to speak on behalf of the County of Fresno, the Cities of Fresno and Clovis, and the Fresno Irrigation District.

Our purpose before the Committee is to request that federal funding to support construction design be included in the budget for the 1981-82 fiscal period in an amount equaling the expressed Corps capability.

The Redbank-Fancher Creeks project was initially identified in the Big Dry Creek project investigation authorized by the Congress in 1940. In 1956, the Congress specifically authorized the flood control project investigation for the Redbank and Fancher Creeks stream system. Unfortunately, federal funds for the investigation were not appropriated until Fresno County was declared a part of the 1969 California disaster area. Since that time, however, the Congress has made funds availalbe to meet the Corps' needs in the project investigation. That investigation is now complete and identifies the need for the project, proving it to be both economically justified and environmentally sound.

Noteworthy, is the fact that the Redbank-Fancher Creeks project is one which is economically justified on the basis of flood damage prevention alone. Though other benefits accrue from the project, they are not required to produce a positive benefit-cost ratio. When constructed, the project will provide protection to 51,000 acres containing a population in excess of 112,000 people at a benefit-cost ratio of 1.6 to 1.0. Total estimated average annual flood damages exceed six million dollars and affect both urban and agricultural properties. The proposed works will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands, Fresno County's annual production exceeding one billion dollars. The project will control the historic flooding which has seen the stream and canal systems overtop their banks an average of once every four years since 1953.

In July 1980, the completed investigation report was forwarded to the Chief of the Corps by the Board of Engineers of Rivers and Harbors. The report was subsequently forwarded to the Secretary of the Army for transmission to Congress. The project was included by the Congress in H.R. 4788 (1980) for authorization of detailed engineering and design with funds provided within that Act to support such design work. Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project. Congressional action effecting the requested appropriations is critical in that it will prevent as much as two years of additional delay, saving the taxpayer an estimated twenty percent in increased project costs which would be associated with such delay.

We appreciate the privilege of appearing before the Committee and the past support the Committee has given the project. We respectfully urge your continued support and ask that our statements be made a part of the hearing record.

A more detailed presentation accompanies this request.

MARCH 26, 1981

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

STATEMENT OF DOUG HARRISON, FRESNO, CALIFORNIA

The people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have the presentations of their representatives heard by the honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world, average production exceeding one billion dollars annually since 1974.

This report, first submitted in May 1971, has been prepared to substantiate and support the vital need for flood control works on Redbank and Fancher Creeks. These two uncontrolled natural streams are related to and are a part of the San Joaquin-Kings River Interstream Group which were included in the San Joaquin River Basin Survey by the Corps of Engineers for more efficient management of the investigations. The Redbank and Fancher Creeks study was removed from the Interstream Group and listed as a separate project when the South Pacific Division of the Corps forwarded the completed feasibility report and the required environmental impact study to the Board of Engineers of Rivers and Harbors in July 1977.

AUTHORIZATION:
The Congress, on June 13, 1956, authorized the Corps of Engineers to investigate the feasibility of a federal flood control project for the Redbank-Fancher Creeks stream group, this following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February of 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization.

PROJECT LOCATION AND NEED:
Redbank and Fancher Creeks, their tributaries and related streams addressed by the proposed project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

It is currently estimated that the flood plain to be protected by the proposed project includes 51,000 acres with a population of 112,000 (1978) and a market value in excess of 1.6 billion dollars. Total estimated average annual flood damages exceed $6,000,000 and affect both urban and agricultural properties.

HISTORY OF FLOODING:
As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969 and March 1978. In addition, available records indicate flooding of lesser severity occurred in 1952, 1958, 1965, 1972, and 1977 with the streams and irrigation canal system overtopping their banks on the average of once every four years since 1953.

Although the recent floods which occurred in February and March 1978 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experienced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:

Following the floods which occurred in January and February 1969, the Fresno area was declared a part of California's disaster area. With the realization that millions of dollars in flood damages could have been prevented and that a recurrence of such floods would be even more devastating, a public hearing on the subject of needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks flood control project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, and the Fresno Irrigation District, authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, signed contracts appropriating $335,000 per year to acquire the necessary project lands.

Relatedly, the California Water Commission has historically supported and continues to support the project. Further, the State Reclamation Board has submitted a supporting letter of intent for local assurances.

Most recently, a broadly based Citizens Project Advisory Committee has been created by the Flood Control District. The Committee has reviewed and confirmed the project's need and design features. The Committee is now actively engaged in drafting a financing plan to ensure the availability of the required local cost share and the equitable distribution of those costs.

ENVIRONMENTAL CONSIDERATIONS:

Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there are no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived by the construction of the needed works.

PROJECT FEASIBILITY AND FINANCING:
The completed report, supplemented by additional detailed studies, substantiates the need for the proposed project and identifies strong economic justification. The project costs and benefits reflected in the completed report are as follows:

Total First Costs:	$ 57,100,000	
Average Annual Costs (6-7/8% Interest)		$ 3,835,000
Total Average Annual Benefits:		
Flood Control	$ 4,956,000	
Flood Proofing Cost Reduction	285,000	
Recreation	394,000	
National Economic Development	608,000	
Total Average Annual Benefits		$ 6,243,000
Benefit/Cost Ratio 1.6 to 1		

Noteworthy, is the fact that the project is economically justified on the basis of flood damage reduction benefits alone. While other benefits are cited, they are not needed to produce a positive benefit/cost ratio. It should be noted that, while not included in the actual benefit calculations, the proposed project will also create significant beneficial effects in the areas of water conservation, groundwater management and wildlife enhancement.

The anticipated distribution of project costs between the Federal Government, the State of California, and the local sponsor is as follows:

Federal Government	$ 41,600,000
State of California	9,477,000
Fresno Metropolitan Flood Control District (Plus Annual O & M a/ $230,000)	6,023,000
Total Project Cost	$ 57,100,000

PROJECT STATUS REVIEW:
Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Upon completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authorization. Unfortunately, the additional study delayed the project for approximately two years causing an estimated seventeen percent increase in project costs.

During July 1980, the Board of Engineers of Rivers and Harbors forwarded to the Chief of the Corps of Engineers the completed project report and environmental impact report. The report was subsequently forwarded to the Secretary of the Army for transmission to the Congress.

The project has been included in legislation passing the House of Representatives each of the last two sessions of the Congress, the latest H.R. 4788 (1980). Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project.

Legislation has again been introduced (1981) jointly by Congressman Pashayan and Congressman Coelho providing for final authorization. Timely action by the Congress effecting the necessary authorizations and appropriations will save as much as an additional two-year delay in the project, thereby saving the taxpayers an estimated twenty percent in increased project costs which would otherwise result.

CONCLUSION: REQUEST FOR AUTHORIZATION

On June 13, 1980, twenty-four years had elapsed since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal level. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for project construction. Further, the more advanced and detailed technical analysis performed for the Board of Engineers has confirmed the previous recommendations of both the District and Division Engineer of the Corps.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and the Congress in authorizing the Redbank-Fancher Creeks Flood Control Project. funding.

Mr. FRANKLIN. Our next witness is Mr. Ed Howe, President of the Kings River Water Conservation District.

STATEMENT OF ED H. HOWE

Mr. HOWE. Mr. Chairman and members of the committee, I have with me our General Manager, Jeff Taylor, and we are here on behalf of the district in support of the Redbank-Fancher Creeks Flood Control Project. We certainly will welcome your consideration. I do have a statement that has been submitted. Thank you.

[Mr. Howe's statement follows:]

STATEMENT OF THE
KINGS RIVER CONSERVATION DISTRICT*
BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

Mr. Chairman, and Members of the Committee:

My name is Ed H. Howe and I am President of the Board of Directors of the Kings River Conservation District of Fresno, California. I am appearing today in support of the Redbank-Fancher Creeks Flood Control Project.

My purpose before the Committee is to request that federal funding to support construction design be included in the budget for the 1981-82 fiscal period in an amount equaling the expressed Corps capability.

The Redbank-Fancher Creeks project was initially identified in the Big Dry Creek Project investigation authorized by the Congress in 1940. In 1956, the Congress specifically authorized the flood control project investigation for the Redbank and Fancher Creeks stream system. Unfortunately, federal funds for the investigation were not appropriated until Fresno County was declared a part of the 1969 California disaster area. Since that time, however, the Congress has made funds available to meet the Corps' needs in the project investigation. That investigation is now complete and identifies the need for the project, proving it to be both economically justified and environmentally sound.

Noteworthy, is the fact that the Redbank-Fancher Creeks project is one which is economically justified on the basis of flood damage prevention alone. Though other benefits accrue from the project, they are not required to produce a positive benefit-cost ratio. When constructed, the project will provide protection to 51,000 acres containing a population in excess of 112,000 people at a benefit-cost ratio of 1.6 to 1.0. Total estimated average annual flood damages exceed six million dollars and affect both urban and agricultural properties. The proposed works will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands, Fresno County's annual production exceeding one billion dollars. The project will control the historic flooding which has seen the stream and canal systems overtop their banks an average of once every four years since 1953.

In July 1980, the completed investigation report was forwarded to the Chief of the Corps by the Board of Engineers of Rivers and Harbors. The report was subsequently forwarded to the Secretary of the Army for transmission to Congress. The project was included by the Congress in H.R. 4788 (1980) for authorization of detailed engineering and design with funds provided within that Act to support such design work. Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project. Congressional action effecting the requested appropriations is critical in that it will prevent as much as two years of additional delay, saving the taxpayer an estimated twenty percent in increased project costs which would be assocaited with such delay.

I appreciate the privilege of appearing before the Committee and the past support the Committee has given the project. I respectfully urge your continued support and ask that my statement be made a part of the hearing record.

A more detailed presentation accompanies this request.

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* Presented by Ed H. Howe, President, Kings River Conservation District, in Washington, D.C. on March 26, 1981.

STATEMENT OF THE
KINGS RIVER CONSERVATION DISTRICT*
BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
THE HONORABLE TOM BEVILL, CHAIRMAN

The Kings River Conservation District and the people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have our presentation heard by the honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world; average production exceeding one billion dollars annually since 1974.

This statement has been prepared to substantiate and support the vital need for flood control works on Redbank and Fancher Creeks. These two uncontrolled natural streams are related to and are a part of the San Joaquin-Kings River Interstream Group which were included in the San Joaquin River Basin Survey by the Corps of Engineers for more efficient management of the investigations. The Redbank and Fancher Creeks study was removed from the Interstream Group and listed as a separate project when the South Pacific Division of the Corps forwarded the completed feasibility report and the required environmental impact study to the Board of Engineers of Rivers and Harbors in July 1977.

AUTHORIZATION:

The Congress, on June 13, 1956, authorized the Corps of Engineers to investigate the feasibility of a federal flood control project for the Redbank-Fancher Creeks stream group, following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February of 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization.

PROJECT LOCATION AND NEED:

Redbank and Fancher Creeks, their tributaries and related streams addressed by the proposed project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

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*Presented by Ed H. Howe, President, Kings River Conservation District, in Washington, D.C. on March 26, 1981.

It is currently estimated that the flood plain to be protected by the proposed project includes 51,000 acres with a population of 112,000 and a market value in excess of 1.6 billion dollars. Total estimated average annual flood damages approximate $6,000,000 and affect both urban and agricultural properties.

HISTORY OF FLOODING:

As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969 and March 1978. In addition, available records indicate flooding of lesser severity occurred in 1952, 1958, 1965, 1972, and 1977 with the streams and irrigation canal system overtopping their banks on the average of once every four years since 1953.

Although the recent floods which occurred in February and March 1978 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experienced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:

Following the floods which occurred in January and February 1969, the Fresno Area was declared a part of California's disaster area. With the realization that millions of dollars of flood damages could have been prevented and that a recurrence of such floods would be even more devastating, a public hearing on the subject of needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks flood control project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, the Fresno Irrigation District, and the Kings River Conservation District authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, have signed contracts appropriating $335,000 per year over the next several years to acquire the necessary project lands.

ENVIRONMENTAL CONSIDERATIONS:

Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control

District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there are no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived by the construction of the needed works.

PROJECT FEASIBILITY AND FINANCING:

The completed report, supplemented by additional detailed studies, substantiates the need for the proposed project and identified strong economic justification. The project costs and benefits reflected in the completed report are as follows:

Total First Costs:	$ 57,100,000	
Average Annual Costs (6-7/8% Interest)		$3,835,000
Total Average Annual Benefits;		
Flood Control	4,956,000	
Flood Proofing Cost Reduction	285,000	
Recreation	394,000	
National Economic Development	608,000	
Total Average Annual Benefits		$6,243,000

Benefit/Cost Ratio 1.6 to 1

It should be noted that, while not included in the actual benefit calculations, the proposed project will also create significant beneficial effects in the areas of water conservation, groundwater management and wildlife enhancement.

The anticipated distribution of project costs between the Federal Government, the State of California, and the local sponsor is as follows:

Federal Government	$ 41,600,000
State of California	9,477,000
Fresno Metropolitan Flood Control Dist. (Plus Annual O & M @ $230,000)	6,023,000
Total Project Costs	$ 57,100,000

PROJECT STATUS REVIEW:

Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Since the completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authoriztion. Unfortunately, the additional study delayed the project for approximately one year causing an estimated seventeen percent increase in project costs.

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CONCLUSION: REQUEST FOR AUTHORIZATION

On June 13, 1980, twenty-four years had elasped since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal level. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for project construction. Further, the more advanced and detailed technical analysis performed for the Board of Engineers has confirmed the previous recommendations of both the District and Division Engineer of the Corps.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and the Congress in authorizing the Redbank-Fancher Creeks Flood Control Project funding.

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Jay Anderson, Secretary-Manager of the Merced Irrigation District, and who also has with him Mr. Joe Plagenza, who is the President of that district.

STATEMENT OF JAY ANDERSON

Mr. ANDERSON. We are here representing the Merced County Board of Supervisors. I have presented a complete written statement to the committee, and in order to save time I ask that the complete statement be made a part of the record. I thank you for your time.

[Mr. Anderson's statement follows:]

Mr. Chairman and Members of the committee: My name is Jay Anderson, Secretary-Manager of the Merced Irrigation District in Merced, California. I am representing the County of Merced, which is the agency sponsoring the Merced County Streams; the County is joined by the Merced Irrigation District, the City of Merced, the El Nido Irrigation District, and the Le Grand-Athlone Water District.

The formulated plan of the Corps of Engineers, Sacramento District, shows that two new reservoirs, the enlargement of two existing reservoirs, and the improvement of 47 miles of channels and levees would provide for protection to about 55,000 acres of agricultural and urban areas. It would also provide protection to Castle Air Force Base, a major installation of the Strategic Air Command, its only protection now is through the use of Merced Irrigation District canals, with resulting damage and hazard to areas completely out of the flood plain. The District may be forced to stop this practice at any time. The City of Merced is vulnerable to flooding without the project.

The agricultural areas subject to flooding are planted to a variety of crops ranging from tomatoes, sugar beets, and alfalfa to grapes, almonds and peaches. Dairy and beef cattle thrive on many acres of irrigated pasture. Only about 1 percent of the 1980 crop value was under any federal or state subsidy.

Recreation facilities have been revised to meet the needs of the community, and the City of Merced has agreed to provide these facilities as part of the project.

The estimated cost is $83,100,000; the project is economically feasible with a favorable benefit-cost ratio. Average damages will exceed $6,000,000 per year without construction of the project.

The studies by the Corps were started in 1958 and led to Congressional authorization in 1970.

The Corps has completed the Phase I G.D.M., and is ready to begin the Phase II detailed plans and specifications.

This is a request that your committee support the sum of $1,244,000 as recommended by the California Water Commission, and the Corps capability to September 30, 1982. The President's budget includes this amount. The allocation of the full amount will allow the Corps to continue without interruption of this work which is so important to the Community, State and Nation.

Mr. FRANKLIN. Our next speaker is Mr. John DeVito, from that place called Contra Costa County.

STATEMENT OF JOHN DEVITO

Mr. DEVITO. Honorable chairman and members, with me is President of the Board Ernest LaSalle. As I have done before, let me state that the saline water problems for 300,000 people transcend all age groups, from hypertension to vascular problems, and as our congressman indicated, the urgency is such that if you require we would be willing to advance 10 percent of this year's funding, and I might add, Chairman Fazio, that any efforts to improve the status of the 300,000 citizens on this side of the estuary will certainly benefit your side including the Suisun Marsh. We thank you for your consideration.

[Mr. DeVito's statement follows:]

Statement Of:	Contra Costa County Water District 1331 Concord Avenue Concord, California 94524
Presented By:	John E. DeVito, General Manager
Before:	U.S. House of Representatives Committee on Appropriations, Sub-Committee On Energy and Water Development
	Honorable Tom Bevill, Chairman
Presentation Date:	March 26, 1981

SACRAMENTO - SAN JOAQUIN DELTA WATER QUALITY

Honorable Chairman and Committee Members, my name is John E. DeVito, General Manager of the Contra Costa County Water District, a public agency of the State of California.

For over forty years, Contra Costa County Water District by way of repayment contracts with the U.S. Bureau of Reclamation, now U.S. Water & Power Resources Service (WPRS), has been responsible for the water supply for some 300,000 people, 23 industries that employ over 16,000 employees, and 150 small farms, through the Contra Costa Canal System, the first unit of Federal Central Valley Project. The District also diverts water from the Delta under a vested water right dating back to the 1930's prior to the CVP. We depend solely and totally on the Sacramento River - San Joaquin Delta for our water supply.

Due to the WPRS's over-commitment of the CVP water supply and build-up in exports from the Delta, we are experiencing re-occurring increased salt water intrusion in the Delta, to a level that is adverse to public health, causes loss of industrial product, adds severe penalty treatment costs to all industry, and causes damage to irrigated plants. (Note attached map.)

These adverse effects on public health, industry and agriculture occurred during 1959 - 1960 - 1961, due to WPRS operations, and occurred again during the 1976 - 1977 drought, due to the obvious over-commitment of the CVP. WPRS statements indicate that these poor water quality levels will occur during normal years.

Accordingly, Contra Costa County Water District supports the conditions necessary to protect the beneficial uses in the Sacramento-San Joaquin Delta, San Francisco Bay, and Suisun Marsh as stated by the District and the California Water Commission with particular attention to:

No. 9 New Melones Lake

The Commission reaffirms its position that the appropriations should be conditioned to provide that New Melones Reservoir shall be operated in accordance with the provisions of Decision 1422 of the State Water Resources Control Board. The Commission urges expeditious acquisition of riparian habitat and flood easements downstream of the dam, and resolution of downstream salmon problems related to release schedules, flow and temperature.

No. 15 San Francisco Bay to Stockton Ship Channel

DWR and the Corps have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening

the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship channel projects.

The Corps should determine the Stockton Ship Channel deepening project's input on the dissolved oxygen problems in the San Joaquin River if any, and propose methods of mitigation if appropriate. We urge the Corps to complete an agreement with the Department of Fish and Game.

No. 15A Sacramento Ship Channel

Based on the letter of agreement between DWR and the Corps dated 3 February 1981, as described in "San Francisco Bay to Stockton Ship Channel" (Item 15), CWC supports the funding of detailed engineering studies for deepening the Sacramento deep water channel.

No. 33 San Francisco Bay and Sacramento - San Joaquin Delta Water Quality and Waste Disposal

San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal CWC supports $255 thousand for metering flows and water quality in the Bay as agreed to by the Corps and the California multi-agency letter of understanding.

No. 48 Auburn Dam and Reservoir

The Commission opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam.
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed.
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board.
4. The State has approved the design of the dam finally selected.

No. 52. Fish and Wildlife Studies

The Commission supports economic, environmental and fish and wildlife studies recommended by former Secretary Cecil Andrus.

No. 56 San Luis Canal-Flood Protective Work and subsidence correction

Since Water and Power Resources Service will have expended all funds allowed under the Westlands monetary authorization, the Commission reaffirms in general its opposition to additional funds for Items 59, 60, 61 and 62 until the following conditions have been met:

1. The features of the Unit are properly authorized by Congress.
2. The water service, distribution system, and San Luis Drain contracts with Westlands are amended to include the payment provisions recommended conceptually by the San Luis Task Force.

3. The Water and Power Resources Service agrees that the federal Central Valley Project and the State Water Project will be operated to meet the identical water quality standards in the Delta.

4. Reclamation Law contains explicit provisions on residency and acreage limitation. The Commission's support of the Westlands Project will be contingent upon enforcement of Reclamation Law by Water and Power Resources Service.

No. 59. San Luis Drain

Due to recent WPRS stated intents on the location of the San Luis Drain point of discharge, Contra Costa County Water District must expand its position on behalf of the water supply integrity of not only the beneficial uses of the Contra Costa County Water District, the Bay and Delta but on behalf of all California who must bear the economic and environmental consequences of an over-committed Federal and State water supply as follows:

Insert the following amendment in the 1981 Appropriations Act: "Provided further, that the final point of discharge for the interceptor drain for the San Luis Unit shall not be determined until:

1. Construction of the Drain extension north of Kesterson Reservoir shall not be initiated until an NPDES permit for the proposed discharge to the

Delta has been issued by State Water Resources Control Board and approved by Administrator, U.S. Environmental Protection Agency.

2. Any necessary treatment facilities and storage shall be in place and fully operable prior to initiation of discharge.
3. Sufficient storage shall be provided that, if and when necessary, discharge to Delta water could be limited to those times during the tidal cycle when the discharge would have minimum adverse impact on Delta water quality.
4. The Drain system shall be so designed, constructed and operated that discharge to Delta waters could be stopped during critically dry periods.
5. Those entities discharging to the Drain shall be required to develop and implement conservation programs which will minimize the discharge of both water and pollutants to the Drain.
6. A continuing detail monitoring program shall be carried on.

No. 68 - 74 San Felipe Division

The Commission urges the Congress to provide that diversions of water from the Delta by the Water and Power Resources Service be subject to federally approved Delta water quality standards. The Commission affirms

that it is desirable that the WPRS operation in the entire area conform to provisions of reclamation Law, including those provisions which relate to residency and acreage limitations.

No. 79 Contra Loma Res. Rec.
Facilities

This project represents first implementation of the Federal Recreation Act on November 5, 1965, with the local sponsor, the East Bay Regional Park District, advancing matching funds.

No. 93 Feasibility Investigations
Kellog Unit Reformation
Delta Division

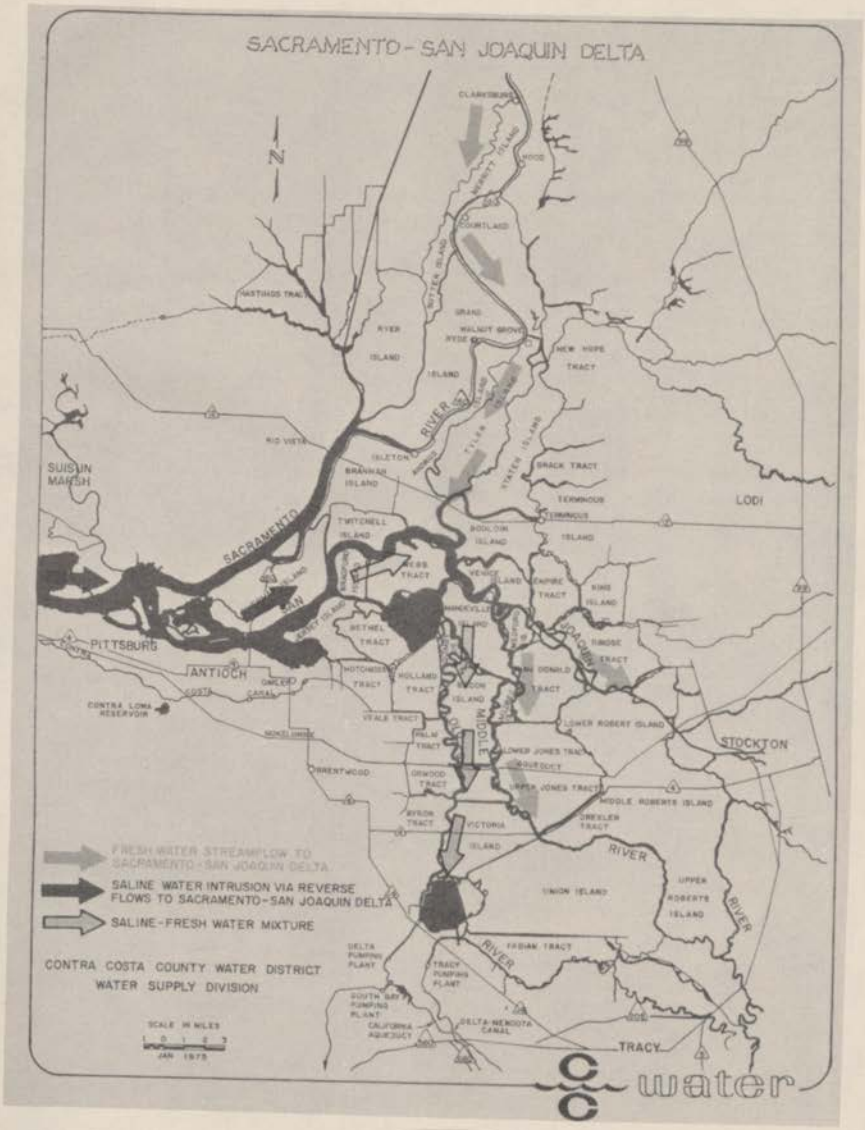
Commission supports funding of feasibility investigation of Los Vaqueros Reservoir and relocation of Contra Costa Canal intake.

State and WPRS have executed a memorandum of understanding dated December 12, 1980 regarding a joint investigation of the Los Vaqueros-Kellog project including relocation of Contra Costa Canal intake. Commission supports $10 ($10,000) for fish and wildlife studies.

Furthermore, it should be noted that WPRS and U.S. Corps of Engineers' Sacramento-San Joaquin Delta studies reflect amounts of total Federal costs of $17,105,000. In order to eliminate duplication and realize maximum dollar benefits to public purpose objectives, we respectfully suggest that the Committee consider coordination of these Delta studies under one regimen of responsibility.

In summary, our comments in the past and specifically at this time, recognize and commend the wisdom of the Congressional enactment of Public Law 95-46 -- The San Luis Task Force Study -- which study "points to the need for profound changes in Bureau of Reclamation (WPRS) procedures in some instances and legislative changes in others".

Please accept our appreciation for this opportunity to appear, and may this statement be made part of the record.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FRESH WATER STREAMFLOW TO SACRAMENTO - SAN JOAQUIN DELTA
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WATER SUPPLY DIVISION
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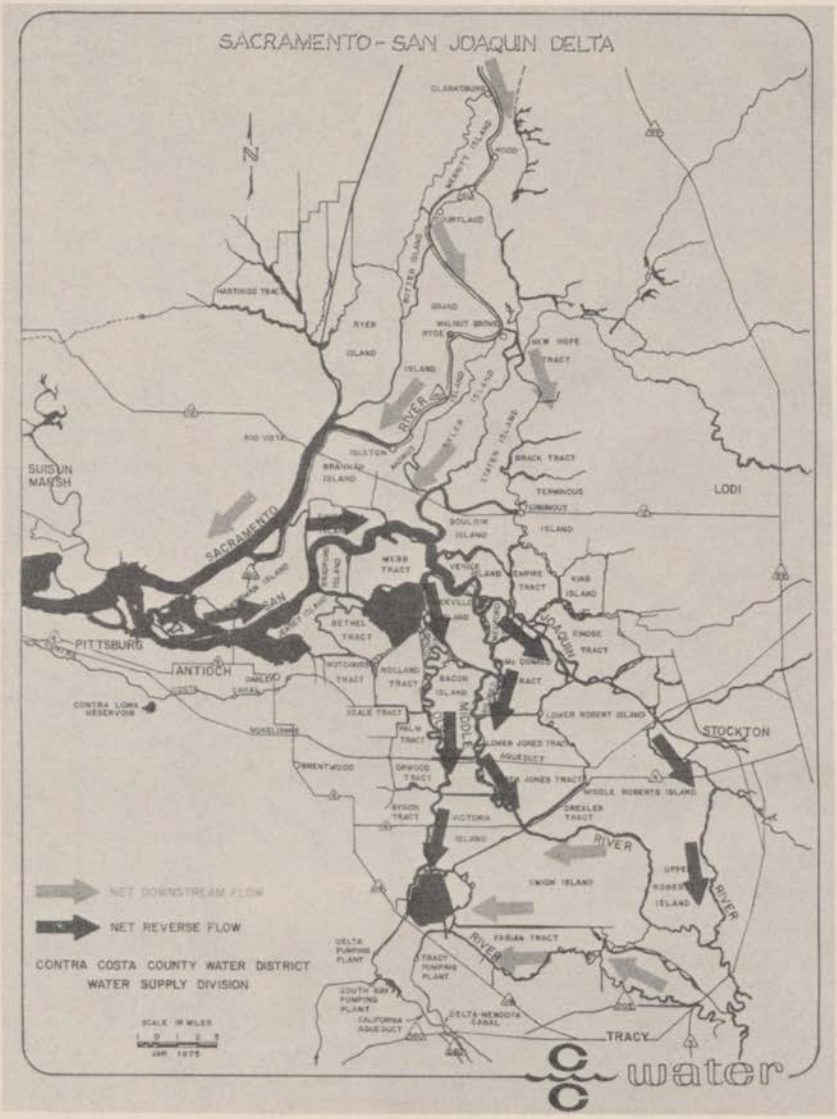
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NET REVERSE FLOW
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WATER SUPPLY DIVISION
SCALE IN MILES
JAN 1975
water

Mr. FAZIO. You realize I have Delta constituents and water users to the north, and sometimes I feel that the stretch I am involved in is going to cause a split right down the middle.

Mr. DEVITO. Mr. Chairman, there is no separation. We are all one. There is no north and south.

Mr. FAZIO. We are going to have to be, one of these days.

Mr. FRANKLIN. I might add that the commission is very supportive of our project.

Our next speaker is Mr. Jack Ford, who is representing today the Fallbrook Utility District, and a person I consider an old friend.

Mr. BURGENER. Mr. Chairman, I have to interrupt here.

Mr. FAZIO. Please do.

Mr. BURGENER. This particular witness is no stranger to this room. Just a stranger to that side of the table. I was privileged to have Jack Ford as a member of my staff for years. I hated very much to lose him. He was well replaced by Mr. Hathaway back here, so I am looking forward to hearing you for the first time on the opposite side of the table on a project I am keenly interested in.

Thank you, Mr. Chairman.

Mr. FAZIO. Mr. Burgener, let me also add that Jack is one of the strongest and most effective advocates for a number of agricultural groups. Many of my constituents and others here are members of that, and with that you can't live up to your billing.

STATEMENT OF JACK T. FORD

Mr. FORD. Enough said. Thank you, Mr. Chairman, members of the committee. It really is a rare pleasure and honor to be here in front of you, sitting in a chair rather than behind you, after five years. I am appearing today as a representative of the Fallbrook Public Utilities District in support of the Santa Margarita Project in Northern San Diego County, in your district, Congressman Burgener.

We are requesting $260,000 for beginning the updating of the feasibility report and the environmental impact statement for this project, and we feel that the need is urgent. We have to move forward with this project; 1991 is fast approaching, and at that point if this project isn't in place there will be severe economic dislocations in the area. We respectfully request this committee's consideration for that amount of money.

Thank you very much for your time.

[Mr. Ford's statement follows:]

STATEMENT
OF THE
FALLBROOK PUBLIC UTILITIES DISTRICT
(Fallbrook, San Diego County, California)

In Support Of The
SANTA MARGARITA PROJECT

Before The
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT
HONORABLE TOM BEVILL, CHAIRMAN

SUMMARY

The Fallbrook Public Utilities District respectfully requests the appropriation of $260,000 to the Water and Power Resources Service appropriations for Fiscal Year 1982 to begin up-dating the feasibility study and the environmental impact statement for the Santa Margarita Project in northern San Diego County. The WPRS has indicated that a total of $560,000 will be needed over fiscal years 1982 and 1983 to up-date these studies.

Mr. Chairman, Members of the Committee, my name is Jack Ford and I am an attorney with the Washington, D.C. law firm of Pope Ballard & Loos. I am appearing before you today as the representative of the Fallbrook Public Utility District of Fallbrook, California, in support of appropriations to the

Water and Power Resources Service for the up-dating of the feasibility study and the environmental impact statement for the Santa Margarita Project in northern San Diego County. We are requesting $260,000 for this purpose in fiscal year 1982, and an additional $300,000 will be requested for the next fiscal year in order to complete the up-dating of these studies.

BACKGROUND

The Santa Margarita Project is a part of the California Water Plan designed to provide a means for impounding, conserving and utilizing the flows of the Santa Margarita River, a coastal stream north of San Diego, California.

The Project facilities include: two dams and reservoirs, one approximately two miles north of Fallbrook, and the other on the Marine Corps base at Camp Pendleton; water conveyance lines from one reservoir to the Fallbrook Public Utility District distribution system and from the other reservoir through Camp Pendleton; park and recreational facilities; road access across the reservoir; and wildlife wilderness areas and fish hatcheries.

The Project has significant municipal, industrial, irrigation and military water supply elements, and,

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particularly for Camp Pendleton, significant flood control elements.

This supplemental water supply will be most essential to the economic survival of the 16,000 residents of the area in the event excess imported water ceases to be available. The Fallbrook Public Utility District, which serves an area of 16,104 acres, relies almost entirely on imported water obtained through the County Water Authority and the Metropolitan Water District aqueduct systems for its water requirements which are presently 68% for irrigation and 32% for municipal use. The present consumption of 13,200 acre feet of imported water annually is approximately three times greater than the District's legal entitlement to imported water.

The reservoir of water stored behind the Fallbrook Dam will provide a reserve supply which could be utilized in the Fallbrook area for several years in the event of a natural or manmade catastrophic disruption to any of the imported water-delivery facilities on which the area is now totally dependent.

The project facilities will provide an alternate source of water supply for the Marine Corps base at Camp Pendleton, the U.S. Naval Hospital and the Naval Weapons Station, Fallbrook Annex. The base presently relies upon underground water as its sole source of supply, and the

Department of the Navy considers the development of an alternate source vital to protect its continually increasing investment in this huge base complex.

To make use of a local water source in lieu of importing water is not only a sound economical practice, but will eventually become a necessity, if all the future demands for fresh water in this state are to be met. The future anticipated demands for fresh water in southern California will necessitate making maximum utilization of all available sources of this increasingly valuable natural resource to augment the vast quantities of water which now must be moved hundreds of miles from northern California and the Colorado River to supply the demand.

REQUEST

The revised feasibility study and the final environmental impact statement were completed in 1974 and 1976, respectively. New water project requirements mandated by recent policy changes, as well as new environmental concerns that have come to light in the interim, require an up-dating of these studies before moving forward to construction.

The Water and Power Resources Service has indicated, in a letter to the California State Water Commission, that it will require two fiscal years -- 1982 and 1983 -- to complete

this required up-date. The up-dating, according to WPRS, will address the current appropriateness of the dam design, water yield, project economics and environmental impacts. WPRS has estimated that additional studies would cost $560,000 over the two-year period. Included in that amount is $375,000 for geology data, safety of dams and seismic analyses, and additional design work which may be required to meet current standards. Also included is an estimated $85,000 to up-date the Fish and Wildlife Coordination Act report, prepare the appropriate environmental documents and coordinate with the involved agencies. The reevaluation of the hydrology and economics in the feasibility report is estimated at $100,000.

Mr. Chairman and members, on behalf of the Fallbrook Public Utility District, we respectfully and most urgently request a favorable consideration for the augmentation of the present budget by $260,000 for fiscal year 1982 in order to begin the up-dating of these studies. We very much appreciate the opportunity to present this testimony to the Committee.

Respectfully submitted,

Jack T. Ford
Counsel to the Fallbrook
Public Utility District

Date: March 26, 1981

Mr. FAZIO. Thank you, Jack.

Mr. FRANKLIN. Our next witness is Mr. Marshall Jones, who is the Consulting Engineer for the Glide Water District.

Mr. FAZIO. Welcome.

STATEMENT OF MARSHALL JONES

Mr. JONES. The Glide Water District is about ten miles north of the north boundary of our Congressional District.

Mr. FAZIO. Close enough.

Mr. JONES. I would like to introduce the people with me on this expedition: Bill Feeney, the Chairman of the Board of Directors of this district; Noralu Michael, the Secretary, and Robert Feeney, the District Engineer.

This district is in the same Colusa Canal. They are about to embark on the final step of obtaining water from the Tehama-Colusa. They have to build a distribution system now to move the water from the Canal to the landowners. They need $390,000 for work on this system in fiscal 1982.

The application that the District prepared for this loan from the Federal Government, due to a rather tedious review process, did not move through the Department in time to get into the President's budget, so they are asking your help in being added to the budget.

Mr. FAZIO. We understand. That is not a problem. In a reapportionment, ten miles is close enough to any district line.

Mr. JONES. I have a statement for the record.

[The statement of Mr. Jones follows:]

March 26, 1981

Statement before

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT OF THE
HOUSE COMMITTEE ON APPROPRIATIONS

by
Marshall Jones, Engineer for Glide Water District

Honorable Tom Bevill, Chairman:

I am Marshall Jones, Engineer for Glide Water District in the service area of the Tehama-Colusa Canal, Sacramento River Division of Central Valley Project.

SUMMARY

The Tehama-Colusa Canal is complete and ready to serve irrigation water this year. A distribution system now is needed to deliver water from the Canal to individual landowners. Our District is applying for a loan under Public Law 84-130 to finance construction of our system. The application soon will go to the Secretary of Interior for approval and we will be ready to design the system and start construction in Fiscal Year 1982. Our schedule shows a need for $390,000 in F.Y. 1982. The application was not sufficiently advanced last year for funds to be included in the President's budget so, we respectfully request you to add the $390,000 to your budget. Parts of the District are now under irrigation from failing groundwater supplies so our system is urgently needed. Additionally, our purchases of water are what repay the federal investment in the Tehama-Colusa Canal.

- - - - - - - - - - - - - - - - -

The Glide Water District Improvement District No. 1, for which we are seeking funds, includes some 4,900 irrigable acres, of which about 3,300 are being irrigated, in the service area of the Tehama-Colusa Canal of the Central Valley Project. Rapidly increasing land values and rising taxes make it urgent that lands now relying on groundwater supplies, which are failing, continue to be irrigated and that the lands now being dry-farmed be brought under irrigation soon. Irrigated agricultural produces from five to six times the value of products per acre over that of dry-farmed production. Also, much of the produce grown in the District is exported. Agricultural exports are a major factor in meeting foreign exchange requirements of the United States.

The Tehama-Colusa Canal was authorized by Congress in 1950 and during the intervening years many landowners have spent money on development of their lands in anticipation that water would become available. Hence, it is urgent and fair that the distribution system be completed as soon as possible. Further, repayment of the federal investment in the Tehama-Colusa Canal depends upon purchases of water by the irrigators.

The District respectfully requests your Committee's approval of including in the F.Y. 1981 budget the $390,000 needed for our project. We greatly appreciate the help the Committee has provided in development of the Central Valley Project which will mean so much to our people in the future.

Mr. FRANKLIN. Our next witness is Mr. Douglas Waltz, who is the Chairman of the Yuba County Water Agency Loan.

STATEMENT OF DOUGLAS WALTZ

Mr. WALTZ. You can stand in my district and throw rocks into yours. This is a $21.6 million loan project. It too has not cleared yet, but it is expected to be cleared momentarily.

We are requesting $600,000 for the inclusion in fiscal year 1981 and 1982 budgets. We have the need, the availability of water in our district from our present water and we have the economic feasibilty to pay off the loan. We appreciate your consideration.

Mr. FAZIO. With the restraints that we have we are going to be hard-pressed, but I think you understand that we are aware of the validity of your project. It is just a matter of time.

We would like to help you this year.

Mr. WALTZ. Thank you.

[The statement of Mr. Waltz follows:]

YUBA COUNTY WATER AGENCY

BOARD OF DIRECTORS
DOUG WALTZ, Chairman
GEORGE DEVERAUX, Vice-Chairman
ARTHUR BERTOLINI, Secretary
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COUNTY COURTHOUSE
P.O. BOX 1569
MARYSVILLE, CALIFORNIA 95901
TELEPHONE (916) 674-6278

DONALD R. FROST
ADMINISTRATOR

March 17, 1981

U.S. House of Representatives
Committe on Appropriations
Sub-Committee on Energy & Water Development
Honorable Tom Bevill, Chairman

The Yuba County Water Agency is seeking a Federal Loan under PL84-984 to build the South County Irrigation Project. In order to initiate the project the Agency requests that the amount of $600,000 be included in the Federal Budget for fiscal year 1981-82. The funds will be entirely repaid from project revenues.

Proposals to provide Yuba River water to south Yuba County were developed as early as 1954. A diversion dam and canal system were included as part of the Agency's New Bullards Bar Project, which began operation in 1969. The Agency holds the permits for the water which will be supplied from storage in New Bullards Bar Reservoir. However, lack of available funds caused deletion of the South County Irrigation facilities from the first stage hydroelectric and irrigation project.

Agricultural activity in the south County has continued despite the lack of surface water. The continuing development has caused ground water levels to drop nearly eighty feet during the past sixty years. Current overdrafts result in lowering ground water levels an average of more than four feet per year. If the rapidly declining

supply of ground water is not replaced with surface water, production of agricultural products must be reduced because new exploration has exposed non-water bearing strata or evidence of salt water intrusion. Rice, one of the United States's most important export crops, will be the principal crop affected by the production loss.

All of the water to the south County will be distributed on a partnership basis, utilizing the facilities of Wheatland Water District, South Yuba Water District and Brophy Water District. The additional 104,500 acre feet of irrigation water that will be provided annually by this project is only sufficient to balance the present overdraft which now occurs. By stablizing the water level and reducing the dependence on pumps, the project will save eight million kilowatt hours of energy per year.

An additional 13,400 acre feet will also become available for domestic use at Beale AFB and to two nearby developed communities, served by Linda County Water District and Olivehurst Public Utility District and having a combined total permanent population of 28,000. Portions of the service area are now experiencing ground water quality problems.

The final application for the loan was submitted in July 1980 and has been processed through the Regional Office of the Department of Interior, Water and Power Resources Service. The application is now in the Commissioner's office in Washington, D.C. The rate of repayment has been set to utilize the maximum payment capacity of the water users.

Mitigation measures will be provided to compensate for the loss of fish and wildlife habitat.

A summary of the most important features of the project are listed below:

- Diversion structure on the Yuba River, consisting of an inlet structure, tunnel and fish screen/return system.
- Concrete lined 500 cfs, 5.7 mile main canal from the diversion structure to a bifurcation structure at the north boundary of Beale Air Force Base.
- Concrete lined 400 cfs reducing to 150 cfs, 16.2 mile Beale canal across Beale AFB then along its southern boundary and South Beale Road to the intersection of South Beale Road and Highway 65. This canal would serve the South Yuba and Wheatland Water Districts.
- Concrete lined 250 cfs reducing to 200 cfs, 4.8 mile West Branch canal along the north boundary of Beale AFB to the western tip of Beale to the North Beale Road. This canal would serve lands in the Brophy Water District and convey water for municipal users.
- Approximately 57 miles of distribution system canals to be operated by the participating districts, and serving a gross area of about 40,000 acres.

The California Water Commission unanimously supported the project which is scheduled to be funded as follows:

Fiscal Year 1982	$ 600,000
Fiscal Year 1983	$ 8,400,000
Fiscal Year 1984	$12,600,000

The Yuba County Water Agency acknowledges its obligation to raise its matching share of the funds, $6,636,000, and respectfully requests formal action by your Sub-Committee to authorize the Federal appropriation.

Very truly yours,

Douglas Waltz

Douglas Waltz
Chairman, Board of Directors

DW:nj

cc: Senator Alan Cranston
Senator S.I. Hayakawa
Congressman Eugene Chappie
Congressman Vic Fazio
Scott Franklin, Chairperson, California Water Commission

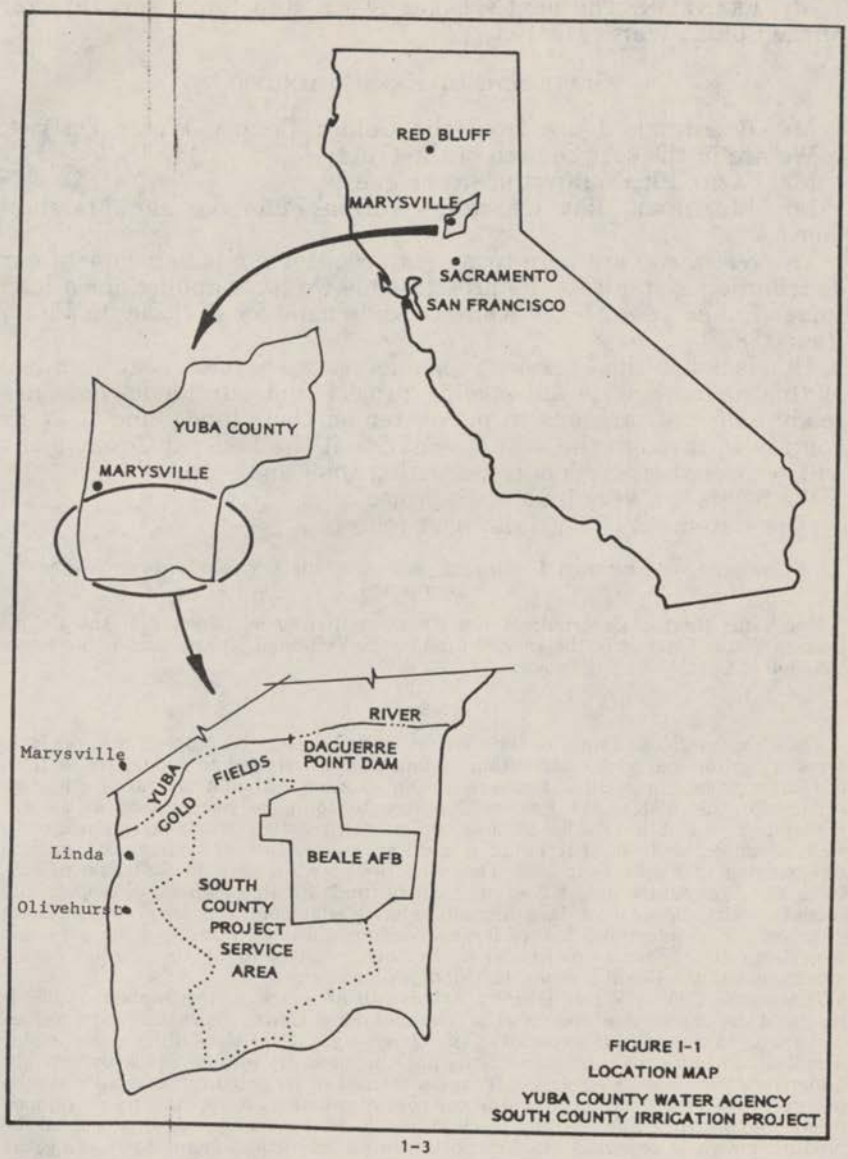

FIGURE I-1

LOCATION MAP

YUBA COUNTY WATER AGENCY
SOUTH COUNTY IRRIGATION PROJECT

Mr. FRANKLIN. The next speaker is Mr. Ken Rominger, Director of the Colusa Water District.

STATEMENT OF KEN ROMINGER

Mr. ROMINGER. I am from the Colusa County Water District. We are in the service area of the Canal.

Mr. FAZIO. Please introduce your guests.

Mr. ROMINGER. Ray Charter, Cynthia Peterson, and Marshall Jones.

The reason we are here today is to request funds to complete our distribution system. At the present time we have applied for a loan under Public Law 84-130. Our schedule calls for $846,000 in Fiscal Year 1982.

This is not in the President's budget, so we request your approval of this amount. It is an ongoing project and our landowners are ready and most anxious to put water on their lands, and it is, as you know, through the sale of water that the Federal Government will recover their costs of constructing the Canal.

We feel it is a very important project.

[The statement of Mr. Rominger follows:]

STATEMENT OF KENNETH ROMINGER, DIRECTOR FOR COLUSA COUNTY WATER DISTRICT

Hon. TOM BEVILL, Chairman: I am Kenneth Rominger, Director of the Colusa County Water District in the service area of the Tehama-Colusa, Sacramento River Division of Central Valley Project.

SUMMARY

The Tehama-Colusa Canal of the Central Valley Project is complete and ready to serve irrigation water. A distribution system now is required to deliver water from the Canal to our individual landowners. Our existing 9(d) contract funds are inadequate for the Water and Power Resources to complete our system so we are applying for a Public Law 84-130 to complete construction. Our loan application is well advanced and we will be in a position to design the system and initiate construction in Fiscal Year 1982. Our schedule shows a need for $846,200 in F.Y. 1982. The President's budget does not include funds for this loan so we respectfully request your approval of this amount. Our landowners are faced with failing groundwater supplies and loss of large investment unless water is made available soon from the Tehama-Colusa Canal. Further, repayment of the United States investment in the Canal is dependent upon sale of water.

The Colusa County Water District includes 40,000 acres, of which about 25,000 is irrigated, in the service area of the Tehama-Colusa Canal. Increasing land values and rising taxes make it imperative that lands now using the failing groundwater supplies continue to be irrigated and that the now dry-farmed lands by brought under irrigation soon. Conversion from dry-farmed to irrigated crops usually results in a five or six-fold increase in value per acre of produce grown. Rapidly rising food prices demonstrate the need for such increases in production. Also, much of the produce grown is exported. Such exports are an important factor in meeting the nation's foreign exchange requirements.

The Tehana-Colusa Canal was authorized by Congress in 1950 and construction started in 1965. The Canal is complete and ready to serve water this year. Many landowners have spent money on development of their lands in expectation that water would be available. Hence it is essential that the distribution system be financed and built soon. Also, repayment of the Government's investment in the Tehama-Colusa Canal depends upon sale of water to the irrigators.

Our District in 1965 signed a 9(d) contract for a $14,800,000 loan to build our distribution system. A portion of the system was built to serve 10,000 acres from a temporary water supply. The remaining $9,000,000 under the contract now is insufficient to complete the system. We are applying for a supplemental loan under Public Law 84-130 to complete it. Our application is in the Office of the Secretary of Interior for approval. Our schedule calls for $846,200 in Fiscal Year 1982 for design

and start of construction. It is urgent that our system be completed and we respectfully ask that you include the necessary funds in the F.Y. 1981 budget.

The people of our District greatly appreciate the assistance the federal reclamation program provides and you Committee's past help in financing the irrigation facilities.

Mr. FAZIO. We paid for the Canal; we now have it ready to go, and we have not got distribution systems in place.

Mr. FRANKLIN. That was our argument at OMB yesterday and also with Mr. Caruthers in the Bureau, and I think that is a valid point.

Mr. FAZIO. I appreciate your bringing it to our attention.

Thank you, Ken.

Mr. FRANKLIN. Our next speaker is Judi Johnson, who is a member of the Board of Supervisors, Tehoma County.

STATEMENT OF JUDI JOHNSON

Ms. JOHNSON. Thank you, Mr. Chairman.

I have submitted a statement that I would like included in the record.

[The statement of Ms. Johnson follows:]

77-001 O - 81 - (Part 9) - 76

U.S. House of Representatives
Committee on Appropriations
Sub-Committee on Energy and Water Development
Honorable Tom Bevill, Chairman

Thank you for this opportunity to ask for support for vital Northern California Water projects. It is my hope that you will continue the appropriations for authorization for the Cottonwood Creek project, as this will be a vital link, not only in the California State water project, but also for the continuation of the alleviation of water shortages for food and fiber production and recreation in the North State.

My chief concern today is the continued one million dollar appropriation for the Chico Landing to Red Bluff Project. Each year acres of productive and protective lands are washed from the banks of this unprotected canal, also called the Sacramento River, due to lack of funding and cooperation with State Agencies. Six sites were recommended in 1978 as being critical for immediate work. With over 50% of the projects already completed, these sites would provide substantial protection for farm lands, natural habitat and desiltification of the Delta. On one three thousand stretch of river bank 30 of the 40 acres have been lost in an area set aside for preservation of natural oaks, grasses and wildlife. The cost benefit ratio on this piece of property alone is figured to be 1.95. The other five sites currently abut productive but threatened orchard lands.

There has been some concern that these dollars are going to protect a few privately owned farms and that perhaps tax dollars should be spent for the masses, but I would say to you that a cost benefit ratio which exceeds one at each of these six sites are dollars well spent for food production and wildlife and Delta protection.

Northern California comprises a large part of the food basket for the U.S., especially the Western Region. Water and energy for such large scale production is an ever increasing concern. But without basic protection for the land itself our ability to assist in food production will be severely limited. Therefore this one million dollar investment can be counted on for return many times over.

Please understand that we as County Supervisors will take total responsibility for seeing the work done in an orderly, efficient and economic manner.

Judi H. Johnson

Ms. JOHNSON. We would like to tell you that we would very much appreciate your continued support of the Cottonwood Creek Project. We believe this is crucial to the economy of our area.

We would also like to ask for help on the continuation of funding for the Chico Landing to Red Bluff Project on the banks of the Sacramento River.

Each year acres of productive and protective lands are washed from the banks of this unprotected Canal, also called the Sacramento River, due to lack of funding and cooperation with State agencies. Six sites were recommended in 1978 as being critical for immediate work. We believe this to be crucial both to the State and Federal water plans and to maintain stability for the environment, agriculture and desiltification of the Delta.

This has been in the budget in the past. It has been previously funded and we are about half done and would like to continue the project.

Mr. FAZIO. We would like to help.

Mr. FRANKLIN. That concludes the testimony of the people from California, Mr. Chairman, and I want to thank all of you for staying and hearing our comments. We appreciate it very much.

We appreciate the dilemma that your particular committee and all of Congress has. We want to work with you. For the first time, California Water Commissioners prioritized their projects. It is in my statement.

We will be doing the same thing in the future, and I hope that that kind of makes it a little easier.

Mr. FAZIO. We appreciate that. That helps us, and it also shares some of the pain.

Mr. MYERS. Off the record.

[A discussion was held off the record.]

Mr. FAZIO. We got to move along now. We are a good deal behind.

CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE

WITNESSES

HON. GLENN ANDERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA
ROBERT H. LANGNER, EXECUTIVE DIRECTOR
JUN MORI, COMMISSIONER
FRED HEIM, COMMISSIONER,
JACK WELLS, DEPUTY CHIEF EXECUTIVE, PORT OF LOS ANGELES
EDWARD GORMAN, CHIEF HARBOR ENGINEER

Mr. FAZIO. Next we have Mr. Robert Langner, Executive Director, California Marine Affairs and Navigation Conference.

Would you like to introduce the number of people you brought along?

STATEMENT OF ROBERT LANGNER

Mr. LANGNER. I have a statement for the record before you.

Mr. FAZIO. We will place your statement in the record.

Mr. LAGNER. I note that this is our 23rd consecutive year here, and we tried to very briefly summarize all the rationale and reasons we have given over the years for the development which has occurred and to which this committee and its predecessors have been responsive.

We understand the constraints you referred to earlier, Mr. Chairman, and we are well aware of these problems. We mention them briefly in my testimony. Attached to my testimony is a schedule of projects which we are supporting again for the 23rd year. Some of our witnesses will mention these very briefly.

Our first presentation, and we are sorry as well that the various Congressmen who were going to appear have been otherwise detained——

Mr. FAZIO. When they come in we will recognize them.

Mr. LANGNER. We have the Port of Los Angeles, represented by Commissioners Jun Mori, Fred Heim, Jack Wells, and Edward Gorman, Chief Harbor Engineer.

CALIFORNIA
C-MANC Marine Affairs and Navigation Conference
ORGANIZED 1956
303 WORLD TRADE CENTER • SAN FRANCISCO, CALIFORNIA 94111 • TELEPHONE (415) 982-7788

March 27, 1980

PRESENTED TO: Subcommittee on Energy and Water Development
Committee on Appropriations
1st Session, Ninety-Seventh Congress

STATEMENT OF: Robert H. Langner, Executive Director
California Marine Affairs and Navigation Conference

Mr. Chairman and Members of the Committee:

In my 23rd consecutive, annual appearance before you as C-MANC's executive officer, to present our witnesses and introduce in support of our projects and recommendations, it would be easy merely to update and repeat the material and facts, arguments and rationales, contained in my statements presented here since 1959.

More than ever, however, time and attention are precious, and with your concurrence, I will not indulge myself with a rehash of all of the reasons why we believe these California projects — a list of which is appended to this statement — should continue to receive your careful attention and favorable consideration. This Committee and its predecessors have heard extensively and with patience the tens of thousands of words with which we have expressed our needs and made our pleas. Despite this verbal bombardment, and reflecting inherent wisdom and a capacity to filter out redundancies — the Congress has been responsive for two-decades-plus in recommendations and actions which have benefited not only California but the nation. Stronger, more resilient, greater capability of logistics and security, a pace-setter in recreational boating and shallow draft navigation open to the ocean, the Golden State is the fastest-growing area of the United States in expanding our nation's vital international commerce.

Emphasized now and reflected in Congressional inquiries and proposed legislation are plans to accelerate the capabilities of certain U.S. port areas to accommodate larger bulk carriers necessary to transport more efficiently the soaring export of American coal. And — while not as rapid — there has been in the relatively recent past similar realization that our ports must also have capability to perform economically their function as pipelines for the growing volume of imported oil required to sustain this nation.

These and other anticipated, dynamic developments have been highlighted in our previous statements over the years. Navigation as fuel-efficient, cost-effective, environmentally-superior, security-essential, and water-related recreation — perennially the most popular — all have been subjects of our comments.

OFFICERS AND DIRECTORS

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Oxnard Harbor District

GERALD POPE, Vice President
Port of Oakland

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Consulting Engineer

ROBERT H. LANGNER
Executive Director and Secretary

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Los Angeles County

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Contra Costa County Development Assn

ALEXANDER KRYGSMAN
Port of Stockton

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KENNETH SAMPSON
Consultant

ANTHONY TAORMINA
Port of San Francisco

LESLIE M. WESTFALL
Westfall Stevedore Company

To rehash now for this knowledgeable body the fact, logic and rationales for these truisms would indeed be superfluous.

From the positive to the less so — or, "a revisit to regulatory jungle", similarly is inappropriate, since you are all most familiar with this "other side of the coin". In July, 1978, C-MANC presented to the House Port Caucus its "white paper", "The Regulation of Dredging: A Muddle Over Mud". Since then, the excesses of counter-productive regulations and their applications have not been ameliorated. Seeking regional relief, two similar efforts and documents have been presented for the benefit of the California Legislature and state agency officials, and while not within the immediate purview of this Committee, you are in agreement, we are sure, that the delays, frustrations, cancellations and major additional costs, have not boded well for these public works projects which are being considered here today. Repeatedly in the last year have been statements citing total annual costs of government regulations in excess of $100 billion — or more than is invested to make America productive through capital improvements. The negative implications of such figures need no exposition.

It is with the same restraint that the issues of user charges and fuel taxes on waterways, creeping down into deep water ports, is not dwelled upon now. While a convenient target and with numerically limited proponents, navigation interests largely represent the public. This nation was to a major extent explored, settled, developed and defended by means of navigable waterways and ports. More than ever, we need the efficiency and reliability which they afford our commerce, security and economic well-being.

At this time of apparent publicly-mandated action to cut government expenditures, balance the federal budget, bring inflation within reasonable bounds, and to revitalize our economy and competitiveness in the world, one might question the logic through which we appear here to seek to not only maintain but expand proposed expenditures in the coming fiscal year to carry out federal responsibilities which were originally dictated by the Constitution. If ports and commercial navigation are so efficient and important, critics say, why can't they "pay their own way"? Why should hard-pressed Treasury coffers have to be replenished at increasing cost with borrowed funds, only to be depleted again by "pork barrel" appropriations? Better than anyone, this Committee knows the true value of public Works, and particularly, those involving navigation projects. In the two hundred-plus years of our nation's existence, it is difficult for this witness at least to cite another traditional federal responsibility, annually funded, which has reaped such major benefits for all. Regrettably, the modest proportions of Federal budgets allocated to the kinds of projects we espouse have steadily declined on a percentage basis. Fewer and fewer projects are initiated, the time it takes to plan and have them approved stretches into decades today, their initiation has become a matter of conjecture at best, and if when realized, they are at best reasonably maintained, and seemingly unworthy of improvement!

A rehash was promised to be avoided, although it may appear that this is a covert one in the philosophical sense. It is hoped that the preceeding repetitive summary of earlier themes was not excessive.

Our witnesses today and their Congressional hosts and supporters of our recommendations join me in appreciation to you for your customary hospitality and cordial reception here today. We hope that we have not worn out our welcome and will have opportunity to appear before you next spring, and at that time, express appreciation for your considered response to our request and recommendations. Thank you.

* * *

CALIFORNIA
Marine Affairs and Navigation Conference
303 WORLD TRADE CENTER, SAN FRANCISCO, CALIF. 94111

MANC

ACTIVE NAVIGATION AND BEACH EROSION STUDIES IN PROGRESS OR NOT STARTED

(Amounts in Thousands)

Compiled with the cooperation of the South Pacific Division, Corps of Engineers, USA

Study		Estimated Federal Cost	Approp Thru 30 Sep 80	FY 1981 Conference Allowance	FY 1981 Work Allowance	Balance to Complete	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
NAVIGATION IN PROGRESS									
Bolinas Lagoon		925	185	0	0	740	0	115	Resume study
Coast of Northern California (Harbors for Light Draft Vessels)		1,350	771	140	140	439	0	216	Continue study
Crescent City Harbor		690	85	220	220	385	200	200	No additional requirement
Humboldt Harbor and Bay		1,320	511	375	275	534	0	265	Continue study
Morro Bay Harbor		700	154	0	0	546	0	230	Resume study
North Coast of Los Angeles County		520	165	0	0	355	0	80	Resume study
Oakland Inner Harbor		490	100	200	200	190	130	130	No additional requirement
Oceanside Harbor		680	580	0	0	100	100	100	No additional requirement
Redondo Beach Harbor (King Harbor)		175	0	65	40	110	0	70	Continue study
San Francisco Bay and Tributary, Deep Water Ports		515	0	0	0	515	0	150	Initiate study
San Francisco Bay Area (In-Depth)		2,615	2,251	110	110	254	110	110	No additional requirement
San Francisco Harbor and Bay (Collection and Disposal of Floating Debris)		400	92	0	0	308	0	130	Resume study
San Leandro Bay		645	50	0	0	595	0	150	Resume study
San Pedro Bay Ports		1,120	315	325	325	480	480	480	No additional requirement
Sunset Harbor		790	385	100	100	305	150	150	No additional requirement
NOT STARTED									
Coast of California (Storm & Tidal Wave)		7,000*	0	0	0	7,000*	0	750*	Initiate study
Santa Cruz Harbor		95	0	0	0	95	0	95	Initiate & complete study
West Newport Beach Harbor (Costa Mesa)		320	0	0	0	320	0	0	Awaiting Coastal Commission approval
SHORELINE PROTECTION IN PROGRESS									
San Francisco Bay Shoreline		1,360	300	350	350	910	0	700	Continue study
Santa Barbara County		830	91	0	0	739	0	50	Resume study
CONTINUATION OF PLANNING & ENGINEERING STUDIES									
Fisherman's Wharf		370	0	0	0	370	0	200	Continue planning and engineering
Oakland Outer Harbor		220	0	0	0	220	150	150	No additional requirement
Sacramento River Deep Water Ship Channel		1,250	0	0	0	1,250	0	400	Continue planning and engineering
Project			**ADVANCE ENGINEERING AND DESIGN AND CONSTRUCTION**						
Bodega Bay	(N)	3,110							
(Precon Plng)		(586)	(431)	(0)	(0)	(155)	(0)	(155)	Complete planning
Crescent City Harbor	(*)	11,100 1/	1,478	200	200	9,422	1,720	1,720	No additional requirement
Los Angeles and Long Beach Harbors	(N)	29,600 1/	2,677	13,500	13,500	13,423	11,000	11,000	No additional requirement
Noyo River and Harbor	(N)	10,800							
(Precon Plng)		(1,200)	(520)	(160)	(160)	(520)	(240)	(240)	No additional requirement
Oceanside, San Diego County 2/	(SP)	3,000	0	3,000	3,000				
San Diego River and Mission Bay	(N&PC)	19,200 1/	11,335	250	250	7,615	250	250	No additional requirement
San Francisco Bay to Stockton (John F. Baldwin & Stockton Ship Chan)	(N)	166,000	8,559	850	850	156,591	1,400	1,400	No additional requirement

*C-MANC estimate.
1/ Cost estimate includes an allowance for inflation through the construction period.
2/ Special line item for FY 1981 only.

OPERATION AND MAINTENANCE PROJECTS

(Amounts in Thousands)

Project	Actual Obligations FY 1980	FY 1981 Conference Allowance	FY 1981 Work Allowance	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
Bodega Bay Harbor	175	0	175	0	0	Harbor depths adequate for current use
Channel Islands Harbor	1,750	235	242	2,292	4,092	Dredge sand trap
Crescent City Harbor	2,096	1,632	247	1,347	1,347	No additional requirement
Humboldt Harbor and Bay	710	1,505	1,456	1,642	2,522	Dredge Bar and Entrance Channel (170); dredge Fields Landing and North Bay Channel (610); and update Environmental Impact Statement (100)
Los Angeles-Long Beach Harbors	697	1,088	19	0	0	Harbor depths adequate for current use
Los Angeles-Long Beach Harbors Model	298	82	107	100	980	Conduct model tests at Federal expense; normally be paid for by local interests
Marina Del Ray	0	0	1,100	0	0	Harbor depths adequate for current use
Morro Bay Harbor	1,400	649	62	0	2,000	Dredge entrance; Navy and south Morro Channel (1,400); and repair rock revetment (600)
Moss Landing Harbor	0	479	479	0	0	Harbor depths adequate for current use
Napa River	80	0	912	0	500	Dredge channel
Newport Bay Harbor	0	327	327	0	0	Harbor depths adequate for current use
Noyo River and Harbor	239	380	381	436	436	No additional requirement
Oakland Harbor	1,206	1,070	1,070	1,446	1,556	Boundary survey and monumentation
Oceanside Harbor	0	650	1,040	0	700	Dredge entrance and Navy Channel
Petaluma River	507	0	0	0	1,500	Dredge across San Pablo Bay Flats
Redondo Beach Harbor (King Harbor)	0	250	250	0	0	Harbor depths adequate for current use
Redwood City Harbor	20	1,089	989	0	650	Dredging
Richmond Harbor	542	740	690	671	854	Dredge Inner and Outer Harbors
Sacramento River	1,680	2,706	2,495	2,637	2,637	No additional requirement
San Diego Harbor	0	540	65	0	0	Harbor depths adequate for current use
San Francisco Bay-Delta Model	1,686	451	457	513	1,238	Upgrade roads and parking areas (375); and upgrade visitor center exhibits (350)
San Francisco Harbor	751	1,437	48	1,987	1,987	No additional requirement
San Joaquin River	398	108	25	1,340	1,340	No additional requirement
San Leandro Marina	0	0	0	582	690	Dredge auxiliary channels
San Pablo Bay and Mare Island Strait	1,015	1,611	1,527	2,363	2,363	No additional requirement
San Rafael Creek	181	0	299	0	0	Channel depths adequate for current use
Santa Barbara Harbor	668	541	544	743	743	No additional requirement
Santa Cruz Harbor	530	675	675	595	1,155	Continue multi-year dredging contract (170); and seal west jetty (390)
Suisun Bay Channel	319	267	268	358	358	No additional requirement
Suisun Channel	0	51	51	619	619	No additional requirement
Ventura Harbor	430	534	1,065	1,142	3,142	Dredge sand trap (1,750); and design fixed sand bypass (250)
Drift Removal (S.F. Harbor and Bay)	1,255	1,198	1,203	1,426	1,426	No additional requirement

STATEMENT OF MR. JACK WELLS

Mr. WELLS. I am Jack Wells. I am the Deputy Executive Director of the Port of Los Angeles, not one of the Commissioners.

First I would like to introduce two of the Commissioners that are accompanying me, as well as a member of the staff.

First I would like to introduce Mr. Jun Mori, the President of the Los Angeles Board of Harbor Commissioners.

Mr. FAZIO. Why don't you folks all stand up.

Juni, come on in.

Mr. WELLS. And Mr. Fred Heim, a member of the Board of Harbor Commissioners; Mr. Ed Gorman, Chief Harbor Engineer.

Dr. E. L. Perry, has a prepared statement on behalf of the Los Angeles Board of Harbor Engineers, and I would like to request the statement be placed in the record of this hearing.

[The statement of Dr. Perry follows:]

STATEMENT OF DR. E. L. PERRY,
EXECUTIVE DIRECTOR OF THE PORT OF LOS ANGELES, ON BEHALF OF THE
LOS ANGELES BOARD OF HARBOR COMMISSIONERS BEFORE THE
HOUSE ENERGY & WATER DEVELOPMENT
SUBCOMMITTEE
OF THE SENATE APPROPRIATIONS COMMITTEE
WASHINGTON, D.C.
MARCH 26, 1981

Mr. Chairman, I am E. L. Perry, Executive Director of the Port of Los Angeles, and I am representing the Los Angeles Board of Harbor Commissioners at this hearing. I appreciate the opportunity to appear before you today to respectfully request Congress to appropriate $11 million in fiscal year 1982 so that the deepening of our port's main channel, turning basins and inner harbor may continue as scheduled.

The deepening of the channels at the Port of Los Angeles from -35 to -45 feet not only will serve the national defense and public interest, but is critical to California and the entire nation. The project was authorized by Congress under the Water Resources Development Act of 1976 (PL94-587), which states in part that this navigation project is "hereby adopted and authorized to be prosecuted by the Secretary of the Army, acting through the Chief of Engineers, substantially in accordance with the plans and subject to the conditions recommended by the Chief of Engineers . . ." The authorization bill by Congress emphasized the need for prompt implementation of the project.

Mr. Chairman, I am very happy to report to this committee that just last week, with the throwing of the symbolic switch along our Main Channel, Congressman Glenn Anderson and Los Angeles Mayor Tom Bradley hailed the start of this $61 million deepening project and the dredging is going on even as we meet here today.

With representatives of the Los Angeles City Council, Harbor Commissioners, Corps of Engineers representatives, and a group of some 200 government officials, Harbor tenants and local community leaders looking on, the Hydro Pacific electric dredge began its six-days-per-week, 30-month project, starting at the south end of the Port's Main Channel and progressing toward the Wilmington District.

The massive dredge is one of the world's largest and its cutter head is capable of 500-foot-wide sweeps of the harbor bottom. The contract for the project was awarded last year by the Corps to Potashnick Construction, Inc. of Cape Girardeau, Missouri, and calls for the use of the electric Hydro Pacific dredge in order to preserve the air quality of the Los Angeles Basin.

Actually, the construction phase of the project began last October with the building of a retaining wall for the dredge material and which is the foundation of a new and additional land area in our Port.

In order that the dredging and this project may go forward and remain on schedule, Mr. Chairman, we are asking your committee to

approve the $11 million needed to match the Corps capability for continued construction of the project in fiscal year 1982. Eleven million dollars is in the President's budget and therefore we are not asking for any additional funds.

It is estimated that the dredging project will take 1 1/2 to 2 more years to complete. An appropriation equal to the Corps' capability of $11 million for this coming fiscal year will keep our project on schedule for an early 1983 completion.

The federal share of these navigation improvements for Los Angeles Harbor is being matched by $34.6 million in local contributions from the Port and Port users, bringing the total cost of the project to over $61 million. The project also will provide the impetus for the Port to spend more than $500 million in capital improvements over the next five years. In addition to these Port investments, millions more will be invested by private interests.

According to studies by the Corps of Engineers, the primary benefits to be derived from the project are in the national interest, and will result in significant transportation savings to U.S. producers and consumers of waterborne commerce.

The Corps has calculated these benefits to be 3.5 times the federal cost, which is a very favorable benefit to cost ratio. The Corps' analysis of the project indicates that the annual benefits to be derived from the deepening of the channel to a depth of 45 feet are more than $14 million. The project will substantially benefit and increase employment, both directly in the Port and indirectly in associated industries. It will enhance and support commerce activities in California and the entire southwest part of our nation.

The Corps' cost/benefit ratio analysis does not include the growing movement of container cargo through the various bridge systems, which is a combined water-rail through movement -- a practical intermodal system. This movement is growing at a conservatively estimated rate of 10 percent per year. In 1980, over 33 percent of the movement was this type of bridge traffic and the percentage is still increasing at a significant rate. The growth is due to the diversion of Atlantic and Gulf Coasts-Far East cargoes rail/water movement through West Coast ports which move with greater frequency at a lesser cost and with faster transit times. Larger container ships requiring depths in excess of 35 feet are entering into service rapidly and now represent more than 50 percent of the world's container fleet. The greatest number of containerships in existence are dedicated to the U.S. West Coast-Far East service. Last year, the bridge system alone resulted in about 3 1/2 million revenue tons of bridge container cargo passing through the Port of Los Angeles as the link between the Far East and Gulf/Atlantic area import and export markets.

An equally important project benefit will be greater navigational safety. A large percentage of vessels in the world fleet cannot now enter the Port of Los Angeles because of the limitation of the 35 foot depth. This creates the necessity of lightering bulk liquid cargo from the larger vessels because they are unable to enter the harbor until their draft has been decreased. The result: time delays and increases in operating costs - all passed on to the consumer -

plus the increased use of finite fuel and its contribution to air pollution.

Those vessels that can enter the harbor often have only minimal clearance which adds to the difficulties in ship handling. Deepening of the harbor channels will allow for increased quantities in commerce, with fewer vessel passages and greater bottom clearance for a higher percentage of ships. Also, the larger containerships cannot take on cargo and fuel oil at their berths because of draft constraints and are forced to proceed to an anchorage in deeper water to take on fuel oil thus adding the inefficiences of cost and time to the movement of waterborne commerce.

Another very important benefit from the deepening project is the creation of additional land off the southern end of the Port's Terminal Island. To be created from the dredge material, this new land will enable the Port of Los Angeles to create facilities for the handling of bulk commodities including coal and other vital energy cargoes.

Mr. Chairman, just last February, the Los Angeles Board of Harbor Commissioners approved in concept the development of a major coal terminal to be located on this new land on Terminal Island. The Board directed than an Environmental Impact Report be prepared for the development, including the dredging of a 65-foot channel to the southern portion of Terminal Island and the creation of necessary landfill in the Outer Harbor for relocation of hazardous liquid bulk terminals presently located adjacent to the harbor community. Both projects are included in the Port's extensive master plan and capital development program.

Such a major coal handling terminal at Los Angeles would be capable of storing millions of tons of coal and could load in excess of 20 million or more tons each year in vessels approaching 250,000 dwt.

Activities such as these at the Port of Los Angeles create many thousands of jobs, both directly and indirectly, and as tonnage increases, so do those jobs. Without the deepening project, normal and necessary economic growth in the area will significantly decline, with the unequivocal possibility of a significant decrease in jobs.

Completion of our deepening project will prevent many of our Port's modern terminal facilities from becoming obsolete, under-utilized and gradually completely bypassed because of their inaccessibility to the larger more capital intensive vessels which require the deeper water. When our channels are deepened to minus 45 feet, we will be able to maintain the highest utilization possible of our facilities and the Port of Los Angeles will remain an economically strong element in the nation's commerce and transportation system.

As you are well aware, Mr. Chairman, the Federal Government's role in port development is to provide the channels and anchorages in the nation's navigable waters in the interest of commerce and national defense. In view of the world situation, the role of deeper water in major ports, as a part of national defense strategies, assumes an importance that must not be ignored. Local entities assist by providing the terminals and other facilities needed.

In addition, investment by the Federal Government in the Port of Los Angeles has yielded the highest return on investment of any port in the nation in the form of Customs' collections added to all other tax income generated.

We feel that the facts as presented justify our request for continued and full funding and support for the Los Angeles Harbor deepening project. Our request of $11 million for fiscal year 1981 will permit this vitally important project to proceed on schedule towards an early 1983 completion date.

The Mayor, City Council, the Board of Harbor Commissioners of the City of Los Angeles, all local government bodies in the San Pedro Bay area and port users unanimously support our project and urge your approval of the requested funding.

In addition to the Los Angeles Harbor deepening project, Mr. Chairman, there are two other San Pedro Bay projects under consideration for funding by your committee. These projects are the San Pedro Bay ports' Transportation Study and maintenance of the Corps of Engineers' Los Angeles and Long Beach Harbors model at Vicksburg, Mississippi.

The transportation study is a very important one for us in Los Angeles, because it is a vital tool that we use in planning our harbor and navigation improvements. The Port is but a link in the transportation of goods between supplier and user and all links must be adequately joined together. One is helpless without the other. As cargo volumes continue to increase in the Los Angeles/Long Beach area, rail, freeway and pipeline transportation must be ready to handle those increases. We are requesting an appropriation of $480,000 to complete the transportation study now under way. This amount matches both the President's budget for the study as well as the Corps' capability. We urge you to approve this funding.

The President's budget contains also $100,000 for the maintenance of the hydraulic model of Los Angeles and Long Beach Harbors at the Corps' testing station in Vicksburg, Mississippi. While $100,000 will only maintain the model in a ready-for-testing condition, it is extremely important that the model's maintenance be funded. If it isn't, the Corps of Engineers would not be able to respond to any testing needs that we or Long Beach may have.

Along these same lines, Port engineers, technical staffs of permit reviewing agencies and model investigators have found the Los Angeles/Long Beach Harbor hydraulic model to provide essential information required when planning improvements in the harbor complex. Information from the model testing and studies has greatly assisted in the making of decisions for these plans and for the growth of the ports. However, more detailed knowledge is still needed on tidal action and the effects of surges on moored ships.

A field data collection program is needed to measure the efficiency of tidal flushing and to define current patterns inside

our breakwater. Such a program would also provide more direct measurement of ship surges caused by harbor seiching. These measurements, coupled with improved analysis by computer, will allow investigators to better predict the ship movements to be expected in newly created harbor channels and ship berthing areas. The President's budget for fiscal year 1982 does not include funding for such a program, estimated to cost $880,000. Therefore, Mr. Chairman, we respectfully request you and your committee to favorably consider an appropriation in the amount of $880,000 for the coming fiscal year. The Corps of Engineers has an equal capability for the model studies program.

As you know, Mr. Chairman, the Ports of Los Angeles and Long Beach sit side-by-side within San Pedro Bay in California. Together, these ports handle nearly $100 million revenue tons of cargo annually and neither port alone has the facilities or capability of meeting the needs of commerce and navigation in Southern California. This is why the two ports together and as a single geographic harbor will benefit from the completed Transportation Study now in progress and which your committee has supported and funded in the past. The operation and maintenance of the hydraulic model and the other projects in San Pedro Bay that your committee and Congress has supported and funded over the years also are mutually beneficial.

Again, we thank you, Mr. Chairman, and the members of your committee for your past and continued support for our projects.

GVH/dmm
3/20/81

Mr. WELLS. Our Congressman, Glenn Anderson, will outline our project funding needs in San Pedro Bay, and I would like to thank you, Mr. Chairman, for your continued support of the Los Angeles Port.

We urge you to make it possible for us to continue to fulfill our responsibilities as the West Coast's major port complex.

We will be able to do that, Mr. Chairman, but only with your help and that of Congress.

We urge you to recommend full funding of the projects to be outlined in Congressman Glenn Anderson's remarks and in our own testimony which I have submitted for the record.

Thank you.

Mr. FAZIO. Mr. Anderson is one of the most persistent lobbyists of this committee, so I am sure your points will be well taken.

PORT OF LONG BEACH

WITNESSES

RAYMOND BERBOWER, ASSISTANT CHIEF HARBOR ENGINEER
TRAVIS MONTGOMERY, EXECUTIVE SECRETARY TO THE BOARD

Mr. FAZIO. Mr. Langner, you may proceed.

Mr. LANGNER. The Port of Long Beach is represented by Travis Montgomery and Ray Berbower.

STATEMENT OF RAYMOND BERBOWER

Mr. BERBOWER. Thank you, Mr. Chairman.

Had Congressman Anderson been here and given his testimony, my words would have echoed his. I am mindful of the $950 million in Customs revenue generated by the Ports. The Port of Long Beach feels its request for less than $1½ million is indeed modest. I am submitting a formal statement for the record.

Thank you.

[The statement follows:]

The Port of Long Beach
"America's most Modern Port"
P.O. BOX 570 · LONG BEACH, CALIFORNIA 90801 · TELEPHONES: (213) 437-0041 · (213) 775-3469 · TELEX: 65-6452 PORTOBEACH LGB

March 13, 1981

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water Development
House Committee on Appropriations
2362 Rayburn House Office Building
Washington, D.C. 20515

Subject: Congressional Appropriations for
Los Angeles-Long Beach Ports Transportation Study,
Hydraulic Model Maintenance, and San Pedro Bay
Hydraulic Monitoring

Mr. Chairman:

I am Raymond F. Berbower, Assistant Chief Harbor Engineer of the Port of Long Beach, California and I am authorized by the Board of Harbor Commissioners of the City of Long Beach to represent the Port of Long Beach in regard to appropriations for the Los Angeles and Long Beach Harbors Transportation Study, Hydraulic Model Maintenance, and San Pedro Bay Hydraulic Monitoring Program.

The Water Resources Development Act of 1976, in Section 163, authorized the Chief of Engineers to conduct a study of water and land transportation needs resulting from expansion and further development of the ports on San Pedro Bay. The study, initiated under a Fiscal Year 1978 appropriation, covers in depth the present and anticipated future needs for railroad and highway facilities to serve the two-port complex and the navigational aspects for commercial shipping and recreational boating. The President's budget for Fiscal Year 1982 includes $480,000 to complete this study. Congress is respectfully requested to appropriate $480,000 for Fiscal Year 1982 for this study, commensurate with the Corps of Engineers' capability.

The Water Resources Development Act of 1976, Section 123, also authorized the Chief of Engineers to operate and maintain the Los Angeles-Long Beach Harbor hydraulic model in Vicksburg, Mississippi. In the President's budget for Fiscal Year 1982, $100,000 has been included to maintain that model. Congress is respectfully requested to appropriate $100,000 under O & M funding for Fiscal Year 1982 for this project, commensurate with the Corps of Engineers' capability.

Under Fiscal Year 1971 appropriation, the U.S. Army Corps of Engineers Waterways Experiment Station installed instruments and monitored the hydraulic regime (wave

energy and tidal circulation/flushing) over a fifteen-month period to obtain prototype data utilized in the design of the Los Angeles-Long Beach hydraulic model at Vicksburg. That monitoring program served its purpose, but did not provide adequate long-term data on which future port facilities can be adequately tested and designed, commensurate with the available technology and capabilities of the hydraulic and numerical (computer) models. A program for this much-needed data gathering has been developed by the Hydraulics Laboratory of the Waterways Experiment Station to augment the data previously obtained. Port of Long Beach long-term plans for deeper channels (76 to 80 feet) and companion landfills to accommodate large bulk carriers for much needed international trade, predominately coal exports, is contingent on obtaining such hydraulic data and subsequent model testing. The President's budget for Fiscal Year 1982 does not include the $880,000 O & M funding needed to acquire and place instrumentation for this program by the Waterways Experiment Station. However, Congress is respectfully requested to appropriate $880,000 for Fiscal Year 1982 for this program, commensurate with the Corps of Engineers' capability.

The modernization and expansion program of the Port of Long Beach is estimated to be in excess of $200,000,000 of local funds for the decade of the 1980's, and a similar or greater growth in the 1990's. Our current two-year program will utilize all existing available land areas. The subsequent programs can be carried out only if additional landfills and companion deep water channels and berths can be provided. Design of these programs is dependent on data obtainable from hydraulic monitoring of San Pedro Bay and hydraulic model testing, results of the Review of Reports, which is scheduled for completion in Fiscal Year 1981, and results of the Transportation Study for San Pedro Bay, which is scheduled for completion in Fiscal Year 1982.

Also, we find the current Corps of Engineers project to dredge the Los Angeles Harbor main channel to minus 45 feet, as authorized by the Congress in October 1976, to be in the best interest of overall utilization and development in San Pedro Bay.

Attached hereto is Resolution No. HD-1199 adopted by the Board of Harbor Commissioners of the City of Long Beach on March 2, 1981, which contains data relating to the background of the Reviews of Reports, hydraulic modeling, the San Pedro Bay Transportation Study, and other related matters, and which stresses the need for federal assistance in developing economic, technical and environmental background information essential to design and permitting of port facilities vital to regional and national interests. Agencies benefiting from these studies in San Pedro Bay include, but are not limited to, the Cities and Ports of Long Beach and Los Angeles, Los Angeles County, the State of California, the United States Navy and Coast Guard, and various State and Federal Environmental Agencies.

Thank you for permitting me the privilege of this presentation.

Raymond F. Berbower

Raymond F. Berbower
Assistant Chief Harbor Engineer

GHP:eb

Attachment

RESOLUTION NO. HD-1199

A RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS OF THE CITY OF LONG BEACH REQUESTING THE CONGRESS OF THE UNITED STATES TO APPROPRIATE FUNDS FOR HYDRAULIC MODEL MAINTENANCE, SAN PEDRO BAY WAVE AND TIDAL CIRCULATION MONITORING PROGRAM, AND TRANSPORTATION STUDIES BY THE UNITED STATES ARMY, CORPS OF ENGINEERS RELATING TO IMPROVEMENTS IN SAN PEDRO BAY AND MAKING A DETERMINATION RELATING THERETO

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WHEREAS, the Ports of Long Beach and Los Angeles in San Pedro Bay, California are two of a limited number of sites on the West Coast which possess the potential for deep water ports as recommended in the West Coast Deep Water Port Facilities Study conducted by the United States Army, Corps of Engineers; and

WHEREAS, the Ports of Long Beach and Los Angeles have a record of physical and fiscal growth to the end that together the two are presently handling over 80 million metric tons (89 million short tons) of cargo annually valued at nearly $23 billion, which growth and activity are significant economic regional and national factors, and from which over $955 million in federal revenues from foreign imports are derived annually through United States Customs; and

WHEREAS, both Ports are now and are becoming increasingly hard-pressed to provide facilities to meet the needs of the shipping industry, and to that end are conducting extensive studies in conjunction with federal studies, to determine navigational, transportation, and environmental requirements to provide economic and adequate surge-free berthing and cargo handling facilities; and

WHEREAS, completion of the studies currently underway by the Corps of Engineers, which include the Review of Reports as requested by the Committees on Public Works of both the House and Senate, the maintenance and operation of the San Pedro Bay hydraulic model at Vicksburg, Mississippi, as authorized by Section 123 of the Water Resources Development Act of 1976, and the San Pedro Bay Transportation Study as authorized by Section 163 of the Water Resources Development Act of 1976 are all urgently needed for use in the design and permitting processes for future land fills for Port development; and

WHEREAS, to obtain long term data on the hydraulic regime in San Pedro Bay which activity consists of a two to five year monitoring program utilizing self-contained recording instruments to determine currents and energy entering the Bay to augment earlier monitoring and to verify specific needs for hydraulic model testing to assure tidal flushing and surge-free berthing; and

WHEREAS, all existing land in the Port of Long Beach which can be developed for shipping operations will have been utilized by 1982, and to meet the needs of the following decade, the design, permitting and construction of new lands must commenc

immediately; and

WHEREAS, the Board of Harbor Commissioners of the City of Long Beach, as a properly constituted and financially responsible local agency, by its Resolution No. HD-890, adopted August 30, 1965, expressed its intent to enter into such agreements as may be reasonably required to further federal projects for the development and improvement of Long Beach and Los Angeles Harbors; and

WHEREAS, the Director of Port Planning of the City of Long Beach Harbor Department has determined in a review of the applicability of the California Environmental Quality Act of 1970 (CEQA) to this resolution, that under the provisions of Section 15060 of the State Guidelines implementing CEQA, this resolution is not subject to the requirements of CEQA;

NOW, THEREFORE, the Board of Harbor Commissioners of the City of Long Beach resolves as follows:

1. The Board of Harbor Commissioners of the City of Long Beach hereby finds and determines that this resolution is not subject to the provisions of the California Environmental Quality Act of 1970, as amended.

2. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, to complete the San Pedro Bay Ports Transportation Study, which study was authorized by Section 163 of the Water Resources Development Act of 1976.

3. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously

the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers to maintain the Los Angeles-Long Beach Harbors hydraulic model at the Waterways Experiment station at Vicksburg, Mississippi.

4. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers to initiate a hydraulic monitoring program of San Pedro Bay to obtain prototype data essential to long range planning and design.

5. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, directed to send copies of this resolution to the United States Senators and to Members of the House of Representatives from California, with a letter requesting their assistance in presenting this resolution before the proper Congressional committees.

6. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, further directed to send copies of this resolution to the President of the United States; the Director, Office of Management and Budget; the Secretary of the Army; the Chief of Engineers; the Board of Engineers for Rivers and Harbors; the United States Division Engineers, San Francisco; the District Engineer, Los Angeles; and such other interested persons as he may deem appropriate.

7. The Secretary of the Board shall certify to the passage of this resolution by the Board of Harbor Commissioners of the City of Long Beach, and it shall thereupon take effect.

8. The Secretary of the Board shall cause this

resolution to be published once in the official newspaper of the City of Long Beach.

I hereby certify that the foregoing resolution was adopted by the Board of Harbor Commissioners of the City of Long Beach at its meeting of March 2, 1981, by the following vote:

Ayes: Commissioners: Langslet,DuVall,Hanna

Noes: Commissioners: None

Absent: Commissioners: Gray,Wilson

Acting Secretary

ETB:jw
2-26-81
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