HEARING
BEFORE THE
SUBCOMMITTEE ON
ENERGY RESEARCH AND WATER RESOURCES
OF THE
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE
NINETY-FOURTH CONGRESS
FIRST SESSION
ON
S. 2089
A BILL TO AUTHORIZE MODIFICATIONS TO DICKINSON DAM, DICKINSON UNIT, PICK-SLOAN MISSOURI BASIN PROGRAM, NORTH DAKOTA, AND FOR OTHER PURPOSES

S. 2493
A BILL TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO CONSTRUCT, OPERATE, AND MAINTAIN THE POLLOCK-HERREID UNIT, SOUTH DAKOTA PUMPING DIVISION, PICK-SLOAN MISSOURI BASIN PROGRAM, SOUTH DAKOTA, AND FOR OTHER PURPOSES

OCTOBER 30, 1975

Printed for the use of the Committee on Interior and Insular Affairs

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1975
CONTENTS

S. 2089.................................................................................................................. 2
Department of the Interior report................................................................. 4
S. 2493.................................................................................................................. 9
Department of the Interior report................................................................. 12

STATEMENTS

Abourezk, Hon. James, a U.S. Senator from the State of South Dakota... 1
Brandner, Lawrence, vice president, Myron Johnson, chairman, Mike
Madden, adviser, Pollock-Herreid Irrigation District; and Keith Harner,
representing Gov. Richard Kneip, State of South Dakota...................... 31
Burdick, Hon. Quentin, a U.S. Senator from the State of North Dakota... 16
McGovern, Hon. George, a U.S. Senator from the State of South Dakota... 15
O'Brien, James J., Assistant Commissioner, Resources Planning, Bureau
of Reclamation, Department of the Interior, accompanied by Robert L.
McPhail, regional director, Billings, Mont.; and Phil Q. Gibbs, regional
planning officer, Billings, Mont................................................................. 17
Schank, Hon. Henry, mayor, Dickinson, N. Dak., and Frederick Gengler,
city commissioner, Dickinson, N. Dak...................................................... 24, 25
Young, Hon. Milton R., a U.S. Senator from the State of North Dakota... 15

ADDITIONAL MATERIAL

Kneip, Hon. Richard F., Governor of the State of South Dakota, letter to
Senator Church, October 29, 1975.............................................................. 33

APPENDIX

Resolutions and statements supporting the Pollock-Herreid Unit.......... 40
Westling, Duane, manager, Electric Cooperative, Inc., Selby, S. Dak., let-
ter to Senator Abourezk, October 21, 1975........................................... 39

(III)
OPENING STATEMENT OF HON. JAMES ABOUREZK, A U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator ABOUREZK. This is a hearing on two different projects by the Energy Research and Water Resources Subcommittee. I would like to open by saying as far as the Pollock-Herreid testimony, that will be taken up after Senator Burdick testifies.

When the Flood Control Act of 1944 was adopted the Pollock-Herreid project was one of those promised to the people of the State in return for the land flooded. The Bureau of Reclamation has determined this project is feasible under the conditions imposed by Federal Reclamation law.

The people of this region of South Dakota as individual landowners affected by the project, as members of business organizations, that will serve the project, as well as voters of governmental bodies, have supported this project in every conceivable way since the plans were first prepared for and since the irrigation district was formed to seek its approval.

No irrigation project in America has enjoyed greater support. I am personally pleased we have finally reached the point to have hearings on authorization of this project.

This project deserves the support of this committee and of the Congress and of the President. As an offhand comment, I first introduced this bill to authorize the Pollock-Herreid project in 1971 or 1972 when I was a Member of the House of Representatives. I am very happy to see we were able to obtain hearings in both the House and the Senate at virtually the same time this year.

Now the text of the two measures we are considering today, S. 2089 which would authorize modifications to the existing Dickinson Dam in North Dakota, and S. 2493, which is the Pollock-Herreid authorization, the text of these bills as well as the reports of the Department of the Interior will appear in the record at this point.

[The material referred to above follows:]
IN THE SENATE OF THE UNITED STATES

JULY 10, 1975

Mr. Burdick and Mr. Young introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To authorize modifications to Dickinson Dam, Dickinson Unit, Pick-Sloan Missouri Basin program, North Dakota, and for other purposes.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,
That the Secretary of the Interior is authorized to modify the spillway of Dickinson Dam on the Heart River in the State of North Dakota, to increase conservation storage by installing gates on the existing spillway. The Secretary is also authorized to construct a new spillway to assure the safety of Dickinson Dam from floods currently estimated to be capable of occurrence.

Sec. 2. The Secretary is authorized to enter into an
amendatory repayment contract with the city of Dickinson, North Dakota, to accomplish the repayment of that portion of the cost of the work authorized herein properly allocable to municipal and industrial water supplies in not to exceed forty years from completion of construction: Provided, That the total cost of the new spillway and related works incurred for the safety of the structure shall be nonreimbursable and nonreturnable.

SEC. 3. The interest rate used for purposes of computing interest during construction and interest on the unpaid balance of the capital costs allocated to interest-bearing features of the works authorized herein shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which construction is initiated, on the basis of the computed average interest rate payable by the Treasury upon its outstanding marketable public obligations, which are neither due nor callable for redemption for fifteen years from date of issue.

SEC. 4. There is hereby authorized to be appropriated for construction of works authorized herein the sum of $4,000,000 (January 1975 price levels) plus or minus such amounts as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indices applicable to the types of construction involved herein.
Dear Mr. Chairman:

This is in response to your request for the views of this Department with respect to a bill, S. 2089, "To authorize modifications to Dickinson Dam, Dickinson Unit, Pick-Sloan Missouri Basin Program, North Dakota, and for other purposes."

We have reviewed the proposed legislation and recommend against its enactment at this time. The Department and the Administration are of the view that the legislation is being proposed and considered prematurely, and that consideration should be deferred.

S. 2089 proposes that modifications be made to the existing Dickinson Dam. The purposes of the proposed modifications are:

1. To make additional municipal and industrial (M&I) water available to the city of Dickinson, North Dakota. Installation of bascule gates on the existing spillway of Dickinson Dam would increase the conservation storage capacity of Edward Arthur Patterson Lake. The resulting increase in firm water yield in combination with existing M&I supplies would be adequate to meet the needs of the city of Dickinson to about the year 1985.

2. To assure the safety of Dickinson Dam from flood occurrences currently estimated to be larger than the existing spillway capacity. The existing spillway capacity is 33,200 cubic feet per second (ft³/s). The currently estimated maximum inflow design flood (IDF) under the most extreme circumstances would have a peak flow of about 106,700 ft³/s. The addition of an auxiliary spillway, with a design capacity of 69,200 ft³/s, in combination with the existing spillway and surcharge storage would allow safe passage of the currently estimated maximum IDF. The increased estimates of maximum IDF over those originally anticipated for the dam are the result of improved and updated scientific methodology. There are no structural defects in the dam.

The total estimated cost, based on January 1974 price levels, of the measures included in S. 2089 is $3,171,000 including interest during construction. Under the terms of the proposed bill, the portion of the cost relating to increased water supply for the city would be
The portion relating to dam safety would not be reimbursable. Costs as presently projected include $681,000 for the bascule gates, and $2,490,000 for safety improvements.

The bill is premature for the following reasons:

1. The feasibility report on the modifications for increased capacity is not yet final and has not yet been approved by the Department, the Administration or the Congress; action on the bill now would therefore serve to circumvent and short-circuit proper consideration of the report as well as the legislative procedures normally followed for a project of this type, pursuant to authorization of a feasibility study.

2. The report on the safety feature of the dam has not been approved by the Department, nor has the Administration or the Congress had time to consider it. Although the Administration has not yet finalized its policy with respect to safety of dams issues, the Department has heretofore applied a policy whereby legislative action under the Safety of Dams program would be considered on a case-by-case basis, only after full Executive review of study reports on each project.

3. The proposed modifications are not of such urgency that further consideration of the issues for a period amounting to a matter of weeks would be a serious or unwarranted delay. [Where necessary to reduce the risk, the Department would apply interim operating criteria, although it does not appear to be required in this case.]

Moreover, the Administration and the Department would oppose any provision which calls for full payment by the Federal Government of the cost of new safety measures, without reimbursement and without consideration of the individual merits of each case, and which would appear to assume that full payment should be undertaken by the Federal Government in all cases involving the Safety of Dams program. In considering the matters of cost and allocation of costs and repayment for safety modifications, such factors as the original purpose and uses of the dam, the proposed uses of the dam as modified, the reasons for the modification, the urgency of the need, the remaining life expectancy of the dam, and the financial circumstances of those benefiting from the dam should be taken into account.
While we feel that this legislation is premature, we are aware that other similar proposals are being scheduled for consideration in the near future and we are making every effort to establish a more definitive Department and Administration position on Safety of Dams issues in time to fully consider those upcoming proposals.

Dickinson Dam was constructed by the Bureau of Reclamation, under the authority of Public Law 80-299 and was completed in 1950. Dickinson has grown from a small town in 1910 of 3,700 people to its present size of about 14,000. By 1950 the city had reached a population of 7,500 and had become a hub of business and distribution for much of the western part of North Dakota. In that year it began converting from its limited ground water supply to a surface water system and storage supply from Dickinson Dam. The dam and small reservoir near the city on the Heart River were constructed for the principal purpose of providing municipal water, but also included some recreation, limited irrigation, and incidental flood control.

The Heart River originates on the semiarid high plains and provides limited runoff from about 400 square miles of drainage. While the runoff varies between flood and drought conditions, the Dickinson Reservoir yield is too small to insure the municipal supply of the present population in a dry year and the yield even in average water years will not supply the increasing water needs.

If Dickinson grows at a moderate pace it can, by modifying the present water facilities, extend its water supply another decade or more, but it should anticipate plans for a long-range solution.

The population of the city of Dickinson could increase very rapidly if strippable lignite deposits of about 800 million tons, which are located within 15 miles of the city, are developed. If development of the tremendous coal deposits in the Northern Great Plains begins to accelerate, the city will rapidly increase beyond the capability of the present and improved water sources and require a new and costly alternative.

The short-range plan to extend the city's water supply, which is part of the legislative proposal, requires that the original concrete spillway for the existing dam, which is 200 feet wide, be gated so that the water surface can be raised 3-1/2 feet. This additional storage will provide the needed water for another decade during which time the trend of future growth will become evident.
One possible long-range solution would be a new dam and reservoir on Green River about 10 miles east of the city at the Versippi site. When the city will require such an alternate can be decided some years hence, and other sources should be investigated. Development of the Versippi site would be expensive and beyond the city's capability to finance in the immediate future.

The short-range solution, modification of the existing spillway, would raise the controlled water surface 3-1/2 feet, increase the storage by 3,493 acre-feet, increase the yield by 900 acre-feet in a critical streamflow year to 3,300 acre-feet a year, increase the water surface by 372 acres to 1,191 acres, and increase the land management area by 243 acres.

Recreation and fish and wildlife benefits would be preserved at present levels. Existing recreation facilities, including boat ramps, beaches, roads, day use facilities, and a youth camp would be relocated. Use of these facilities would be lost temporarily during relocation. The addition of a wildlife management area would mitigate loss of habitat in the area to be flooded.

A further problem exists, however, in that the existing spillway is inadequate to handle potential floods as currently estimated. Through the utilization of modern meteorological and hydrological techniques, plus the additional years of experience in precipitation and flood studies, we have determined that the maximum inflow design flood is greater than was estimated when Dickinson Dam was designed and constructed.

When the existing spillway was designed the inflow design flood was estimated at 40,000 ft$^3$/s. At that time, the design was based on an analysis of the recorded runoff resulting from all historic major storms in the general area. A peak of 40,000 ft$^3$/s represented the highest ever recorded or estimated for the 400 square mile drainage area. The new analysis and design assume 13 inches of rainfall in 12 hours over the entire water shed. Therefore, we now judge that the maximum inflow design flood could reach 106,700 ft$^3$/s at Dickinson Dam assuming the most extreme circumstances, and could cause structural failure of the dam which would cause the flood surge through the city to be increased by 30 percent. This flood surge, resulting from a failure, would occur in a matter of minutes, whereas a flood peak, without failure, would afford about 9 hours of warning.

The rainfall of storms which have occurred in the general region, and which could have occurred above Dickinson Dam ranges from 12 to 24 inches. In June of 1975 a storm occurring in Ransom County, about 100 miles southeast of Dickinson, had a measured rainfall of 20.6 inches.
The legislative proposal would therefore modify the concrete spillway by the addition of a new and larger grass-covered spillway through the right abutment to provide the needed safety against possible failure. The added spillway would have a capacity of 69,200 ft³/s, which, when combined, with the 29,300 ft³/s remaining in the modified concrete spillway making a total capacity of 98,500 ft³/s, would prevent failure of the dam during the occurrence of an inflow design flood.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely yours,

[Signature]

[Name]
Assistant Secretary of the Interior

Honorable Henry M. Jackson
Chairman, Committee on
Interior and Insular Affairs
United States Senate
Washington, D.C.
IN THE SENATE OF THE UNITED STATES

OCTOBER 8 (legislative day, SEPTEMBER 11), 1975

Mr. ABOUREZK (for himself and Mr. McGovern) introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To authorize the Secretary of the Interior to construct, operate, and maintain the Pollock-Herreid unit, South Dakota pumping division, Pick-Sloan Missouri Basin program, South Dakota, and for other purposes.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,
That the Secretary of the Interior is hereby authorized to
construct, operate, and maintain in accordance with the Fed-
eral reclamation laws (Act of June 17, 1902; 32 Stat. 388,
and Acts amendatory thereof or supplementary thereto) the
Pollock-Herreid unit, South Dakota pumping division, Pick-
Sloan Missouri Basin program, South Dakota, for the pur-
poses of providing irrigation water service for approximately
The conservation and development of the fish and wildlife resources in connection with the Pollock-Herreid unit shall be in accordance with the provisions of the Federal Water Project Recreation Act (79 Stat. 213) as amended by section 77 of the Water Resources Development Act of 1974 (88 Stat. 33).

The Pollock-Herreid unit shall be integrated physically and financially with the other Federal works constructed under the comprehensive plan approved by section 9 of the Flood Control Act of December 22, 1944 (58 Stat. 887, 891), as amended and supplemented.

For a period of ten years from the date of enactment of this Act, no water from the unit authorized by this Act shall be delivered to any water user for the production on newly irrigated lands of any basic agricultural commodity,
as defined in the Agricultural Act of 1919, or any amendment thereof, if the total supply of such a commodity for the marketing year in which the bulk of the crop would normally be marketed is in excess of the normal supply as defined in section 301(b)(10) of the Agricultural Adjustment Act of 1938 (52 Stat. 31, 41), as amended, unless the Secretary of Agriculture calls for an increase in production of such commodity in the interest of national security.

SEC. 5. The interest rate used for computing interest during construction and interest on the unpaid balance of the interest bearing reimbursable costs of the unit shall be determined by the Secretary of the Treasury, as of the beginning of the fiscal year in which construction of the unit is commenced, on the basis of the computed average interest rate payable by the Treasury upon its outstanding marketable public obligations which are neither due or callable for fifteen years from date of issue.

SEC. 6. There is hereby authorized to be appropriated for construction of the Pollock-Herreid unit, as authorized in this Act, the sum of $25,000,000 (January 1975 price levels), plus or minus such amounts, if any, as may be justified by reason of changes in construction costs as indicated by engineering cost indexes applicable to the types of construction involved herein and, in addition thereto, such sums as may be required for operation and maintenance of the works of said unit.
Dear Mr. Chairman:

This responds to your request for the views of this Department with respect to S. 2493, a bill "To authorize the Secretary of the Interior to construct, operate, and maintain the Pollock-Herreid unit, South Dakota pumping division, Pick-Sloan Missouri Basin program, South Dakota, and for other purposes."

We have reviewed the proposed legislation and recommend that consideration of it be deferred until a feasibility report on the unit is currently reevaluated.

S. 2493 is based on a plan to divert water by pumping from the existing Lake Oahe on the Missouri River. The principal purposes of the Pollack-Herreid Unit would be to supply on-farm sprinkler irrigation for 15,000 acres of land and to supply municipal and industrial water to two communities. S. 2493 also contains provisions for fish and wildlife resources.

The physical works of the unit would include: the main pumping plant, located at the existing Lake Oahe on the Missouri River, to lift the water into the existing Lake Pocasse; a subimpoundment on Spring Creek, which is a tributary to Lake Oahe, for reregulation; a 24 mile-long system of main canals; a 56 mile-long system of laterals; seven relift pumping plants; 165 miles of collector, surface, and closed pipe drains; and other facilities necessary to the purposes of the unit.

The cost of the unit is estimated to be $25,570,000 based on January 1975 price levels.

A feasibility report on the unit was completed in January of 1968 and was transmitted to the Secretary of the Interior on September 16, 1971. A reevaluation statement, which updated the feasibility report, was completed in March 1971; and another is expected to
be completed shortly. Neither the feasibility report nor the updatings have been approved by the Department nor reviewed and approved by the Administration. Action on S. 2493 now would serve to circumvent proper administrative consideration of the project.

In 1971 a 12 page environmental impact statement, pursuant to section 102(2)(c) of the National Environmental Policy Act of 1969, was drafted for the project. This Office later judged this statement to be insufficient for purposes of the project. Preparation of a new environmental impact statement is necessary.

The Fish and Wildlife Service evaluated the proposed project in 1966 and found that it would not seriously degrade fish and wildlife resources. However, nine years have elapsed since that analysis and a new appraisal of impacts, addressing current environmental concerns, is in order. Subsequent to our 1966 detailed report on the Pollock-Herreid Unit, the Water Resources Council's Principles and Standards for Planning Water and Related Land Resource Projects have been adopted and the Endangered Species Act have been enacted. These new planning considerations and laws should be applied to this project.

The unit will have an agricultural return flow of approximately 14,000 acre-feet. About 5,000 acre-feet will be returned to Lake Pocasse, a National Wildlife Refuge, and the remainder to Oahe Reservoir. We have not defined, at this time, the effects of the return flow on the Pocasse Wildlife Refuge.

As mentioned previously, the 1968 Pollock-Herreid report was amended by a 1971 reevaluation. This reevaluation included new costs and benefits. At that time a major change in costs and benefits occurred as a result of a new cropping pattern. The area converted from a predominately wheat and grain area to producing potatoes, offering better yield per acre. Because of this and as the result of increased farm prices for potatoes, the benefit-cost ratio improved despite a new discount rate and higher construction cost. Another reevaluation will be presented shortly, based on 1975 costs and the latest "agriculture normalized prices" developed by the Economic Research Service, Department of Agriculture, for the current Water Resources Council. Current costs and benefits and repayment obligations should be clearer at that time.
Also undefined is the projects' effects on the water rights of the Indian tribes in the Upper Missouri River Basin.

The Office of Management and Budget has advised that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely yours,

[Signature]

[Title]

Honorable Henry M. Jackson
Chairman, Committee on
Interior and Insular Affairs
United States Senate
Washington, D. C. 20510
Senator ABOUREZK. Our witnesses this afternoon traveled a long way to appear here today and it is my understanding the North Dakotans accompanying Senator Burdick have a plane to catch this afternoon, so in order to accommodate them I have asked them to testify first.

Senator Young is in an Appropriations Committee meeting and has submitted a statement for the record along with Senator McGovern’s.

[The prepared statements of Senators Young and McGovern follow:]

STATEMENT OF HON. MILTON R. YOUNG, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

Mr. Chairman, I want to thank you very much for scheduling this hearing today to hear testimony on S. 2089 which would authorize modifications to Dickinson Dam.

The City of Dickinson, the largest city in southwestern North Dakota, is a thriving community, especially proud of the bee industry that is such an integral part of their economy. It is the major livestock and grain marketing area for that part of North Dakota. Dickinson also serves as a major shopping area and its growth is one of the fastest in our state.

Dickinson has an annual rainfall of only 8 to 16 inches and the availability of water has been and continues to be a major problem. There are 800 million tons of strippable coal deposits within 15 miles of Dickinson. Coal development in the area will greatly compound this water problem. Current growth estimates of the 1990 population for Dickinson range from around 20,000 to 50,000 people. The current population is 12,500.

Mr. Chairman, it is this situation which led my colleague Senator Burdick and I to introduce S. 2089 which would authorize construction of the Dickinson Dam so the city could be provided with an additional water supply. This legislation would increase conservation storage by installing gates on the existing spillway and would authorize the Secretary of Interior to construct a new spillway for flood protection.

The City of Dickinson would repay that portion of the cost applicable to municipal and industrial water supplies. The cost of the new spillway and related works incurred for the safety of the structure would be nonreimbursable and nonreturnable.

It is estimated that the total cost of the project would be $2,940,000 with $640,000 of that amount being used to construct the gates and $2.3 million to be used for the auxiliary spillway. Mr. Chairman, these are January, 1974, prices which I believe are the most recent estimates. It is probable the cost has increased somewhat, but the amount authorized in S. 2089 is adequate to cover any increase due to inflation.

Mr. Chairman, I am sure The Honorable Henry Shank, Mayor of the City of Dickinson, and Mr. Frederick Gengler, a City Commissioner from Dickinson, who will testify shortly can give you any details you might desire about this project. I want to thank you again for giving me this opportunity to testify on this very worthwhile project.

STATEMENT OF HON. GEORGE MCGOVERN, A U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman, one of the greatest present and potential benefits to those areas in South Dakota which lie adjacent to the Missouri River has been the Pick Sloan development projects. The impoundments behind the series of dams along its reaches have provided water for irrigation, hydro-electric power, recreational facilities, and fish and game habitat. They have changed the face of the land for the better.

Proper utilization of the impoundments, however, should be increased, and some additional projects are underway or planned—the Oahe irrigation, expanded hydro-electric generating capacity, and pipe lines for transporting Missouri water to more distant communities. Today I recommend favorable consideration of still one more—the Pollock-Herreid irrigation project, in North Central South Dakota.
When the Oahe reservoir filled some years ago, Campbell County lost about 20,000 acres of farmland. It was not the best farmland because rainfall was undependable during the growing season. It did, however, provide some crops. Had irrigation been used, it could have provided still more.

If now the Pollock-Herreid project were a reality, the land irrigated could so increase its production that the loss of the 20,000 acres would be compensated by increased production.

It is not a large project. It will serve 15,000 acres and benefit a maximum of 100 families. It will provide domestic water supplies to two communities. Its size and location and the nature of the soil will reduce its cost. Long canals will be unnecessary, as will channelization of any existing water course for run-off. Other sophisticated expensive technical arrangements should be comparatively few.

Pollock-Herreid is not a new idea. It was first inspired in 1944. In 1962 an irrigation board was formed followed by a detailed survey of the 15,000 acres. All of these efforts were undertaken for the residents of the area. For the past two years, they have been paying a nine cent per acre tax for the support of the irrigation district and promotion of its goals.

I hope that the Committee can view this project favorably. Besides providing jobs and business opportunities it will substantially increase production of goods on the remaining acreage and in all ways mitigate the loss of the land originally lost. In this time of threatened world food supplies, no project can be more important.

Senator ABOUREZK. The first witness will be my distinguished colleague and close friend, Senator Quentin Burdick from North Dakota. It is a pleasure to welcome you here today.

Senator BURDICK. Thank you.

STATEMENT OF HON. QUENTIN N. BURDICK, A U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

Senator BURDICK. I want to thank you for chairing this subcommittee and giving us the accommodations you have given us today.

Mr. Chairman, the city of Dickinson, N. Dak., comes before you today as a small city with a big problem. It has sent its mayor, Henry Schank, to Washington several times to enlist the aid of the Federal Government in securing an adequate source of municipal water for the town.

Most recently, Mayor Schank appeared before a subcommittee of the House of Representatives to urge prompt and favorable action on a bill similar to the one now before you. I think it is accurate to say that the city was encouraged by the response they received.

I hope that Mayor Schank can take a similar message of encouragement back to the residents of the city of Dickinson after today’s Senate hearing. I know that the mayor and his support witness, Mr. Fred Gengler, are eager to supply this subcommittee any data that it requires so I will be brief.

The city of Dickinson is located in western North Dakota. Dickinson is a primary servicing center for agriculture and ranching and is the dominant retail center in the southwest of the State. Petroleum production has brought new residents to the Dickinson area over the last 20 years and large deposits of lignite coal promise the influx of a good many more.

This means that the city surely faces rapid growth and increasing demands on municipal services—particularly water service.

Unfortunately, the environs of the city are arid. The city’s only water supply is from a dam and reservoir constructed by the Bureau of Reclamation about 25 years ago. The Bureau’s own figures show that this facility supplies a firm source of only 1,500 acre-feet of water.
The city has used more than this amount in recent years and it is only fortuitous rainfall that has averted serious water shortages. The city has been vigorous in its efforts to find a larger and more secure source of municipal water. The first part of the solution is S. 2089, the bill Senator Young and I have offered which is before you today.

The other is embodied in legislation, also before this subcommittee, to authorize a feasibility investigation of the so-called Versippi Dam proposal.

S. 2089 would authorize the construction of bascule gates on the existing Dickinson Dam. This would supply an additional 900 acre-feet of municipal water to help meet the city's needs. This portion of the project will cost approximately $840,000, according to recent Bureau of Reclamation estimates. Yet even if S. 2089 is promptly passed and if funds are appropriated for the work, the city of Dickinson will be able to meet its water supply needs only for the next 10 years or so. As vital as this project is, it is only a partial solution.

The long-range solution to the city's needs is dependent, to some extent, upon the findings of the feasibility investigation of the proposed Versippi project. But, whatever the long-range solution, it will surely be an extraordinarily expensive one. Therefore, it is imperative that this subcommittee do all that it can to minimize the cost to the city of the project to be authorized in S. 2089. Accordingly, I strongly urge that the subcommittee adopt my recommendation—reflected by the language of S. 2089—that the city not be required to assume the costs attributable to safety of dams component recommended by the Bureau to be undertaken at the same time as the bascule gates are installed.

This safety component involves an auxiliary spillway that will cost nearly $3 million. The municipal water supply benefits attributable to the vastly enlarged spillway are minimal.

Further, the safety component is almost totally for the purpose of fulfilling a national dam safety program. It is my view that the Federal Government ought to pay for all of the costs related to the safety component of the project. I hope that the subcommittee will adopt my view.

At this time, I take great pleasure in presenting to you Mayor Henry Schank and Mr. Fred Gengler of Dickinson, N. Dak., who will explain in greater detail their situation and will be ready to answer your questions.

Senator Abourezk. Thank you very much for an excellent statement, Senator Burdick. Do you gentlemen have statements?

Senator Burdick. They would like to be heard after the Bureau.

Senator Abourezk. Very well; the next witness is James J. O'Brien, Assistant Commissioner, Bureau of Reclamation.

STATEMENT OF JAMES J. O'BRIEN, ASSISTANT COMMISSIONER, RESOURCES PLANNING, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY ROBERT L. MCPHAIL, REGIONAL DIRECTOR, BILLINGS, MONT.; AND PHIL Q. GIBBS, REGIONAL PLANNING OFFICER, BILLINGS, MONT.

Mr. O'Brien. Mr. Chairman and members of the subcommittee, we are appearing here today to offer the Department's views on S. 2493, a measure to authorize the Pollock-Herreid Unit in South Dakota.
As stated in the Department's letter to the committee, the Department has reviewed the proposed legislation and recommends against enactment of S. 2493 at this time. Since the feasibility report update and the environmental statement on the unit have not been approved within the Department, the Department and the administration are of the view that the legislation is being proposed and considered prematurely, and that consideration should be deferred.

In view of this position and in order to be as responsive to the committee as possible, we offer the remainder of our testimony as an overview of the information we have, thus far, developed concerning the unit, recognizing that most of our information is based on a 1968 feasibility report and recent and preliminary update data.

The purpose of the Pollock-Herreid unit is to irrigate 15,000 acres of dry land. Additionally, the unit would provide municipal and industrial water to the two small towns of Pollock and Herreid, and mitigate and enhance fish and wildlife resources. The lands involved lie above the eastern flood plain of the Missouri River in north-central South Dakota.

A feasibility report on this unit was completed in January 1968 and was revaluated in March 1971. The unit in each instance met the benefit-cost requirements of project formulation.

The display map outlines the plan of development.

Water pumped from the existing Lake Oahe would be conveyed through the Pollock Canal into the existing Lake Pocasse, which would serve as a storage reeregulation facility in addition to its present use as a national wildlife refuge.

Lake Pocasse was formed in 1961 when the Corps of Engineers constructed a small dam across the Spring Creek arm of Lake Oahe to form a subimpoundment. The lake is being administered by the Fish and Wildlife Service as a national wildlife refuge. It comprises 2,540 acres of water surface and adjacent shore areas.

Beyond Lake Pocasse, other main canals, laterals, and relift pumping plants would convey water to the irrigable lands. The unit features are the main pumping plant, which would divert 3,200 acre-feet annually from the Oahe Reservoir; existing Lake Pocasse; 24 miles of main canal; 56 miles of laterals; 7 smaller relift pumping plants; and 165 miles of open and closed drains requiring an additional small drainage relift pumping plant. The main pumping plant has been specifically designed to accommodate the wide fluctuations in Lake Oahe water surface elevations and would lift water through a range of 38 to 100 feet.

About half of the lands to be irrigated are in natural grass and dry pasture. The other half are now producing low yields of corn and wheat which vary with vagaries of weather. Presently, corn production averages about 45 bushels per acre and wheat production averages about 29 bushels per acre.

With a reliable water source and technological improvements yields could reach about 115 bushels of corn per acre.

Alfalfa, irrigated pasture, and corn would probably dominate the cropping pattern after irrigation commences. Other livestock feeds like barley, would be grown along with corn and silage. Additionally, other crops such as sugar beets could become an important cash crop and the soils also could support other high income crops, such as potatoes, beans, vegetables, sorghums, and to some extent fruits.
There are 101 landowners within the unit area of which only 12 would own more than the 320 acres permissible by man and wife under the excess land limitation provisions of reclamation law. Our studies indicate that the acreage limitation should be modified to an equivalent of 160 acres of class 1 land. The landowners have expressed agreement to dispose of excess lands and we anticipate no difficulty in meeting provisions of reclamation law regarding delivery of water to individual ownerships.

Half of the 15,000 acres of irrigable lands are class 1, about one-third are class 2, and the remainder are class 3. Because of undulating topography and scattered tracts, the land classification is currently based on sprinkler irrigation methods, detailed standards of land and subsoil classification, and subsurface drainage investigations.

Development of the unit lands and facilities would reduce the wildlife habitat. The plan would compensate for this reduction by development of four marsh areas along the open drainage system about 1½ miles southeast of Herreid.

In addition, a large marsh area south of the town of Pollock would be acquired, fenced, provided with a dependable water supply, and managed specifically for wildlife enhancement.

The Fish and Wildlife Service evaluated the proposed project in 1966 and found that it would not seriously degrade fish and wildlife resources. However, 9 years have elapsed since that analysis and a new appraisal of impacts, addressing current environmental concerns, is in order.

Subsequent to the 1966 fish and wildlife report on the unit, the Water Resources Council's Principles and Standards for Planning Water and Related Land Resource projects have been adopted and the Endangered Species Act has been enacted. These new planning considerations and laws should be applied to this project.

Using water from the unit would be advantageous to both Pollock and Herreid because their existing supplies, derived from groundwater, are inferior in quality. The unit would supply a total of 300 acre-feet of water annually to the two towns.

The Pollock-Herreid unit consists of 15,000 acres of irrigable land which would be developed to replace a part of the 509,000 acres of river bottom land inundated by the main stem storage system which was authorized in the 1944 Flood Control Act—to be part of the Pick-Sloan Missouri Basin program.

Effects on water quality in the Missouri River would appear to be negligible because of the immense volume of water in Lake Oahe—23,500,000 acre-feet, and in the river—average annual flow 17,525,000 acre-feet.

Return flow from the unit lands would be higher in mineral content than the supply diverted from Lake Oahe.

The unit will have an agricultural return flow of approximately 14,000 acre-feet. About 5,000 acre-feet will be returned to Lake Pocasse, a national wildlife refuge, and the remainder to Lake Oahe. We have not defined, at this time, the effects of the return flow on the Pocasse Wildlife Refuge. However, about 60 percent of the return flows would be routed around Lake Pocasse and back to the river to avoid deterioration of quality in the lake.

Diversion from Lake Oahe would be 3,200 acre-feet annually. About 5,300 acre-feet of return flow water would be redverted to
supply the total water requirement of 36,500 acre-feet. This would provide 300 acre-feet for municipal water, 500 acre-feet for fish and wildlife needs, 32,500 acre-feet for irrigation, and compensate for 3,200 acre-feet of evaporation from Lake Pocasse. Depletion of the Missouri River would be 22,700 acre-feet annually if this unit is developed. The net return flow of 8,500 acre-feet will have no discernible effect on Lake Oahe water quality, and State water quality standards would be accommodated.

Costs to construct the unit, based on January 1975 price levels, are estimated to be $25,940,000. Addition of $4,744,000 assigned costs of the Pick-Sloan Missouri Basin program and $3,207,000 interest during construction, and deletion of $449,000 pre-authorization investigation costs, results in a net investment cost of $33,442,000 for the economic evaluation of the unit. Operation, maintenance, and replacement costs are estimated to be $160,000 annually.

The annual equivalent costs, based on an interest rate of 6% percent and a 100-year period of analysis, are computed to be $2,214,000.

The total annual equivalent benefits are estimated to be $3,410,000. These consist of $3,364,000 for irrigation, $9,000 for fish and wildlife, $4,000 for municipal and industrial water service, $60,000 for area redevelopment, and $9,000 for uncompensated adverse effects for crop losses on unit rights-of-way.

The benefits appear to exceed the costs by a ratio of 1.54 to 1.

Estimated construction costs, including assigned costs but excluding interest during construction, have been allocated as follows: Irrigation $30,515,000; fish and wildlife $113,000; and municipal water supply $56,000. The irrigation costs would be repaid without interest within 50 years, exclusive of a 10-year development period.

Water users in the Pollock-Herreid Irrigation District and the Oahe Conservancy Subdistrict would be able to repay $3,397,000 or about 11 percent of the irrigation allocation. The Pollock-Herreid Irrigation District is an entity qualified to contract with the United States for repayment of these costs and the operation, maintenance, and replacement costs allocated to irrigation.

The remaining reimbursable costs allocated to irrigation—$27,118,000—would be repaid from power revenues of the Pick-Sloan Missouri Basin program. The report on financial position, Missouri River Basin project, December 1963, demonstrates that revenues would be available to repay these costs within 50 years following the permissible development period.

Average annual payment capacity of irrigable lands in the Pollock-Herreid unit has been estimated at $16.90. Deduction of a contingency and incentive allowance of $2.33 per acre results in a recommended average annual water charge of $14.57 per acre. Further deduction of operation, maintenance, and replacement costs, estimated at $10.45 per acre, leaves $4.03 per acre for partial amortization of a part of the project and assigned costs allocated to irrigation along with conservancy subdistrict payments of $0.50 per acre annually, making the total amortization capacity $4.53.

An environmental impact statement has not been filed. A 12-page draft environmental statement was prepared in 1971 which indicated that the quality of the human environment would be enhanced by
converting 15,000 acres of dryland in a sparsely settled area into a viable establishment of an agricultural community with new economic and social opportunities. Fish would be enhanced and wildlife and waterfowl effects will vary by species—some loss and some gain—but with overall offsetting replacement if recommendations of the Fish and Wildlife Service are fulfilled. We later judged the 1971 draft statement to be insufficient for purposes of this unit. Preparation of a new environmental statement is necessary.

Mr. Chairman, that concludes our statement and we would be happy to answer any questions that the committee might have.

Senator ABOUREZK. The North Dakota people have to catch a plane right away, and I want to put them on so they can testify.

Perhaps you can proceed with your North Dakota statement as Senator Burdick has some questions.

Mr. O'BRIEN. Mr. Chairman and members of the subcommittee, we are appearing today to offer the Department's views on S. 2089, a measure to authorize modifications to the existing Dickinson Dam in North Dakota.

As stated in the Department's letter to the committee, the Department considers the legislation premature and, therefore, opposes enactment of S. 2089.

The principal purposes for modifying Dickinson Dam are to obtain an additional short-term water supply for the rapidly growing city of Dickinson, which is a county seat and center of major regional importance, and to assure the safety of existing structure.

Dickinson grew from a small town of 3,700 people in 1910 and was dependent on a limited ground water supply of poor quality. By 1950, the city had reached a population of 7,500 and had become a hub of business and distribution for the western part of North Dakota. In 1970, the population had reached 12,400 and presently exceeds 14,000.

Dickinson Dam, constructed by the Bureau of Reclamation under the authority of the Flood Control Act of 1944 and Public Law 80-299, was completed in 1950. In that year, the city began converting to a surface water system and storage supply from Dickinson Dam. The dam and small reservoir on the Heart River near the city were constructed for the purposes of providing municipal water, recreation, limited irrigation water, and incidental flood control.

The Heart River originates on the semiarid high plains and provides limited runoff from about 400 square miles of drainage. While the runoff varies between flood and drought conditions, the Dickinson Reservoir yield is too small to insure a full municipal water supply for the present population in a dry year, and the average water year yield will not supply the increasing demand for water.

The population of the city of Dickinson could increase very rapidly. The reason is that strippable lignite deposits of about 800 million tons are located within 15 miles of the city. If development of the vast coal deposits in the Northern Great Plains begins to accelerate, the city's needs for water will rapidly increase beyond the capability of presently available water sources and require a new and costly alternative. If Dickinson's population grows at a moderate pace, it can, by modifying the present water facilities, extend its water supply another decade or more. The city also needs to plan ahead for a long-range solution.
The display map shows the existing city and reservoir. Dickinson is 100 miles west of Bismarck and near the center of Stark County.

A short-range plan to extend the city's water supply is shown in red. The plan requires the installation of Bascule gates on the original concrete spillway, which is 200 feet wide, so that the reservoir water surface can be raised $3\frac{3}{4}$ feet. This additional conservation storage will provide the needed water for another decade during which time the trend of future growth will become evident.

One possible long-range solution also is indicated on the display map. The solution includes a new dam and reservoir at the Versippi site on the Green River about 10 miles east of the city. When the city will require, such an alternate can be decided some year hence, and other sources also should be investigated. Development of the Versippi site would be expensive and beyond the city's capability to finance in the immediate future.

Modification of the existing spillway at Dickinson Dam, by providing Bascule gates and raising the storage $3\frac{3}{4}$ feet, is a part of the plan contemplated in S. 2089. It would solve the immediate water supply problem for the city.

Modifying the existing 200-feet-wide concrete spillway by the addition of gates would: Raise the controlled water surface by $3\frac{3}{4}$ feet; increase the conservation storage by 3,500 acre-feet; increase the yield by 900 acre-feet in a critical streamflow year; increase the water surface by 372 acres; increase the land management area by 243 acres; and decrease the existing spillway capacity by 12 percent.

Recreation and fish and wildlife benefits would be preserved at present levels. Existing recreation facilities, including boat ramps, beaches, roads, day-use facilities, and a youth camp would be relocated. Use of these facilities would be lost temporarily during relocation. The addition of a wildlife management area would mitigate loss of habitat in the area to be flooded.

The plan to obtain a short-range water supply, by adding the Bascule gates to raise the water surface and provide the essential storage, is estimated to cost about $840,000 at 1975 price levels.

Another problem exists, however, because the size of the existing spillway is inadequate to handle potential floods. Through the utilization of modern meteorological and hydrological techniques, plus the additional years of experience in precipitation and flood studies, we have determined that the inflow design flood is greater than was estimated when Dickinson Dam was designed and constructed.

When the existing spillway was designed, the inflow design flood was estimated at 40,000 cubic feet per second—$\text{ft}^3/\text{s}$—which now corresponds to a flood with about a 500-year frequency. At this time, the design was based on an analysis of the recorded runoff resulting from all historic major storms in the general area. A peak runoff of about 40,000 $\text{ft}^3/\text{s}$ represented the highest ever recorded or estimated in that general area.

The new analysis and design assumes 13 inches of rainfall in 12 hours over the entire watershed. Therefore, we now judge that the inflow design flood could reach 106,700 $\text{ft}^3/\text{s}$ at Dickinson Dam. That would cause structural failure of the dam resulting in an increase in the flood surge, through the city of nearly 40 percent. The flood surge, resulting from a failure, would occur in a matter of minutes, whereas a flood peak, without failure would afford about 9 hours of warning.
Storms which have occurred in the general region, and which could have easily occurred above Dickinson Dam, produced rainfall ranging from 12 to 24 inches. In June of 1975, 20.6 inches of rainfall was measured during a storm in Ransom County, immediately southeast of Dickinson.

The plan to modify the concrete spillway would be accompanied by the addition of a new and larger grass covered spillway through the right abutment, shown in red on the display map, to provide the needed safety against possible failure. The new spillway would have a capacity of 69,200 ft$^3$/s.

When combined with the 29,300 ft$^3$/s remaining in the modified concrete spillway the total spillway capacity would be 98,500 ft$^3$/s, and would prevent failure of the dam during the occurrence of the inflow design flood. The proposed grass covered spillway was estimated to cost $3 million at July 1975 prices.

The estimated construction cost is $3,840,000, made up of $840,000 for the bascule gates and $3 million for the auxiliary spillway. The annual equivalent economic cost, based on a 5%-percent discount rate, a 100-year period of analysis, including interest during construction, and estimated annual operation, maintenance and replacement costs of $6,000, is $260,900. The annual equivalent benefits are $433,000 and exceed the annual equivalent cost by $127,000. Therefore, the benefit-cost ratio is 1.66 to 1.

Senator BURDICK. Your opening paragraph indicates this legislation is premature and then you give the following reasons, which I will develop in a few minutes. But when you say on page 2, “While the runoff varies between flood and drought conditions, the Dickinson Reservoir yield is too small to insure a full municipal water supply for the present population in a dry year, and the average water year yield will not supply the increasing demand for water,” we may be premature in one way but we are not premature in another.

We are in a desperate situation out there in Dickinson. You realize that, don’t you?

Mr. O’BRIEN. Yes, sir.

Senator BURDICK. As to why it is premature, you have listed two or three reasons. First of all, you claim the feasibility report on the modifications has not yet been finalized. Can you give us a date when that might become final?

Mr. O’BRIEN. It depends on what we mean by finalized. Our interpretation, that report would have to be completed, approved by the Commissioner of Reclamation, approved by the Secretary of the Interior, sent out for approval of all of the States of the Missouri River basin, and then it would have to be accommodated to the States and those agencies, submitted to the Secretary, transmitted to the Office of Management and Budget and at that point in time, OMB would refer it to the Congress for its consideration, and only then would we say it has been completed.

Senator BURDICK. There is still the question, what is the lapse of time you are referring to?

Mr. O’BRIEN. I would say if everything went well we are talking about a year to a year and a half.

Senator BURDICK. Can we talk about a year?

Mr. O’BRIEN. We could but everything would have to go just right including an expedited review by the Office of Management and Budget.
Senator Burdick. And you can shorten it to a year?
Mr. O'Brien. I don't think it has been done. That is our record.
Senator Burdick. Let's set a new record.
Now I am referring to page 2 of the Department's review of the bill:
The report on the safety feature of the dam has not been approved by the Department, nor has the Administration or the Congress had time to consider it. Although the Administration has not yet finalized its policy with respect to safety of dams issues, the Department has heretofore applied a policy whereby legislative action under the Safety of Dams program would be considered on a case-by-case basis, only after full Executive review of study reports on each project.
I am wondering how you can make an objection when we don't have a policy to go by.
Mr. O'Brien. The Department is making the objection on the basis they have not made a case-by-case determination with respect to the Dickinson Unit.
Senator Burdick. Can it go parallel with the feasibility study?
Mr. O'Brien. Yes.
Senator Burdick. So that determination would not necessarily cause any delays?
Mr. O'Brien. I would hope not.
Senator Burdick. Then you say—you don't say it, the Department says it—but proposed modifications are not of such urgency that further consideration of the issues for a period amounting to a matter of weeks would be a serious or unwarranted delay.
Mr. O'Brien. I didn't understand that paragraph when I testified on this project in the House and I still don't understand it.
Senator Burdick. I don't understand it either. Here they are only referring to a matter of weeks. In other words, you cannot speak to that?
Mr. O'Brien. No, sir, I cannot.
Senator Burdick. I don't know what the citizens of Dickinson are going to do. Your own statement acknowledges we have a serious problem out there. I would hope whatever pushing we can do, we will do to help you.
For the record, we will now hear from Mayor Henry Schank, the mayor of Dickinson, and Mr. Fred Gengler of the city of Dickinson. You gentlemen may proceed in any way you wish.

STATEMENTS OF HON. HENRY SCHANK, MAYOR, DICKINSON, N. DAK., AND FREDERICK GENGLER, CITY COMMISSIONER, DICKINSON, N. DAK.

Mayor Schank. Senator Burdick, we have submitted written testimony to the committee prior to today and some of the testimony has been mentioned by the Senator's statement so we will summarize and point out some of the things that have come up that have been mentioned. But we would ask that our entire statements be submitted for the record.
Senator Burdick. Is that the statement signed by you? And by Mr. Stranik for the city of Dickinson?
Mayor Schank. Yes.
Senator Abourezk. That will be included in the record.
STATEMENT OF MESSRS. SCHANK AND STRANIK, DICKINSON, N. DAK.

Dear Mr. Chairman, through this statement of testimony the City of Dickinson, North Dakota wishes to express its unified support of the referenced project which is designed to provide an additional supply of raw water for municipal and domestic uses for the City of Dickinson, North Dakota. This statement has the full support of the citizens of Dickinson and its surrounding trade area. In the past several years during which Dickinson sought a solution to its critical water supply problem, many of the citizens of our area participated in the search for a solution, including not only the elected officials of the City of Dickinson, but also the Dickinson Citizens Water Advisory Committee, members of the Stark County Board of Commissioners, the Commissioners of the Dickinson Park and Recreation District, and the Stark County Water Management District. There has been excellent media coverage of the problem and alternative solutions and several well-attended public meetings have been conducted in the Dickinson area.

In April of 1975 the Bureau of Reclamation of the U.S. Department of the Interior issued its Feasibility Report on Municipal and Industrial Water Supply Study for Dickinson. The Board of Commissioners of the City has unanimously endorsed that report and urged its speedy implementation in its regular meeting on June 30, 1975. The extensive report of the Bureau of Reclamation will herein-after for convenience be referred to as the Feasibility Report.

HISTORY OF DICKINSON'S WATER SUPPLY

Dickinson's raw water supply has indeed reached such a critical stage as to be fairly termed an emergency. It is literally only through the good graces of nature in providing sufficient rainfall at critical times that a shortage of water for domestic consumption has been averted.

In the late 1940's Dickinson's well water source became exhausted and the Dickinson Dam and resulting Edward Arthur Patterson Lake were constructed. That Dickinson Unit has supplied municipal water since 1952. As shown in the Feasibility Report, the City initially received 1,100 acre feet annually but by 1962 that limited amount, combined with a drought in the year 1961, required rationing by the citizens of the City. In 1962 a supplemental contract was entered into with the Bureau of Reclamation for an additional 900 acre feet. However, the supplemental contract is subordinate to a quantity of 900 acre feet reserved for irrigation. Thus, as shown at page 3 of the Feasibility Report, the total annual firm supply of municipal water available from the Dickinson unit is only 1,500 acre feet. Last year, Dickinson consumed approximately 1,900 acre feet of water, which supply exceeded the safe yield by approximately 400 acre feet and as noted, was made available only through timely rainfall.

A review of the historical record also reveals that domestic water consumers in Dickinson pay the highest water rate of all the municipalities in North Dakota. This high rate is due not only to the high contractual cost of a raw water supply, but also due to the high cost of treatment of the poor quality of water gathered from the drainage basin resulting from bentonite deposits. These cost factors will be more fully discussed.

IMPACT OF ENERGY DEVELOPMENT

Dickinson's urgent need for a water supply has been accented by both past and contemplated contribution of energy resources to the nation's needs. It should be noted that Dickinson commenced its contribution of energy resources following completion of the Dickinson Dam in 1952.

Oil and gas production.—In the early 1950's, after completion of the Dickinson Dam, oil and gas were discovered in Southwestern North Dakota. Development of those oil fields has gradually increased to the present time in which sixty oil wells are located within a ten mile radius of the City and approximately 300 producing oil wells are found within a forty mile radius. Practically all of that oil and gas production is transported out of our immediate area to help meet the energy needs of our fellow citizens in the United States.
Coal development.—For several decades the Dickinson area has manufactured and transported to the nation a variety of products from a lignite coal processing plant located near the City. Utilization of our vast coal resources will be dramatically increased in the near future with the advent of the energy crisis in recent years. A coal gasification plant will be constructed in the immediate future near the village of Dunn Center at a location approximately thirty miles from Dickinson. Another gasification plant is proposed at a location only eight miles from the City. The energy production from these plants will be transported away from our area for consumption by the nation but the water needs of the increased population resulting from construction and operation of various coal development facilities must be met by the City of Dickinson.

In addition to the specific plants which are already planned and in various stages of development, it should be noted that Dickinson is located approximately sixty miles from the State of Montana and approximately eighty miles from the State of South Dakota. The Feasibility Report points out that there are 800 million tons of strippable coal deposits within fifteen miles of the City of Dickinson. Since our City is the only sizeable population center in all of Southwestern North Dakota, it is inevitable that the City of Dickinson will become the service and population center for future energy development in this area. Further, the Feasibility Report is based upon population projections as noted in the Report do not include full impact of coal development. The Bureau of Reclamation population projections for the year 1990 would include a population for Dickinson of 19,800; whereas other studies, particularly, the Little Missouri Grassland Study predict a population of 32,000 in the year 1990 and the Northern Great Plains Resource Programs report projects 50,000 in that same year. It should also be stressed, as shown on page 21 of the Feasibility Report, that while the water demands of the City in 1990 will be 2,900 acre feet annually, this project will provide a firm annual supply of only 2,400 acre feet for municipal consumption. It is thus obvious that future energy development in the Dickinson area will only aggravate our already critical water supply problem.

DICKINSON’S LIMITED FINANCIAL CAPACITY

We have already noted that the residents of Dickinson currently pay the highest consumer water rate in the State of North Dakota. That high rate will necessarily be increased in the future not only to meet present contractual commitments for water supply but to pay for an additional raw water source. Dickinson is already contractually committed to the year 1980 for repayment of its 69% share of the cost of original construction of the Dickinson Unit. That repayment is made through semi-annual payments to the Bureau of Reclamation which substantially increase in amount after each five year period. In addition to the original contract, we must meet separate payments under the supplemental contract and bear operational and maintenance costs for the Dickinson Unit. Added to these burdens are the high treatment costs which we have already noted.

Thus, while part of our financial future is already committed to pay for a past water supply, the impact of energy development in our area presents Dickinson with a heavy financial burden in other required areas of municipal services. Because of the impact of energy development, we are already meeting new financial burdens for modernization and increase in capacity of our municipal airport, law enforcement, library facilities, recreational needs, sanitary sewage disposal and treatment facilities, water storage and distribution systems, street improvements and similar normal municipal functions.

The agony of our future financial dilemma is rendered even more complex by the fact, as noted in the Feasibility Report, that the proposed project will provide us with a safe annual water supply for only an additional ten year period although we will be paying for this ten year supply for a period of forty years under the repayment schedule suggested by the Bureau of Reclamation. As the Feasibility Report demonstrates, Dickinson will be required to develop a long-term raw water supply commencing about the year 1985. That long-term supply would come either from construction of a dam on another river in our area or possibly through realization of the long time dream of diversion of Missouri River water impounded behind Garrison Dam.

AUXILIARY SPILLWAY

The additional short-term supply of water which we request will be brought about by installation of Bascule gates on the existing concrete spillway of Dickinson Dam. In implementation of its Safety of Dams Program, the Bureau
of Reclamation has proposed in its Feasibility Report that a new auxiliary spillway be constructed at Dickinson Dam either separately or concurrently with installation of the Bascule gates. The Feasibility Report acknowledges both Dickinson's strong opposition to paying for any part of the auxiliary spillway and Dickinson's inability to contribute payment to the Safety of Dams Program. As the Report states at page 16: "Essentially the city is firmly opposed to paying for remedial measures which primarily assure the safety of a structure." Our opposition to payment of any part of the auxiliary spillway is based not only upon the harsh realities of our limited financial capability which we have already noted, but also our genuine feeling that the Safety of Dams Program is truly one of national concern and that no cost of it should be borne by a particular municipality, absent unusual local benefits.

As the Report also shows, after installation of the Bascule gates, the existing spillway structure would have a discharge capacity of at least 29,500 c.f.s. and a flow of 57,000 c.f.s. could be discharged without material damage to the structure. That tremendous capacity should be compared with the maximum discharge experienced in the 25-year history of the dam which was 6,200 c.f.s. in the year 1970. That highest discharge rate of 6,200 c.f.s. was experienced during a period of several unusually heavy rain storms within a relatively short period of time. As a means of comparison only, the massive Missouri River during 1975 experienced its highest recorded rate of flow and the maximum discharge rate experienced this past summer at Garrison Dam was 65,000 c.f.s.

The cost of the installation of Bascule gates to provide our needed water supply is estimated by the Bureau of Reclamation to be about $640,000.00, whereas construction of the auxiliary spillway is estimated to cost about $2.3 million. We plead with this Committee to provide that the City of Dickinson not be required to participate in that tremendous cost.

ENVIRONMENTAL IMPACT

Perhaps the most pleasing aspect of the proposed Dickinson Dam modification is that it will cause no adverse environmental effects. Positive environmental results include a broader habitat for wildlife growth and an increased water area for human recreation.

CONCLUSION

The residents of the Dickinson area will be making a great contribution to the citizens of the United States through utilization of the energy resources in our area including production of oil, gas, and coal and generation of electricity. We feel it is only fair that our significant contribution to the nation be acknowledged by providing us with an additional water supply. We hope that we have sufficiently demonstrated the urgency of our need so that the members of this Committee will exercise their authority to expedite implementation of the Dickinson Dam modification.

Mayor SCHANK. Through this statement of testimony the city of Dickinson, N. Dak., wishes to express its unified support of the referenced project which is designed to provide an additional supply of raw water for municipal and domestic uses for the city of Dickinson, N. Dak. This statement has the full support of the citizens of Dickinson and its surrounding trade area.

In the past several years during which Dickinson sought a solution to its critical water supply problem, many of the citizens of our area participated in the search for a solution, including not only the elected officials of the city of Dickinson, but also the Dickinson Citizens Water Advisory Committee, members the Stark County Board of Commissioners, the Commissioners of the Dickinson Park and Recreation District, and the Stark County Water Management District. There has been excellent media coverage of the problem and alternative solutions and several well-attended public meetings have been conducted in the Dickinson area.

The board of commissioners of the city has unanimously endorsed that report and urged its speedy implementation in its regular meeting on June 30, 1975. The extensive report of the Bureau of Reclamation will hereinafter be referred to as the Feasibility Report.

The Feasibility Report points out that there are 800 million tons of strippable coal deposits within 15 miles of the city of Dickinson. Since our city is the only sizable population center in all of southwestern North Dakota, it is inevitable that the city of Dickinson will become the service and population center for future energy development in this area. Further, the Feasibility Report is based upon population projections which as noted in the report do not include full impact of coal development. The Bureau of Reclamation population projections for the year 1990 would include a population for Dickinson of 19,800, whereas other studies, particularly, the Little Missouri grassland study predicts a population of 32,000 in the year 1990 and the Northern Great Plains resource programs report projects 50,000 in that same year. It should also be stressed, as shown on page 21 of the Feasibility Report, that while the water demands of the city in 1990 will be 2,900 acre-feet annually, this project will provide a firm annual supply of only 2,400 acre-feet for municipal consumption. It is thus obvious that future energy development in the Dickinson area will only aggravate our already critical water supply problem.

We have already noted that the residents of Dickinson currently pay the highest consumer water rate in the State of North Dakota. That high rate will necessarily be increased in the future not only to meet present contractual commitments for water supply but to pay for an additional raw water source. Dickinson is already contractually committed to the year 1989 for repayment of its 69 percent share of the cost of original construction of the Dickinson unit.

That repayment is made through semiannual payments to the Bureau of Reclamation which substantially increase in amount after each 5-year period. In addition to the original contract, we must meet separate payments under the supplemental contract and bear operational and maintenance costs for the Dickinson unit. Added to those burdens are the high treatment costs which we have already noted.

Thus, while part of our financial future is already committed to pay for a past water supply, the impact of energy development in our area presents Dickinson with a heavy financial burden in other required areas of municipal services. Because of the impact of energy development we are already meeting new financial burdens for modernization and increase in capacity of our municipal airport, law enforcement, library facilities, recreational needs, sanitary sewage disposal and treatment facilities, water storage and distribution systems, street improvements, and similar normal municipal functions.

The agony of our future financial dilemma is rendered even more complex by the fact, as noted in the Feasibility Report, that the proposed project will provide us with a safe annual water supply for only an additional 10-year period although we will be paying for this 10-year supply for a period of 40 years under the repayment schedule suggested by the Bureau of Reclamation.

As the Feasibility Report demonstrates, Dickinson will be required to develop a long-term raw water supply commencing about the year 1985. That long-term supply would come either from construction of a
dam on another river in our area or possibly through realization of the long-time dream of diversion of Missouri River water impounded behind Garrison Dam.

The additional short-term supply of water which we request will be brought about by installation of Bascule gates on the existing concrete spillway of Dickinson Dam. In implementation of its safety of dams program, the Bureau of Reclamation has proposed in its Feasibility Report that a new auxiliary spillway be constructed at Dickinson Dam either separately or concurrently with installation of the Bascule gates. The Feasibility Report acknowledges both Dickinson's strong opposition to paying for any part of the auxiliary spillway and Dickinson's inability to contribute payment to the safety of dams program.

As the report states at page 16: "Essentially the city is firmly opposed to paying for remedial measures which primarily assure the safety of the structure."

Our opposition to payment of any part of the auxiliary spillway is based not only upon the harsh realities of our limited financial capability which we have already noted, but also our genuine feeling that the safety of dams program is truly one of national concern and that no cost of it should be borne by a particular municipality, absent unusual local benefits.

As the report also shows, after installation of the Bascule gates, the existing spillway structure would have a discharge capacity of at least 29,500 ft³/s, and a flow of 57,000 ft³/s could be discharged without material damage to the structure. That tremendous capacity should be compared with the maximum discharge experienced in the 25-year history of the dam which was 6,200 ft³/s in the year 1970. That highest discharge rate of 6,200 ft³/s was experienced during a period of several unusually heavy rainstorms within a relatively short period of time. As a means of comparison only, the massive Missouri River during 1975 experienced its highest recorded rate of flow, and the maximum discharge rate experienced this past summer at Garrison Dam was 65,000 ft³/s.

The cost of the installation of Bascule gates to provide our needed water supply is estimated by the Bureau of Reclamation to be about $640,000, whereas construction of the auxiliary spillway is estimated to cost about $2.3 million. We plead with this committee to provide that the city of Dickinson not be required to participate in that tremendous cost.

Perhaps the most pleasing aspect of the proposed Dickinson Dam modification is that it will cause no adverse environmental effects. Positive environmental results include a broader habitat for wildlife growth and an increased water area for human recreation.

The residents of the Dickinson area will be making a great contribution to the citizens of the United States through utilization of the energy resources in our area, including production of oil, gas, and coal, and generation of electricity.

We feel it is only fair that our significant contribution to the Nation be acknowledged by providing us with an additional water supply.

We hope that we have sufficiently demonstrated the urgency of our need so that the members of this committee will exercise their authority to expedite implementation of the Dickinson Dam modification.
Senator Burdick, Mayor Schank, that is a very excellent statement. Is the city of Dickinson prepared to assume the cost of the additional water—

Mayor Schank. The cost of the Bascule gates, yes.

Senator Burdick. I might ask Mr. O'Brien who is sitting right back there, we talked about the feasibility report, the 1975 report the mayor is referring to, how do you describe that report?

Mr. O'Brien. That is the regional director's feasibility report.

Senator Burdick. Doesn't that take us part way down the line?

Mr. O'Brien. Yes, sir.

Senator Burdick. And you still think we have another year besides that since you have had this done?

Mr. O'Brien. Yes. Processing time.

Senator Burdick. I am still pleading for a speedup.

Do you have a statement at this time, Mr. Gengler?

Mr. Gengler. Mine is in his statement.

Senator Burdick. You verify everything said by the mayor?

Mr. Gengler. Yes; I do.

Senator Burdick. Very good. Thank you very much.

Senator Aborezk. Mr. O'Brien, I guess you can come back to the witness stand. This is kind of a confused day, but I guess that happens.

Mr. O'Brien. That is quite all right. I was hoping there wouldn't be any questions.

Senator Aborezk. In regard to the Pollock-Herreid bill, on page 1 of your statement, you suggest action on S. 2493 be deferred pending completion of the Department's review of the updated feasibility report and environmental impact statement. When, in your opinion, can the Congress expect to receive the recommendations from the Secretary?

Mr. O'Brien. I think the answer to that would be contingent upon the amount of review the Department is willing to enter into and the amount of time it might take to process it through the Office of the President and primarily through the Office of Management and Budget.

Senator Aborezk. I could go through this and ask you how much time you will spend in review, but I will ask you again, when may we expect the final determination on the part of the Secretary?

Mr. O'Brien. I can't answer for the Secretary on that.

Senator Aborezk. He won't come up here and testify, so we will have to ask you.

Mr. O'Brien. I would hope it could be done in 6 months.

Senator Aborezk. In 6 months?

Mr. O'Brien. Yes, sir.

Senator Aborezk. On the basis of your statement, the Pollock-Herreid project looks good. It has a beneficial benefit-cost ratio, the water is available, the citizens in the area strongly support the project, and the adverse environmental impacts are minimal. In fact, the only reason the Department is recommending against passage of S. 2493 is to allow time for internal paperwork.

Now, isn't it a fact that in the normal procedure for a project, after it has been authorized, the Bureau would update the existing feasibility report and conduct postauthorization planning?

Mr. O'Brien. Yes, sir.
Senator ABOUREZK. The additional planning then would in effect take place regardless of whether action on S. 2493 was deferred or not?

Mr. O'BRIEN. That is correct.

Senator ABOUREZK. Then wouldn't it make sense for you not to be against the project at this time solely on the basis of internal paperwork, to allow the project to go ahead and be authorized and do your paperwork afterward? Wouldn't that make sense?

Mr. O'BRIEN. It makes sense; yes, sir.

Senator ABOUREZK. I have a question which does not require response on your part, Mr. O'Brien.

It seems to me that the Secretary of the Interior should have forwarded his recommendation to the Congress in favor of the project in 1972 when the original report was updated. I suppose, though, that the Department's decision to sit on the project did not have anything to do with the Presidential election and the fact that the challenger to the incumbent was from South Dakota.

Thank you and your staff for your testimony here today.

The next panel of witnesses will be Lawrence Brandner, vice president of the Pollock-Herreid Irrigation District; Myron Johnson, chairman of the district; Mike Madden, adviser to the district and member of the Oahe Conservancy Subdistrict Board; and Keith Harner, representing the Governor of South Dakota.

If you would all come forward and sit at the witness table.

Senator ABOUREZK. First of all, we will welcome all of the people from the irrigation district, from the State of South Dakota, and I would like to express my thanks for your work over the years on this project, for the interest you have shown in it, and I would like to welcome you to the subcommittee hearings.

If you are ready to proceed with your testimony, I am ready to hear it. I promise you I won't ask you the same questions I asked Mr. O'Brien.

STATEMENTS OF LAWRENCE BRANDNER, VICE PRESIDENT, MYRON JOHNSON, CHAIRMAN, MIKE MADDEN, ADVISER, POLLOCK-HERRIED IRRIGATION DISTRICT; AND KEITH HARNER, REPRESENTING GOV. RICHARD KNEIP, STATE OF SOUTH DAKOTA

Mr. MADDEN. Thank you, Mr. Chairman, members of the committee, we are very happy to be here.

I have material we will file with you, and I will go over it briefly. I am Michael Madden, member of the Oahe Conservancy Board. I have lived in this district, I have been there 38 years. I have worked with this group, and I am adviser to the Pollock-Herreid Irrigation District. It is a pleasure to work with them.

Many of our people have traveled long distances to attend State and national meetings to promote this project. They are interested in the area, it is an area of low population. We are happy we are having hearings at this time.

In the material filed is a resolution passed by the Oahe Conservancy Board on October 16th, favoring the project. I have one passed by the South Dakota Water Development Association on October 3.

In the last week, the book we prepared for you, we called it "Blood, Sweat, and Tears," everybody rolled up their shirtsleeves and got to work and got the testimony written and documented, and it is here for you.
Senator ABOUREZK. Thank you, Mike.

Mr. BRANDNER. Good afternoon, ladies and gentlemen. I am the vice president of the Pollock-Herreid Irrigation District and director of the Third District. In the bulletins you have received are testimony of why the Pollock-Herreid unit should be authorized, and here are some of the reasons I think it should be authorized.

First, the water of the Missouri River is of excellent quality and will be plentiful at all times.

Second, there are no large landowners in the unit.

Third, it is small enough and large enough that it can be maintained and operated on a local level.

Fourth, it is a wildlife enhancement area for hunters and fishermen.

Fifth, the land will drain well and not fault because of the fact it is heavily underladen with gravel.

Sixth, there will be dryland farming in the area.

Seventh, there has been some irrigation in the area that has been very profitable to the farmers.

Eighth, the United States and the world will need more food and fiber in the years to come.

Ninth, higher production will raise our standard of living.

Tenth, and last, we have young men and women in the area who will make this project work. So this testimony, I ask you to authorize the Pollock-Herreid unit.

Thank you very much.

Senator ABOUREZK. Thank you.

Mr. JOHNSON. I am Myron Johnson, chairman of the Pollock-Herreid Irrigation District. I have been with the Board since it was formed in 1952. We are very pleased to come to Washington and attend the hearings on the Pollock-Herreid Irrigation District.

Mostly what I have to say is repeat what we have been doing for the last 10 or 12 years. Also, I am a Commissioner in Campbell County. It has been repeated, we have lost some 20,000 acres of river bottom land to the reservoir, $1½ million in value, and for being a small county, it really slows you up.

So we are asking and hoping for authorization that we can compensate for some of the loss. We do have good land for irrigation. We have young farmers who are capable. I think it would be a great benefit to the county, to the State, and to the Nation.

Senator ABOUREZK. Thank you.

Mr. HARNER. Thank you, Senator Abourezk. I am happy to be here on behalf of the Governor of our State, Governor Richard Kneip.

Senator, I can either read this letter into the record or just present it for the reporter to enter with a few remarks.

Senator ABOUREZK. If you insert it, that will be fine, and we will just take your remarks.

Mr. HARNER. The Governor regrets he could not be here personally. It does not in any way mean that he has any less support of this project.

Senator ABOUREZK. I can testify as to Dick Kneip's support of this program.

Mr. HARNER. I know you can, and I appreciate your doing so.
First, we in South Dakota have long looked at the Missouri River many, many years before the dams were constructed, and in the years since the dams have been constructed, we have been seriously groping for ways to use the water. We see the project as one of the beginnings of this use of the water.

As you mentioned, our Governor has been a strong supporter of irrigation and this particular project. There are a couple of things I would like to point out in further remarks here. The South Dakota Legislature in further support of water resource projects has passed a resolution of intent to arrange for nonpublic bodies to administer project land and facilities for fish and wildlife enhancement and the costs provided in the Federal Water Project Recreation Act.

The South Dakota Department of Game, Fish and Parks has provided a letter of intent indicating that Department’s intent not to pair one-half of the cost allocated to the Fish and Wildlife enhancement, and also for possible operation enhancement and provisional wildlife enhancement on this project. That was indicated by letter signed by R. S. Hodgins, then Director of the Department of Game, Fish and Parks.

I appreciate the opportunity to be here and will cooperate in providing whatever answers I can.

[The letter from Governor Kneip follows:]

STATE OF SOUTH DAKOTA, Pierre, October 29, 1975.

Hon. Frank Church,
Chairman, Subcommittee on Water and Power Resources, Committee on Interior and Insular Affairs, U.S. Senate, Washington, D.C.

Dear Senator Church: I regret that previously scheduled commitments prevent me from being with you at the hearings on legislation to authorize the Pollock-Herreid Diversion Unit in northcentral South Dakota. I have asked an official of the South Dakota Department of Natural Resource Development to convey to you this letter outlining my position of wholehearted support for authorization and development of the Pollock-Herreid project.

I would like to briefly review some of the reasons why I believe this project should be authorized and constructed. With the construction of the Oahe Dam and Reservoir (started in 1948 with water impoundment beginning in 1958) many farmers and ranchers along the Missouri River were called upon to relinquish their holdings. In 1961 the Corps of Engineers further impacted Campbell County by constructing the Spring Creek arm subimpoundment forming Lake Pocasse. This lake along with the adjacent shoreline, is being administered as a wildlife refuge. As part of the development it was necessary to move the town of Pollock and some adjacent farmsteads.

Although these events created an upheaval and turmoil in the Pollock and Herreid communities, the people of the area were able to pull together and in 1963 formed an irrigation district on the expectation of receiving water and federal assistance in developing an irrigation project. The high interest in irrigation development at that time is shown by the fact that at the election held on February 4, 1963 ninety-four percent of the eligible landowners cast ballots and ninety-five percent of those voting were in favor of the irrigation district. That action was taken more than ten years ago, even before a feasible project was planned and reported upon.

That same enthusiasm and support has been sustained over the past decade through active participation of farmers, businessmen and others in the communities of Pollock and Herreid. Innumerable meetings have been held, trips taken, and conferences set up to convey to governmental agencies and leaders at the regional, state and federal levels the desire and willingness of these people to enter into an irrigation project. The costs of these activities have been undertaken by the people of the Pollock-Herreid Irrigation District and the local communities because they believe in irrigation and know what it can do for their communities.
Regional support is also shown through actions of the Oahe Conservancy Sub-District to support and assist the local district in its efforts to obtain irrigation.

While other Bureau of Reclamation projects in South Dakota are being questioned by certain groups within and without our State, similar questions and controversies have not been raised regarding the Pollock-Herreid Project. If the project is authorized, and as it moves toward construction, there appears to be little likelihood or basis to anticipate major controversy. Any issues that may be raised can be resolved by cooperation among federal, state and local interests.

The basic plan and field report for the Pollock-Herreid Diversion Unit was completed in 1968. The plan called for multiple purpose development including irrigation, municipal and industrial water for two municipalities and fish and wildlife enhancement. My predecessor, Governor Frank L. Farrar, furnished favorable views and recommendations on the proposed project at that time. I find no reason to change those views and recommendations. Because of the passage of time and rapid changes in irrigation technology, I would anticipate that as the project is developed state views and recommendations on project details will again be considered. It is believed the state has certain expertise and capabilities that will be most helpful in developing the project. The development of the Pick-Sloan Missouri River Basin Plan has had a great impact upon the total basin region and upon the nation as a whole. The benefits of this water and related land development project can be measured in the millions of dollars as well as in the reduction of human suffering and loss. On the whole it is my belief the overall environment of the region has been greatly benefited by this development. Downstream flood control, power production and navigation, three of the four primary project purposes as conceived in the 1940's have more than paid for the investments made by the nation in the existing facilities. But still there are opportunities to provide greater benefits especially to the people and areas directly affected in the reservoir states, by completing the fourth primary focus of the overall plan, and that is irrigation. In this day and age when our overall agriculture surpluses have evaporated and there is a pending worldwide food crisis I can see the need to reexamine our recent irrigation development policies and again find ways to develop the food producing potentials of our great plains and western lands. The Pollock-Herreid Project is but a small part of that potential, but to the people of Campbell County and to the people of South Dakota, it is an important step in the right direction. Thus, I would urge both this Sub-Committee and the Congress to give favorable consideration in authorizing and developing the Pollock-Herreid Irrigation Unit.

I appreciate the opportunity to make known my thoughts on this particular matter, and I ask that they be entered into the record.

Sincerely,

RICHARD F. KNEIP,
Governor.

Senator ABOUREZK. I want to express my thanks to you, Keith, to all the people here.

I want to ask a question— anybody can answer, whoever wants to answer it.

Do you know of any opposition of any kind to this project?

Mr. JOHNSON. I would say no at the present time.

We have had very good cooperation with the corps, with the Bureau, with everybody.

Senator ABOUREZK. Irrigation projects come under fire from some environmental groups. Do you know of any environmental groups that have voiced any opposition to the Pollock-Herreid project?

Mr. HARNER. We have had no indication on the State level whatsoever.

Mr. MADDEN. We have had no indication. We only have 2,800 people sometime but they support this project.

Senator ABOUREZK. I don’t know of any opposition to this project whatsoever. I have not heard of any, and I am usually the first one to hear. The politicians are the first to hear of any objections. I guess I will have to agree with what you say on that.
I don’t have any further questions. We know your position, and I can pledge this as a member of this subcommittee and Frank Church is chairman, and I will work very hard on trying to get this through the committee and the Senate, and I want to thank you all for your appearances before the committee here today.

The hearing is adjourned.

[Whereupon, at 3:20 p.m., the hearing was adjourned.]
APPENDIX

Additional Material Supplied for the Record
ELECTRIC COOPERATIVE, INC.,
Selby, S. Dak., October 21, 1975.

Senator JAMES ABOUREZK,
U.S. Senate, New Senate Office Building,
Washington, D.C.

DEAR SENATOR ABOUREZK: As you know the people of Campbell County, S. Dak. have been working for years to obtain approval of the Pollock-Herreid Irrigation District.

This district has received almost unanimous support from the people in Campbell County and I am sure that if the members of Cam Wal Electric, that serves Campbell, Walworth and Potter Counties could vote on this matter they too would give it their wholehearted support.

I am enclosing a copy of a resolution adopted by our Board of Directors for your consideration.

As you know I have personally given this project all the help that I could as it is a sound project and has been supported by the people of the area.

I understand there is now some new hope in a "Omnibus Bill" which we understand will include the Pollock-Herreid Irrigation District. We hope you will give this matter your fullest support.

Yours very truly,

DUANE WESTLING,
Manager.

Enclosure.

CAM WAL ELECTRIC COOPERATIVE, INC., SELBY, S. DAK.—RESOLUTION,
POLLOCK-HERREID IRRIGATION DISTRICT

Whereas the Pollock-Herreid Irrigation District in Campbell County, South Dakota has been in the planning for over a decade and has been supported by an overwhelming majority of the people of the area, and;

Whereas the lack of dependable rainfall has crippled the agricultural potential in the Pollock-Herreid area and has resulted in loss of many farms and people vital to the economic welfare of the community, and;

Whereas the Pollock-Herreid Irrigation District could provide new life to a decaying farm area and help provide the food so essential to the world today, and;

Whereas Campbell County and the State of South Dakota have given up thousands of acres of valuable agricultural land for the reservoirs on the Missouri River and have lost a great deal of tax base, and;

Whereas Cam Wal Electric Cooperative, Inc., also has lost many electric services to the Oahe Reservoir and the depressed farming situation of our area, and:

Now, therefore be it

Resolved by the Board of Directors of Cam Wal Electric Cooperative, Inc., That we support the Pollock-Herreid Irrigation District and request that our congressional delegation exert every effort to secure approval in the Congress of the United States.

CERTIFICATION

I, Wm. J. Sawinsky Jr., do hereby certify that I am Secretary of Cam Wal Electric Cooperative, Inc., an electric non-profit cooperative membership corporation organized and existing under the laws of the State of South Dakota; that the foregoing is a complete and correct copy of an excerpt from the minutes of a meeting of the Board of Directors of this corporation, duly and properly called and held on the 24th day of October 1975.

[seal]

WM. J. SAWINSKY JR., Secretary.

(39)
RESOLUTIONS & STATEMENTS

SUPPORTING THE

Pollock - Herreid Unit

SOUTH DAKOTA PUMPING DIVISION
SOUTH DAKOTA
PICK-SLOAN MISSOURI BASIN PROGRAM

TO THE

SENATE ENERGY RESEARCH AND WATER RESOURCES SUB-COMMITTEE
OF THE
INTERIOR AND INSULAR COMMITTEES

FRANK CHURCH, CHAIRMAN
TABLE OF CONTENTS

1. Pollock-Herreid Unit Map
2. Statement of Pollock-Herreid Irrigation District Board of Directors
3. Statement by Michael Madden
4. RESOLUTIONS:
   * Cahe Conservancy Sub-District
   * South Dakota Water Development Association
   * Cam-Wal Electric Cooperative, Selby South Dakota
   * Campbell County Auditor
   * Campbell County Soil Conservation District
   * Herreid Concrete Plant, Herreid, South Dakota
   * Mound City Businessmen’s Association
   * Directors of Herreid and Pollock banks
   * Herreid Commercial Club
   * Herreid Jaycees
   * Herreid City Council
   * Pollock Civic Club and Town Board
   * C. W. Renz, Campbell County States Attorney, former Cahe Conservancy Board member and County Judge
5. Additional Support Material
   * Lake Campbell Wildlife Club
   * Larry and Alpha Senftner
   * Herreid Equity Exchange Farmers Elevator
6. Additional Material enclosed in copies of Honorable Chairmen
   * Pollock-Herreid Unit Map
   * Information on Pollock-Herreid Unit, S. D. pumping division, South Dakota Pick-Sloan Missouri Basin Program
   * Economic development data, Pollock-Herreid Unit
Statement of Board of Directors of the Pollock-Herreid Irrigation District

In 1962 three directors, two officers, an attorney, plus the county extension agent were elected and appointed to the Pollock-Herreid irrigation board.

We were all young and ready to build a project that would benefit our county. This project would create jobs and business opportunities for our young people.

$90,000 was appropriated and used for a detailed survey of the 15,000 acre irrigation project in the northwest part of the county. This had been our dream since 1944 when we first became involved in the Missouri River Development Program.

Every farmer knew that the land was suitable for irrigation. The soil is gravel underlaid, with good internal drainage. It is agreed that it is one of the two most feasible projects in the United States.

The 20,000 acres, that are now part of the Oahe reservoir, reduced the county evaluation by one million dollars. Twelve farmsteads, that originally occupied this land, are now gone. The application of water on 15,000 acres would compensate for the losses incurred by the building of the dam on the Missouri River.

The annual rainfall in this area is 15-16 inches per year. The farmers living in this area are progressive people, who have good management capabilities. They own and operate excellent equipment and are planting good quality, recommended varieties of all crops. Their livestock is of excellent quality. The only ingredient missing is the lack of adequate moisture during the growing season.

The board of directors and the people have levied a nine cent per acre tax, for the past twelve years, on all land within the boundaries of the district. This money is being used for the administration and promotion of the Pollock-Herreid Irrigation District. The board members and citizens have attended county, state and national meetings in an effort to promote this project. At every meeting members have been received very courteously by officials of the Bureau of Reclamation and the Interior Department.

There is no doubt in the minds of the state and federal officials, that the people of the Pollock-Herreid Irrigation District are one hundred percent in favor of building the Pollock-Herreid pumping unit.
Mr. Chairman, Honorable Members of the Committee,
I am Michael T. Hadden, Director of the Oahe Conservancy Sub-District representing Campbell and McPherson Counties of South Dakota. I have been a resident of Campbell County for 56 years. Thirty-six of these years I served as County Extension Agent.

I have worked with the local people in the proposed Pollock-Herreid Unit area ever since the development of the Missouri River Dams and Reservoirs. Many years ago we recognized the opportunity to develop the water stored behind those giant Dams in South Dakota for irrigation and domestic uses. South Dakota’s future relies solely on agriculture. Without water that future is less bright.

Gentlemen, we are extremely pleased that this commission has scheduled this Hearing on our Project. The people of South Dakota and Campbell County have waited a long time to realize the benefits of irrigation that were promised to us in the Pick-Sloan Plan.

The Oahe Conservancy Sub-District was organized in 1960 to assist local people in developing water for use in South Dakota and to meet the requirement for sponsorship of Federal Projects. The Sub-District Board supports the Pollock-Herreid Unit and stand ready to provide whatever assistance the local people may require to develop this long awaited project in Campbell County.

The attached resolution was adopted by the Oahe Board at their regular meeting on October 16, 1975.

Thank you for the opportunity to appear before you to-day in support of (HR 5685) (S 2495). I urge your favorable consideration of this Bill.
Mr. Madden moved, seconded by Mr. Hippie that the following Resolution be adopted:

WHEREAS, the Bureau of Reclamation has determined that construction of the Pollock-Herreid Irrigation Project is feasible within the requirements of the federal reclamation laws; and

WHEREAS, such construction would be beneficial to the economy of the Oahe Conservancy Sub-District and the State of South Dakota as a whole since it would enable the landowners within the Pollock-Herreid Irrigation District to make beneficial use of water resources and stabilize production of foodstuffs from their lands; and

WHEREAS, proposed legislation to authorize construction of the Pollock-Herreid Irrigation Project has been introduced in the Congress by Senators and Representatives in Congress from the State of South Dakota;

NOW, BE IT RESOLVED, by the Directors of the Oahe Conservancy Sub-District that the Congress be respectfully requested to enact such legislation.

All Directors voting "aye". Motion carried. Resolution adopted.

CERTIFICATE

I hereby certify that the above instrument is a full, true and correct copy of a portion of the minutes adopted by the Oahe Conservancy Sub-District Board of Directors at their meeting on October 16, 1975.

ROBERT E. RASCHKE
MANAGER-TREASURER
RESOLUTION NO. 75-3

Authorization and Funding of Pollock-Herreid Project Requested

WHEREAS, one of the present and foremost national objectives is the revitalization of rural America, and

WHEREAS, such revitalization is necessary if rural areas are to keep pace with the economic and social advancements of the more populous sections of the country, and

WHEREAS, in order to enhance these social and economic conditions in South Dakota, the state's number one industry—agriculture—must be stimulated, thus creating expanded and stabilized agriculture operations and new job opportunities, and

WHEREAS, such new job opportunities will provide South Dakota's young people with the opportunity to remain in the state rather than migrating to the larger cities thus adding to the congestion which presently exists there, and

WHEREAS, one of the best means of achieving this goal is the wise and prudent development of the state's water resources, and

WHEREAS, the development of the Pollock-Herreid Irrigation Unit in Campbell County, South Dakota, presents such an opportunity, and

WHEREAS, strong local support for the Unit has been demonstrated at various times as evidenced in the formation of an irrigation district by overwhelming vote, in excess of 95 percent of the landowners in the district, and by the continued support of the civic and farm organizations in the area, and

WHEREAS, the Bureau of Reclamation's report of January, 1968, established a favorable relationship for the Pollock-Herreid Unit which was reaffirmed and updated in 1971,

NOW, THEREFORE BE IT RESOLVED, by the South Dakota Water Development Association, that it urge the Congress of the United States to enact authorizing legislation for the Pollock-Herreid Irrigation Unit.
RESOLUTION

POLLOCK-HERREID IRRIGATION DISTRICT

WHEREAS: the Pollock-Herreid Irrigation District in Campbell County, South Dakota has been in the planning for over a decade and has been supported by an overwhelming majority of the people of the area, and;

WHEREAS: the lack of dependable rainfall has crippled the agricultural potential in the Pollock-Herreid area and has resulted in loss of many farms and people vital to the economic welfare of the community, and;

WHEREAS: the Pollock-Herreid Irrigation District could provide new life to a decaying farm area and help provide the food so essential to the world today, and;

WHEREAS: Campbell County and the State of South Dakota have given up thousands of acres of valuable agricultural land for the reservoirs on the Missouri River and have lost a great deal of tax base, and;

WHEREAS: Cam Wal Electric Cooperative, Inc., also has lost many electric services to the Oahe Reservoir and the depressed farming situation of our area, and;

NOW THEREFORE BE IT RESOLVED by the Board of Directors of Cam Wal Electric Cooperative, Inc., that we support the Pollock-Herreid Irrigation District and request that our congressional delegation exert every effort to secure approval in the Congress of the United States.

CERTIFICATION

I, Wm. J. Sawinsky Jr., do hereby certify that I am Secretary of Cam Wal Electric Cooperative, Inc., an electric non-profit cooperative membership corporation organized and existing under the laws of the State of South Dakota; that the foregoing is a complete and correct copy of an excerpt from the minutes of a meeting of the Board of Directors of this corporation, duly and properly called and held on the 24th day of October 1975.
WHEREAS, the undersigned as Campbell County Auditor has personal knowledge and records of the actions taken by the Board of County Commissioners, and

WHEREAS, the records substantiate the approval and encouragement given to the organization of the Pollock-Herreid Irrigation District, and

WHEREAS, to demonstrate a continued concern for the project, the Board of County Commissioners have given financial support to members of the Board of Directors of the Pollock-Herreid Irrigation District to attend various meetings to promote the project, and paid all expenses for one member of the Board of County Commissioners and the County Extension Agent to attend the National Water Resources Committee Meeting in Washington, D. C., April 21, 1975, and

WHEREAS, the people, who have land within the boundaries of the District, wholeheartedly supported the project when they overwhelming voted to form the district, and

WHEREAS, a self-imposed tax levied on the acreage within the District has demonstrated the continued and determined efforts to promote the development of the unit, and

WHEREAS, the social and economic welfare of Campbell County would be greatly enhanced by the development of the Pollock-Herreid Irrigation District

NOW, THEREFORE, BE IT RESOLVED that the Congress of the United States be hereby respectfully urged to enact authorizing legislation for the Pollock-Herreid Irrigation Unit.

CAMBELL COUNTY
By: Lenore Pfeifle, County Auditor
Mr. Wittmeier moved, seconded by Mr. Meyer that the following Resolution be adopted:

WHEREAS, the Bureau of Reclamation has determined that construction of the Pollock-Herreid Irrigation Project is feasible within the requirements of the federal reclamation laws; and

WHEREAS, such construction would be beneficial to the economy of the Campbell County Conservation District and the State of South Dakota as a whole since it would enable the landowners within the Pollock-Herreid Irrigation District to make beneficial use of water resources and stabilize agricultural production from their lands; and

WHEREAS, proposed legislation to authorize construction of the Pollock-Herreid Irrigation Project has been introduced in the Congress by Senators and Representatives in Congress from the State of South Dakota; and

WHEREAS, the irrigation of lands within the Pollock-Herreid Irrigation District is part of the goals and objectives of the Campbell Co. Conservation District;

NOW, BE IT RESOLVED, by the Campbell Co. Conservation District Board of Supervisors that the Congress be respectfully requested to enact such legislation.

All Supervisors voting "aye". Motion carried. Resolution adopted.

CERTIFICATE

I hereby certify that the above instrument is a full, true and correct copy of a portion of the minutes adopted by the Campbell County Conservation District Board of Supervisors at their meeting on October 21, 1975.

ALPHA SENFTNER
ADMINISTRATIVE SECRETARY
Please be advised of our interest and support of the Pollock-Herreid Unit.

We feel this project is needed for the survival of our farming area, which has been hard hit by drought conditions in the past years. The future of our business depends wholly on the future of our farmers.

Herreid Concrete Plant
Curt K. Kost
Morrell M. Fuehrer
owners.
AUTHORIZATION AND FUNDING OF POLLOCK-HERREID PROJECT REQUESTED

Whereas, Mound City is the county seat of Campbell County and is interested in the welfare of the County, churches and the school districts.
Now, therefore, be it resolved by the Mound City Businessmen's Association that the House and Senate Committee give serious consideration to the authorization and funding of the Pollock - Herreid Irrigation District.

CERTIFICATION

I hereby certify that the above instrument is a full, true, and correct attitude of the Mound City Businessmen's Association.

Signed [Signature]
Glenn G. Sjomeling, Chairman
Mound City Businessmen's Assoc.
Directors: October 21, 1975
Jacob G. Hofer, Herreid, S.D., Pres.
Esther J. Werner, Herreid, S.D.
Louie Stellflug, Herreid, S.D.
Matt V. Sleifer, Herreid, S.D.
H. R. White, Selby, S.D.
Maynard E. Wittmeier - Cashier & Ex. Officer

RES: AUTHORIZATION AND FUNDING OF POLLOCK-HERREID PROJECT REQUEST.

The Board of Directors and the Stockholders of the Campbell County Bank Inc. and its branch in Pollock, South Dakota realizing that rural America, of which we are a part of, must survive to feed a hungry nation and a starving world. One of the best means for us to accomplish this goal is wise and prudent use and development of the area’s water resources. Our area’s number one industry is agriculture --- this must be stimulated to create new employment objectives to keep our population from moving to the large cities to seek new jobs; these cities have their own employment problems.

WHEREAS this bank, is in support of and, feels that the development of the POLLOCK-HERREID IRRIGATION UNIT in Campbell County is vital for the development and existence of agriculture and the people in our County.

We respectfully request that Congress enact such legislation.

Maynard E. Wittmeier
Maynard E. Wittmeier
Cashier and Secretary
To Whom it May Concern:

The Herreid Commercial Club, meeting in regular session on October 13th, 1975, went on record to unanimously support the Pollock-Herreid Irrigation Proposal.

HERREID COMMERCIAL CLUB,

Don Hinkley, President
HERREID JAYCEES
HERREID, SOUTH DAKOTA

RE: FUNDING & AUTHORIZATION OF POLLOCK-HERREID IRRIGATION PROJECT

The Herreid Jaycees representing the younger generation in Campbell County feel that the development of the area's water resources is a necessity to our existence as an organization. We must have a stimulant which will keep our local young people on the farms which our forefathers have developed. The large possibility of drought conditions in this area plays a large part in destroying people's attitude toward agriculture, our Number One industry. By creating a brighter attitude toward such an important industry, we, at the same time, provide strength and encouragement to urban society by implementing new business and employment opportunities.

Whereas this Organization, hereby strongly supports the development of the Pollock-Herreid Irrigation Unit in Campbell County in order that rural America can provide an opportunity for its youth on which our very existence is dependent.

Therefore, we respectfully request that Congress enact such legislation for the benefit of our local area and all of Rural America.

Brian Bauer
President
Alderman William Bommersbach introduced the following resolution and moved its adoption:

WHEREAS, the Pollock-Herreid Irrigation District has been declared a feasible project by the Bureau of Reclamation, and

WHEREAS, legislation to authorize construction of the Pollock-Herreid Irrigation Project has been introduced in Congress; and

WHEREAS, the City of Herreid is located within the boundaries of the Pollock-Herreid Irrigation District; and

WHEREAS, the City of Herreid is in need of an adequate supply of good quality water for municipal use; and

WHEREAS, the City of Herreid has made application to the Pollock-Herreid Irrigation District for water for municipal use; and

WHEREAS, local merchants must and do rely on our rural community and people in agriculture in order to maintain a successful business; and

WHEREAS, the construction of the Pollock-Herreid Irrigation District would help stabilize our farm economy and in turn stabilize the economy of the city, county and state;

NOW THEREFORE, BE IT RESOLVED, By the City Council of the City of Herreid, South Dakota, that the Congress be respectfully requested to enact such legislation.

Motion seconded by Alderman Beck, with all council members voting "aye", whereupon said resolution was declared adopted.

Dated this 22nd day of October, 1975.

Board of Aldermen of the City of Herreid, South Dakota

Karl Mitzel, City Auditor
The following resolution has been adopted by the:
   Town Board of Pollock, South Dakota
   The Civic Club of Pollock, South Dakota:

WHEREAS, construction of the Pollock-Harrold Irrigation District has been deemed feasible by the Bureau of Reclamation, within the requirements of the federal reclamation laws; and

WHEREAS, such construction would be of great economic benefit to the immediate area, to the Oak Conservancy Sub-District and to the State of South Dakota; and

WHEREAS, the county of Campbell, South Dakota, has lost approximately $1 million in tax base because of county land flooded by the Oaka reservoir, which economic benefits from the irrigation district would help alleviate; and

WHEREAS, 95 per cent of the landowners have voted in favor of the District; and

WHEREAS, legislation to authorize construction of the Pollock-Harrold Irrigation project has been introduced in the Congress by the Senators and Representatives from the State of South Dakota;

NOW, THEREFORE, BE IT RESOLVED that the Congress be respectfully requested to enact such legislation.

S/GORDON ATKINSON, Mayor
   Town of Pollock, South Dakota

S/HAROLD MEYER, President
   Pollock Civic Club, Pollock, South Dakota

OCTOBER 20, 1975
To the Senate and House Interior Committees.

I am writing in behalf of the Pollock-Herreid Irrigation project. I have been on the Board of the Oahe Conservancy Sub-District for fourteen years. At the end of fourteen years I retired from the office and Mike Madden is taking my place, with credit.

During my fourteen years on the board I made it a point to study irrigation in many parts of the United States and Canada. What I found about irrigation I liked. Every community I visited and to every person I talked was enthusiastic about irrigation. I have seen communities after communities that prospered with irrigation while a few miles away there was a desert and a jack rabbit could not make a living. To mention one or two irrigation projects that I visited I want to name the American side of the Rio Grande River Valley. On the American side of the river I found a virtual garden with cabbage fields, potato fields, and other truck gardening. I found Orange groves while on the Mexican side of the river there is a bleak and unproductive country. The sun shines and the rain falls on both sides of the river in the same manner but the difference is irrigation. The Pan Handle of Texas is another good example. Before reaching the Pan Handle without irrigation there is a virtual desert but in the Pan Handle where there is irrigation the picture is quite different. There is prosperity and the country side is beautiful to say the least. And so I could mention irrigation district after irrigation district I have visited where the conditions are the same than the ones I have mentioned.

Campbell County has lost about 20,000 to 23,000 acres of land when the Oahe pool was constructed and as part compensation to Campbell County for the loss of this land I feel that the members of Congress will see it only just to approve the Pollock-Herreid Irrigation project.

Then we will have to look at another phase in promoting irrigation. The world need is for food and more food. Another phase is by building irrigation projects the people will be kept in rural districts and will not crowd into the cities where labor problems and unemployment is a very serious problem. While the Pollock-Herreid Irrigation is only a small project but the country should have many projects for irrigation. As I see the future the population trend must be away from large cities and into the rural sections to make for a healthy economy. There are many hungry people to be fed and the United States has a duty to provide food and we look to Congress to take the lead.

C.W. Renz
Herreid, SD
Mound City, South Dakota
October 25, 1975

TO: SENATE AND HOUSE INTERIOR COMMITTEES
RE: AUTHORIZATION AND FUNDING OF POLLOCK-HERREID IRRIGATION PROJECT.

The Lake Campbell Wildlife Club has 59 members in the Pollock-Herreid and Mound City areas. Most of these members are landowners or operators.

The Wildlife Club Members realize the importance of water for increased crop and livestock production. Water Development will also bring more wildlife habitat. We feel irrigation will create new job opportunities, as well as providing more food and recreation opportunity for our increasing population.

THEREFORE, we respectfully request Congress to enact legislation to Authorize and Fund the Pollock-Herreid Irrigation Project.

Sincerely,

Lake Campbell Wildlife Club

Rodger Kruger
President

Orval Kistlinger
Vice-President

Dean Wessel
Secretary

James Kanable
Treasurer
Herreid, S. Dak.
October 23, 1975

Pollock Herreid Irrigation Board
Herreid, South Dakota

Dear Sirs,

My husband, Larry Senftner, and myself live on a farm in southwest Campbell County. We are part owners in the Senftner Chevrolet Sales & Service in Herreid, S. Dak.

We have three sons and two daughters that are now employed in other areas and in other states. The building and operation of the Pollock Herreid Irrigation Unit would create job opportunities for some of the young people educated in this area.

The development of the Pollock Herreid Irrigation unit would be a great deal of help in the support of the local schools, churches, and small businesses in this area.

This area of South Dakota has a declining population since the early thirties. The area is almost 100% agriculture. Land prices are high and farms are getting larger. Irrigation would create new opportunities for young people.

Last but not least, the City of Herreid would have a better water supply and would certainly help in "cooking coffee" and "doing the laundry".

Sincerely,

[Signature]

Alpha Senftner
RESOLUTION:
WHEREAS, the Board of Directors of the Herreid Equity Exchange, a cooperative representing 475 stockholders, the majority of which are farmers in the Herreid area. A cooperative engaged in buying and selling agriculture products such as grain, feed, fertilizer and petroleum products.

This cooperative being one of the largest business's in Campbell County pays an annual property tax of approximately $13,000.00, with an employment of 8 full time employees and some seasonal part time help. Approval of the Pollock-Herreid Irrigation Unit would create opportunities for much more employment in this area.

We, as a Board of Directors, representing the stockholders of this cooperative feel that an Irrigation Unit such as the Pollock-Herreid would do a great deal to stabilize the economy in this area as well as create a potential for more development and expansion in Agriculture facilities.

NOW, THEREFORE BE IT RESOLVED, by the Board of Directors representing the Herreid Equity Exchange, urge the Congress of the United States to enact authorizing legislation for the Pollock-Herreid Irrigation Unit.

HERREID EQUITY EXCHANGE
B. E. BERNDT, SECRETARY