

**AMENDMENTS TO THE RECLAMATION
WASTEWATER AND GROUNDWATER
STUDY AND FACILITIES ACT**

HEARING
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED NINTH CONGRESS
SECOND SESSION
ON

S. 3638

S. 3639

H.R. 177

H.R. 2341

H.R. 3418

JULY 27, 2006



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE

31-809 PDF

WASHINGTON : 2007

COMMITTEE ON ENERGY AND NATURAL RESOURCES

PETE V. DOMENICI, *New Mexico, Chairman*

LARRY E. CRAIG, Idaho	JEFF BINGAMAN, New Mexico
CRAIG THOMAS, Wyoming	DANIEL K. AKAKA, Hawaii
LAMAR ALEXANDER, Tennessee	BYRON L. DORGAN, North Dakota
LISA MURKOWSKI, Alaska	RON WYDEN, Oregon
RICHARD M. BURR, North Carolina,	TIM JOHNSON, South Dakota
MEL MARTINEZ, Florida	MARY L. LANDRIEU, Louisiana
JAMES M. TALENT, Missouri	DIANNE FEINSTEIN, California
CONRAD BURNS, Montana	MARIA CANTWELL, Washington
GEORGE ALLEN, Virginia	KEN SALAZAR, Colorado
GORDON SMITH, Oregon	ROBERT MENENDEZ, New Jersey
JIM BUNNING, Kentucky	

BRUCE M. EVANS, *Staff Director*

JUDITH K. PENSABENE, *Chief Counsel*

ROBERT M. SIMON, *Democratic Staff Director*

SAM E. FOWLER, *Democratic Chief Counsel*

SUBCOMMITTEE ON WATER AND POWER

LISA MURKOWSKI, *Alaska, Chairman*

GORDON SMITH, *Oregon, Vice Chairman*

LARRY E. CRAIG, Idaho	TIM JOHNSON, South Dakota
RICHARD M. BURR, North Carolina	BYRON L. DORGAN, North Dakota
MEL MARTINEZ, Florida	RON WYDEN, Oregon
CONRAD BURNS, Montana	DIANNE FEINSTEIN, California
JIM BUNNING, Kentucky	MARIA CANTWELL, Washington
JAMES M. TALENT, Missouri	KEN SALAZAR, Colorado
	ROBERT MENENDEZ, New Jersey

PETE V. DOMENICI and JEFF BINGAMAN are Ex Officio Members of the subcommittee

NATE GENTRY, *Counsel*

MIKE CONNOR, *Democratic Counsel*

CONTENTS

STATEMENTS

	Page
Atwater, Richard, Chief Executive Officer, Inland Empire Utilities Agency, on behalf of the WaterReuse Association	28
City of Austin, TX	48
Dreier, Hon. David, U.S. Representative From California	2
Edwards, Hon. Chet, U.S. Representative From Texas	4
Feinstein, Hon. Dianne, U.S. Senator From California	6
Grindstaff, P. Joseph, Director, CALFED Bay-Delta Program, Sacramento, CA	22
Johnson, Hon. Tim, U.S. Senator From South Dakota	5
Lippe, Chris, Director, City of Austin Water Authority	33
Murkowski, Hon. Lisa, U.S. Senator From Alaska	1
Ray, J. Tom, Project Manager, Central Texas Water Recycling Project, Lockwood, Andrews & Newnam, Inc.	38
Todd, Larry, Deputy Commissioner for Policy, Administration and Budget, Bureau of Reclamation, Department of the Interior	7

APPENDIX

Responses to additional questions	49
---	----

**AMENDMENTS TO THE RECLAMATION WASTE-
WATER AND GROUNDWATER STUDY AND
FACILITIES ACT**

THURSDAY, JULY 27, 2006

U.S. SENATE,
SUBCOMMITTEE ON WATER AND POWER,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 2:34 p.m., in room SD-366, Dirksen Senate Office Building, Hon. Lisa Murkowski presiding.

**OPENING STATEMENT OF HON. LISA MURKOWSKI,
U.S. SENATOR FROM ALASKA**

Senator MURKOWSKI. I welcome you to the subcommittee's legislative hearing. We've got five bills regarding the Bureau of Reclamation's Title XVI Water Reclamation and Reuse Program. The bills include S. 3638, which is sponsored by Senator Feinstein, which authorizes several water projects in southern California. We have S. 3639, which I have sponsored, to amend the title XVI program. We have H.R. 177, sponsored by Congressman Gary Miller. This authorizes several projects in southern California. H.R. 2341, sponsored by Congressman Doggett, to authorize a project in the city of Austin, TX. And H.R. 3418, which is sponsored by Congressman Edwards, which authorizes a project in Waco, TX.

We had an oversight hearing on the title XVI program, which we held earlier in the year, and at that time, I raised several questions about the program and what legislative changes, if any, we might want to undertake. Since that time, working together with Senator Feinstein, we have developed this legislation. This is S. 3639 and I believe that it is a pretty good starting point to address the concerns that have been raised relative to the title XVI program.

I understand that the administration continues to question certain aspects of the future of the program, but I think it is fair to say that it is important that the United States have a Federal role in developing new sources of municipal and industrial water supply. The title XVI program has played, and should continue to play, a role in municipal and industrial water supply. It is my understanding that the administration is continuing to develop a legislative proposal to reform the title XVI program and I am pleased that they are taking a proactive approach. Hopefully, we can incorporate some of these ideas into S. 3639.

We've got a couple panels this afternoon that I will introduce, but before we bring the panels on, I would like to welcome to the subcommittee this afternoon Congressman Dreier from the State of California. As a Congressman, you have been very active and very involved in many of the water bills that have come before us in the past and your involvement is greatly appreciated. And with that, I would like to welcome you and ask if you would like to make any comments before we proceed with the hearing.

**STATEMENT OF HON. DAVID DREIER,
U.S. REPRESENTATIVE FROM CALIFORNIA**

Mr. DREIER. Thank you very much, Madam Chairman. Let me just, at the outset, say that I really like water. That's the reason that I'm here. And it is difficult for me to imagine a greater, more thrilling bipartisan panel of Senators, and my California colleague, Diane Feinstein, and you. I'm pleased to see Senator Johnson joining us as well, with whom I was privileged to serve in the House of Representatives. I'm here to say that your opening remarks, Madam Chairman, I think, were really right on target in talking about the commitment the administration has shown to title XVI reform.

I am particularly proud of an effort that we have going that Senator Feinstein and I have represented in southern California. It is the Inland Empire Water Recycling Initiative, which has had tremendous success, and great leadership has been shown on this. We have found, with this initiative, that has twice passed the House of Representatives—we've authorized \$30 million for the Inland Empire Utilities Agency and the Cucamonga Valley Water District to assist in constructing two water-recycling projects there. The projects will produce nearly 100,000 acre-feet of new water annually to the area's water supply. The initiative has the support of all member agencies of the Inland Empire Utilities Agency, which encompasses 240 square miles in southern California.

It also serves a number of the cities that I represent, including the city I mentioned, Rancho Cucamonga, which happens to be one of the very top of the fastest growing cities in the entire country. When I first represented it many years ago, it had a population of 30,000. And the mayor told me not long ago that within the next 4 years—and I don't know if you are aware of this, Diane—220,000 people in the city of Rancho Cucamonga, there in the Inland Empire, by the end of this decade. It's one of the fastest growing cities in our State and that is why this whole notion of pursuing water recycling there is something that I believe is very, very important.

As you said, Madam Chairman, the issue of pursuing title XVI reform is a very high priority. I'd like to say that while I'm here with a specific goal of introducing my friend, Rich Atwater, I'm also very pleased that we have Joe Grindstaff here. Senator Feinstein and I happen to claim among our friends the Governor of California, and Mr. Grindstaff is here representing the Governor, demonstrating his very strong commitment to water recycling and dealing with the challenge of water that have in our State today.

Joe has had a very distinguished career. He headed the Bay-Delta Authority. He has an outstanding record of achievement as the general manager of the Santa Ana Watershed Project Author-

ity, and the Monte Vista and Eastern Municipal Water District prior to that. He has been on the real forefront of dealing with these water issues in California and we all know how important that is for our state.

So now I would like to just take a moment to mention Rich Atwater, who you will be hearing from momentarily. He is the only water agency manager, Madam Chairman, to receive the prestigious Governor's Award for Environmental and Economic Balance three times, from three different Governors. I don't know if you've followed politics in California, but we've gone through sort of a roller coaster in the past several years. Governor Pete Wilson, in 1995, gave the Governor's Award for Environmental and Economic Balance to Rich, and then Governor Gray Davis, in 2002, gave it to him, and then, in 2003, Governor Schwarzenegger provided him that award. So he has obviously been able to cross party lines and there is broad recognition of his stellar work. And I've had the privilege of touring facilities with him and getting to know him. In 1994, our friend, the former Secretary of the Interior, Bruce Babbitt, awarded Rich the Conservation Service Award, which is the highest citizen award for resources management. And he has also served on a number of drought and water reuse commissions for the State throughout the past decade. Most important, he is also the CEO and general manager of the Inland Empire Utilities Agency that I mentioned and is responsible for getting that 100,000 acre-feet of new water produced. So I'm very pleased to be here and I think that the thoughts and proposals that he will have, as you take on this challenge of dealing with title XVI reform—he will be very, very helpful to you.

And I thank you. I know Senator Feinstein has our measure included as part of her legislation. And as I've said, we've twice been able to move this through the House. I'm looking forward to coming to an agreement on it and I thank you and congratulate you on all of your great work. And while water is beautiful in California, it is no more beautiful than it is in Alaska, from all the water that I've seen there.

Senator MURKOWSKI. Sometimes it is a little colder up there, though.

Mr. DREIER. Yes, I know. I like cold water, too. So thank you all very, very much for including me and now you will get some real brilliance.

[The prepared statements of Representatives Dreier and Edwards follow:]

PREPARED STATEMENT OF HON. DAVID DREIER, U.S. REPRESENTATIVE
FROM CALIFORNIA, ON S. 3638

Thank you, Senator Murkowski, for your leadership on water reuse and recycling issues. Having a legislative hearing like this helps to highlight a number of important projects being undertaken by various local water agencies that have the strong support of Members of Congress.

For many years, I have been fortunate to partner with my good friend, Senator Feinstein, on a number of issues. We have often introduced companion legislation, and I am very pleased to be working with her on Congressional support for water recycling in Southern California. In this case, Senator Feinstein's bill, S. 3638, includes the Inland Empire Water Recycling Initiative, which I have sponsored in the House.

The Inland Empire Water Recycling Initiative authorizes \$30 million for the Inland Empire Utilities Agency and the Cucamonga Valley Water District to assist in

constructing two water recycling projects. The projects will produce nearly 100,000 acre-feet of new water annually to the area's water supply. This initiative has the support of all member agencies of the Inland Empire Utilities Agency, which encompasses 240 square miles in southern California. It also serves a number of cities I represent, including the city of Rancho Cucamonga, one of the fastest growing cities in the country.

These water agencies are using high quality recycled water in many water intensive applications, like landscape and agricultural irrigation, construction, and industrial cooling. This allows fresh water to be conserved or used for drinking, which reduces our dependence on expensive imported water. In addition, by recycling water which would otherwise be wasted and unavailable, these agencies ensure that we ring the last drop of use out of water before it is ultimately returned to the environment.

It is imperative that we continue to approve measures preventing water supply shortages in the Western United States. This recycling initiative will help meet the water needs of the Inland Empire and begin a strategic federal—local partnership to bring a significant amount of new water supply to the region. In fact, the Bureau of Reclamation has already recognized the Inland Empire Water Recycling Initiative as one of the most cost effective water reuse projects.

The House has passed the Inland Empire Water Recycling Initiative twice—once last Congress and once this Congress. As you examine Title XVI reform and evaluate these bills before you, I respectfully ask my friends here to consider moving Senator Feinstein's bill forward so these deserving projects are authorized. I have no doubt that you will find that the Inland Empire Water Recycling Initiative is a model project for federal investment.

Before I introduce Richard Atwater, I want to thank Joe Grindstaff for traveling to Washington to testify today. His presence here demonstrates the great importance that Governor Schwarzenegger has placed on developing bold and innovative solutions to ensuring that we possess the water resources to meet the needs of the growing economy and population we are seeing in California today. Before Joe so ably took over the direction of the Bay-Delta Authority, he established an outstanding record of achievement as the general manager of the Santa Ana Watershed Project Authority. While serving at SAWPA and in the Monte Vista and Eastern Municipal Water Districts prior to that, Joe has been at the forefront of tackling the complex water management issues we face in California—particularly in Southern California—and has tremendous experience in understanding and dealing with the issues we are discussing today.

Now, I am very pleased to have the opportunity to introduce to you Richard Atwater, who will be testifying before you shortly. Rich is the director of the WaterReuse Association's National Legislative Committee.

He is the only water agency manager to receive the prestigious Governor's Award for Environmental and Economic Balance three times: by Governor Pete Wilson (1995); Governor Gray Davis (2002); and Governor Arnold Schwarzenegger (2003). Rich has over twenty-five years experience in water resources management and development. He has pioneered many award-winning water projects and implemented numerous innovative water resource management programs that meet today's high standards for quality, reliability and cost-effectiveness. In 1994, former Secretary of the Interior Bruce Babbitt awarded Rich the Conservation Service Award, the highest citizen award for resources management. Rich has also served on a number of drought and water reuse commissions for the state throughout the past decade.

Most important, Rich is also the CEO and General Manager of the Inland Empire Utilities Agency. He is responsible for getting that 100,000 acre-feet of new water produced. So I am pleased he is here to share his input on the proposed Title XVI reforms, and to answer any questions you all may have on the Inland Empire Water Recycling Initiative.

Again, thank you for the opportunity to join you all today.

PREPARED STATEMENT OF HON. CHET EDWARDS, U.S. REPRESENTATIVE
FROM TEXAS, ON H.R. 3418

The Central Texas Water Recycling Act of 2006 supports efforts to manage water resources efficiently in McLennan County by strategically locating regional satellite treatment plants that will not only provide for conservation of our community's water supply but will also reduce cost to the taxpayers.

The initial projects under this legislation can provide up to 10 million gallons per day of reuse water; thereby, reducing the water demand on Lake Waco. This is enough water supply to meet the needs of over 20,000 households.

Central Texas is plagued with periodic drought and it is important to promote water conservation measures that reduce our demand for increased water supply.

Recycling of highly treated wastewater provides an additional valuable resource for a large number of identified reuse applications, including golf courses, landscape irrigation, industrial cooling water, and other industrial applications.

As Central Texas continues to grow, this project will continue to make reuse water available for the major construction project along Interstate Highway 35. The reuse water would be an ideal source of irrigation water for landscaping after construction and on an ongoing basis.

By locating Satellite Wastewater Plants in high growth areas, the local mayors in Waco, Hewitt, Woodway, Robinson, Bellmead, Lacy-Lakeview, and Lorena will all benefit from upgrades to their wastewater treatment systems.

Waco City Manager Larry Groth testified at a hearing last year in support of the bill, said "This bill is a win-win because it is not only the right thing to do for the environment; it's good for businesses that buy the recycled water from us at a cheaper cost."

In the future as water demands increase, additional reuse projects will be identified and implemented. As the population and water demands grow, uses of reclaimed water will increase, and our environment will continue to be protected. Wastewater discharges to our streams and rivers will be reduced and potential pollution problems avoided. Water reuse projects like this will become more and more valuable to cities and states.

Senator MURKOWSKI. Thank you. We appreciate you not only taking a few minutes this afternoon to be here, but for all the good work that you are doing on the House side, on not only some of these water issues that we have before us today, but the good work in other areas. Thank you.

Mr. DREIER. Please carry my greetings to the Governor as well, will you?

Senator MURKOWSKI. I will do that. Thank you.

As I mentioned, we do have a couple panels. Before we bring the first panel up, I would ask either of you, Senator Johnson or Senator Feinstein, if you would have any comments that you might like to make about the respective legislation before we proceed to the panels.

Senator Johnson.

**STATEMENT OF HON. TIM JOHNSON, U.S. SENATOR
FROM SOUTH DAKOTA**

Senator JOHNSON. I'll be very brief about this. Thank you, Madam Chairman, for convening today's hearing. I also want to thank Senator Feinstein for her extraordinary leadership on California-related water issues in general. I would like to extend a welcome to Deputy Commissioner Larry Todd and the Bureau of Reclamation and to the other witnesses who traveled here to provide us with their views on title XVI Water Reclamation and Reuse Program.

While we have not yet made use of the title XVI programs in South Dakota, I have no doubt that we will consider it in the future, given the growing pressure on our finite water resources. In South Dakota and across the West, increasing the efficient use of water is a key part of meeting future water demands, and with that in mind, I'm very interested in today's testimony, which builds on the testimony we heard during the title XVI oversight hearing in February.

At that time, we heard about the importance of a water reuse program to many water-stressed communities in the West. We also heard from the Congressional Research Service that the adminis-

tration has objected to most, if not all, of the title XVI projects that members have proposed for authorization during the 108th and 109th Congress. We also heard that the administration continues to recommend cutting the funding for title XVI projects by over 50 percent each year. Clearly, there is a disconnect between water managers in the West and the administration as to the value of this program, so I'm especially appreciative that you, Madam Chairman, and Senator Feinstein have teamed up to try to reform the program so that it may better secure administration support and better serve all people in the West. I look forward to working with you in that effort. I thank you again for your leadership on the subcommittee.

Senator MURKOWSKI. Thank you, Senator Johnson.

Senator Feinstein, again, I want to thank you for all of your work in this area and in working with us as we tried to craft something that I think will make a difference. So again, thank you.

**STATEMENT OF HON. DIANNE FEINSTEIN, U.S. SENATOR
FROM CALIFORNIA**

Senator FEINSTEIN. Madam Chairman, let me thank you, because Alaska is not eligible for title XVI and you have been just wonderful and gracious and I am very grateful. You have earned a big chip in my book, so thank you very much. Senator Johnson, thank you very much for your support. I'd also like to welcome the two Californians that are here to testify: Joe Grindstaff, the executive director of the CALFED water program and Rick Atwater, who is here on behalf of WaterReuse and also chief executive officer of the Inland Empire Utilities Agency.

In preparation for this hearing, Madam Chairman, I re-read the administration's testimony from our February 28 oversight hearing on title XVI, and administration review found that title XVI served the admirable goal of "proactively addressing water-related crises in the reclamation States," but faulted title XVI because the programs, goals and timelines are unclear. The title XVI bill that Madam Chairman and I have introduced makes quite clear the programs, goals and timetables.

Let me for a moment explain. There was a lot of discussion at our February hearing about how we needed more substantive criteria for evaluating which projects to authorize for Federal funding. We have included those substantive criteria, including the cost per acre-foot of water produced by the project, whether it can demonstrate regional benefits, whether it has environmental benefits, whether it demonstrates new technologies and whether it addresses Federal interests, such as helping to resolve endangered species issues. We thus ensure that title XVI project proposals will be evaluated against real, substantive criteria, which some projects will meet and some will not. We also put clear timelines in the project review process. The Secretary has 180 days to evaluate a proposal and submit a recommendation to Congress. If the Secretary doesn't act in the time period, Congress can move forward with its own review, therefore there is no stalemate.

I want to emphasize the importance of the clear, substantive criteria and the expeditious review process in this bill. There is not a large amount of money in the title XVI program and I, like you,

want to spend it building new water supplies, not just studying projects endlessly. There was just \$25 million appropriated for title XVI in 2006 and the administration asked for just \$10 million in 2007. So it makes no sense, from a cost-effectiveness perspective, to spend most of this limited funding on an elaborate review process of expensive studies and ranking proposals.

You have evidence of the West-wide appeal of title XVI before you today, with two Texas and two California projects. Drought strikes all of us in the West and we all need new water supplies. We need to spend our title XVI dollars, matching the 80-percent local contribution, to build projects on the ground. The two California bills before us today will provide some 300,000 acre-feet of new water annually. Put in context, that is nearly 40 percent of the 800,000 acre-foot annual reduction that California needs to reduce its use of the Colorado River from 5.2 million to 4.4 million acre-feet per year, for a Federal cost share of only 20 percent. That is a lot of reduced pressure on the Colorado River.

Not too long ago, in a speech delivered at a water reuse conference, John Keys, the recently retired Commissioner of Reclamation, called recycled water the last river to tap and I believe he is right. So I look forward to working with you, Madam Chairman, with my colleague, Senator Johnson, and with other members of this subcommittee to pass out this title XVI bill into law. I thank you so much for your excellent cooperation and leadership. Thank you.

Senator MURKOWSKI. Thank you.

With that, we will call up our first panel, consisting of Mr. Larry Todd, who is the Deputy Commissioner for Policy, Administration and Budget at the Bureau of Reclamation within the Department of the Interior. I might also add that we have received some written testimony on several bills that are before the subcommittee today and all that testimony will be made part of the official record. So with that, welcome to the subcommittee, Mr. Todd and if you would like to present your comments, please proceed.

STATEMENT OF LARRY TODD, DEPUTY COMMISSIONER FOR POLICY, ADMINISTRATION AND BUDGET, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

Mr. TODD. Thank you, Madam Chairman and members of the subcommittee. I am Larry Todd, Deputy Commissioner for the Bureau of Reclamation. Thank you for the opportunity to present the departmental views on the five bills before the subcommittee today.

I would first like to address S. 3639, which deals with reforms to the title XVI program and then address the various bills regarding new authorizations for title XVI. We applaud both you and Senator Feinstein for recognizing the need for legislation that would reformulate Reclamation's title XVI program.

The Department believes that this bill proposes improvements that would enable Reclamation to better administer the program. Because we believe that additional adjustments to the legislation are necessary to ensure that project assessment and authorization is prioritized to focus on areas of greatest need, the administration cannot support S. 3639 at this time.

We appreciate the commitment you have made to this issue and look forward to the opportunity to work with subcommittee to improve the legislation and find common ground on the necessary reforms to the title XVI program. We believe that the administration and Congress are of like minds in the need to reform this program and are confident that we can work out our remaining differences to develop reform legislation that addresses our mutual concerns.

Over the past several years, administration witnesses have consistently testified against authorization of new title XVI projects. This is not because we do not recognize the value of water reuse and recycling to the local communities; rather, this steadfast opposition has its origins in several issues that any reform legislation must address for this to be a viable, useful program that the administration can support.

No. 1, water reuse and recycling is fundamentally a responsibility for State and local interests. Federal involvement should be used to facilitate these projects in high priority areas where the Federal funds can have the greatest impact on addressing our long-term water challenges. Two, the program currently has inadequate controls on project development to allow a reviewer to ascertain whether the preferred alternative for a project is in the best interests of the taxpayer. Three, a proliferation of authorized projects without adequate criteria to judge them makes it difficult or even impossible to assess how any one project can contribute to meeting Reclamation's long-term goals. Four, the Department, the Office of Management and Budget and Congress all need to have a consistent, useful suite of performance-oriented metrics to help prioritize projects for funding. And five, the project development and review process must be workable for all parties, meaning that: A, it must have clear standards, criteria and processes for project sponsors; B, Reclamation and the Department and the Office of Management and Budget must have sufficient time and tools to evaluate proposed projects; and C, Congress needs a clear—

Senator MURKOWSKI. Mr. Todd, can you—I think your microphone is on, but can you just move it a little bit closer?

Mr. TODD. Yes. Excuse me.

Senator MURKOWSKI. It is difficult to hear you.

Mr. TODD. Is this better? There we go.

Senator MURKOWSKI. It is a little bit better.

Mr. TODD. That Congress needs a clear assessment of the merits and recommendations regarding each project. We have some concerns with S. 3639 as written and we would like to work with the committee further to reach common ground on these issues. Specifically, we are concerned with the technically and financially viable standard for review cited in the bill. While we support the bill's sponsors' intention to have the administration conduct a formal review and assessment of the proposed project prior to acting on additional projects, we are concerned that this standard weakens the level of review that title XVI projects will go through prior to the Secretary making a recommendation to Congress. Using this standard would remove any requirement that the project be evaluated as to its technical and economic feasibility. A feasibility analysis is necessary in order to develop accurate and well-defined cost estimates that demonstrate the degree to which the water recycling

project alternative is cost-effective, relative to other water supply alternatives.

We also have other concerns that are outlined in my written statement. We believe that the proposed legislation moves us in a direction of satisfactorily addressing these issues highlighted above, but that the changes proposed by S. 3639 are not sufficient. However, we would be pleased to work with the Committee to reach common ground to improve title XVI.

I will now turn to the new title XVI authorization bills that are before the subcommittee today. In summary, with the tremendous backlog of existing title XVI projects, and because of the concerns I've just noted, we cannot support the addition of new projects at this time. It would be our hope that we could reach common ground on how to reform title XVI before additional projects are authorized.

S. 3638 is a multi-part authorization for projects in southern California. We would note that title II, which would authorize the Secretary of the Interior to participate with the Western Municipal Water District in the design and construction of a water supply project known as the Riverside Corona Feeder, does not fit with the title XVI program. In addition, feasibility level studies have not yet been completed. Consequently, we cannot support this legislation.

H.R. 177 would authorize a series of additional title XVI projects in California. The Department would note that under sections 4 and 5, the legislation poses increases to the Federal cost share for projects. The Department does not believe there is justification to support assigning a cap higher than the current \$20 million for these projects and strongly opposes this provision.

H.R. 2341 would authorize a water reuse project in Austin, TX. A final feasibility report is scheduled to be completed by the fall of 2006. We recommend completing this cooperative feasibility study and evaluations of the project, including NEPA compliance, prior to congressional authorization for construction.

Finally, H.R. 3418 would authorize water reuse facilities in McLennan County, TX. The city of Waco has developed conceptual plans for this project but Reclamation has not reviewed this proposal nor conducted any studies. Until we have more information, we cannot comment on the merits of the project nor upon H.R. 3418 itself and are unable to support this legislation.

That concludes my testimony and I will be happy to answer any questions you might have.

[The prepared statement of Mr. Todd follows:]

PREPARED STATEMENT OF LARRY TODD, DEPUTY COMMISSIONER, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR

S. 3639

Madam Chairwoman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner of the Bureau of Reclamation. I am pleased to be here today to give the Department's views on S. 3639, a bill that makes amendments to Title XVI of the Reclamation Projects Authorization and Adjustment Act of 1992. We applaud both you and Senator Feinstein for recognizing the need for legislation that would reformulate the Bureau of Reclamation's Title XVI Water Reclamation and Reuse Program. The Department believes that this bill proposes improvements that would enable Reclamation to better administer the program. Because we believe that additional adjustments to the legislation are necessary to ensure that project assessment and authorization is prioritized to focus on areas of greatest need, the Administra-

tion cannot support S. 3639 at this time. We appreciate the commitment you have made to this issue and look forward to the opportunity to work with the Subcommittee to improve the legislation and find common ground on the necessary reforms to the Title XVI program. We believe that the Administration and Congress are of like minds in the need to reform this program, and are confident that we can work out our remaining differences to develop reform legislation that addresses our mutual concerns.

In 1992, Congress adopted, and the President signed, the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575). Title XVI of this Act, the Reclamation Wastewater and Groundwater Study and Facilities Act, authorized the Secretary to participate in the planning, design and construction of five water reclamation and reuse projects. The Secretary was also authorized to undertake a program to identify other water recycling opportunities throughout the 17 western states, and to conduct appraisal level and feasibility level studies to determine if those opportunities are worthy of implementation. The Bureau of Reclamation has been administering a program to fund these Title XVI projects since 1994. The funds are passed through from Reclamation to the project sponsor; Reclamation is in essence providing a grant to the project sponsoring entities for design and construction work.

In 1996, Public Law 104-266, the Reclamation Recycling and Water Conservation Act, was enacted. This law amended Title XVI and authorized the Secretary to participate in the planning, design and construction of 18 additional projects, including two desalination research and development projects. Since 1996, Title XVI has been amended several times, and now there are 32 projects authorized for construction in nine states.

With regard to the already existing authorizations, of the 32 specific projects authorized to date, 21 have received funding. Of these, nine have been included in the President's budget request. Including anticipated expenditures during FY 2006, approximately \$325 million will have been expended by Reclamation on these authorized projects by the end of the current fiscal year. It is estimated that as much as \$340 million could still be required in order to complete the Federal funding for all 21 projects, and another \$220 million in Federal funding could be needed to complete the remaining 11 authorized projects that have yet to receive funding.

As we stated in testimony before this Committee on February 28, 2006, Title XVI projects have demonstrated that water recycling can be a viable water supply alternative in water short urban areas of the West. However, we have also noted that we believe the Title XVI program has outgrown its original purpose of demonstrating new technology, and that fundamental reform is needed to ensure that the program produces meaningful results for the current water needs of the West. We believe that before projects are authorized for construction, their appraisal and feasibility studies should be completed, reviewed, and approved by the Department and the Office of Management and Budget and submitted to Congress. We also believe that as projects progress through appraisal and, if warranted, feasibility study phases, they should be rated against ranking criteria that would help Reclamation, Congress and the Administration prioritize projects. Such ranking criteria would address whether the project actually alleviates significant water conflict or shortage and whether it would add water supply in one of the likely crisis areas that we have focused on in efforts like the Water 2025 program. Additionally, we believe there is a need to clarify the research and demonstration project provisions of Title XVI. Given tight budget constraints it is particularly important that the Administration and the Congress have all the information necessary to identify the projects most worthy of federal investment. We would welcome the opportunity to work with the Committee to develop mutually acceptable language.

S. 3639 would direct the Secretary of the Interior to provide a technical and financial review of any water recycling project proposal submitted for consideration by a non-Federal project proponent. The purpose of the review would be to determine if the proposed project is "technically and financially viable." If the Secretary finds that the project is "technically and financially viable," the Secretary would then be required—with 180 days—to submit his findings to Congress along with a recommendation as to whether the project should be authorized for construction. We support the bill sponsors' intention to have the Administration conduct a formal review and assessment of a proposed project prior to acting on legislation to authorize additional Title XVI projects. If project authorizations cease to precede the formal review and assessment of a proposed project, this would be an important improvement to the manner in which the Title XVI program has been administered to date.

However, we are concerned that this bill weakens the level of review that Title XVI projects will go through prior to the Secretary making a recommendation to Congress. S. 3639 only requires that a project proponent demonstrate that its

project is “technically and financially viable.” The bill defines a project as “technically and financially viable” if it “meets generally acceptable engineering, public health, and environmental standards,” can obtain all necessary permits, and has a project sponsor that is capable of providing its share of the costs. Using the viability standard contained in this bill removes any requirement that the project be evaluated as to its technical and economic feasibility. A feasibility analysis, as described in Reclamation’s “Guidelines for Preparing, Reviewing, and Processing Water Reclamation and Reuse Project Proposals Under Title XVI of Public Law 102-575,” is necessary in order to develop accurate and well defined cost estimates. This level of cost definition is required to demonstrate the degree to which the water recycling project alternative is cost-effective relative to other water supply alternatives that could be implemented by the local project sponsor. It is also necessary to determine the economic benefits that are to be realized after project implementation. The Department believes that it would not be sustainable to make decisions on future project authorizations that would commit limited Federal funds to construct additional water recycling projects based on whether or not a project is simply capable of being constructed.

The Department believes, as we think the sponsors of the bill do, that a new model of reviewing project proposals is needed, provided that a new model enhances the Administration and Congress’s ability to prioritize federal investment and does not exacerbate the problem of project authorizations preceding proper review and analysis.

An important need that S. 3639 does not sufficiently address is in the area of project eligibility criteria and funding prioritization. S. 3639 would require the Secretary to review any and all project proposals that are received, rather than a select group of proposals for projects that meet minimum standards. In the testimony we presented during the February 28, 2006, hearing before this committee, we stated that any restructuring of the Title XVI program should aim to create a framework under which Title XVI projects will be screened to ensure they complement Reclamation’s mission, rather than diminishing Reclamation’s ongoing core programs. S. 3639 does not include such a framework.

A meaningful reform bill must authorize Reclamation to use uniform assessment criteria to identify the best projects for funding. The practice of project authorization prior to the completion and approval of a study demonstrating that a project is technically and economically practical is a poor practice and has led to the backlog noted previously.

The Department is also concerned about the provisions in S. 3639 that would eliminate the Secretary’s authority to identify and investigate new water recycling opportunities. Under the existing planning authorities of Title XVI, Reclamation has provided financial and technical assistance to local agencies to conduct over a dozen appraisal or feasibility studies for projects not yet authorized for construction. The cities of Austin and Brownsville, Texas, Santa Fe, New Mexico, and Desert Hot Springs, California, are just a few of the many communities that have benefited from the general planning authorities afforded Reclamation under Title XVI. The elimination of the Secretary’s authority to conduct such studies effectively reduces the Secretary’s range of involvement to that of simple participation in the project review process, and only if that participation is requested by a non-Federal project sponsor.

Over the past several years, Administration witnesses have consistently testified against authorization of new Title XVI projects. This is not because we do not recognize the value of water reuse and recycling to local communities. Rather, this steadfast opposition has its origins in several issues that any reform legislation must address for this to be a viable, useful program that the Administration can support:

- Water reuse and recycling is fundamentally a responsibility of state and local interests. Federal involvement should be used to facilitate these projects in high priority areas where the federal funds can have the greatest impact on addressing our long-term water challenges.
- The program currently has inadequate controls on project development to allow a reviewer to ascertain whether the preferred alternative for a project is in the best interest of the taxpayer.
- A proliferation of authorized projects, without adequate criteria to judge them, makes it difficult or even impossible to assess how any one project can contribute to meeting Reclamation’s long-term goals.
- The Department, the Office of Management and Budget, and the Congress all need to have a consistent, useful suite of performance-oriented metrics to help prioritize projects for funding.

- The project development and review process must be workable for all parties—meaning that it must have clear standards, criteria, and processes for project sponsors, that Reclamation, the Department, and the Office of Management and Budget must have sufficient time and tools to evaluate proposed projects, and that Congress needs a clear assessment of the merits and recommendations regarding each project.

Madam Chairwoman, the Department supports efforts to increase local water supplies in the West through the implementation of water recycling projects. However, the Department believes that Title XVI needs to be a focused program that will produce results consistent with Reclamation's mission of diversifying water supplies and proactively addressing water-related crises in the Reclamation States. We believe that the proposed legislation moves us in the direction of satisfactorily addressing the five issues highlighted above, but that the changes proposed by S. 3639 are not quite sufficient. However, we would be pleased to work with the Committee to reach common ground to improve Title XVI.

Madam Chairwoman, this concludes my testimony. Thank you for the opportunity to comment on S. 3639. I would be happy to answer any questions at this time.

S. 3638

Madam Chairwoman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner of the Bureau of Reclamation. I am here today to present the views of the Department of the Interior on S. 3638, a bill to authorize water supply, reclamation reuse and recycling and desalination projects in Southern California. S. 3638 would amend Title XVI, the Reclamation Wastewater and Groundwater Study and Facilities Act (P.L. 102-575) to include design, planning, and construction authority for several regional projects. For reasons described below, the Department does not support S. 3638.

S. 3638 as written would "encourage" the Secretary of the Interior to participate in projects to plan, design, and construct water supply projects, and amend Title XVI to authorize the design, planning, and construction of projects to treat impaired surface water, reclaim and reuse impaired groundwater, and provide brine disposal in the State of California.

Title I of the bill would authorize the Inland Empire recycling project with a Federal cost share not to exceed 25 percent, and a funding authorization of \$20 million. Title I of the bill would also authorize the Cucamonga County Water District Pilot Satellite Recycling Plant with a Federal cost share not to exceed 25 percent, and a funding authorization of \$10 million. With regard to the Inland Empire Regional Water Recycling Initiative, Reclamation reviewed the project as part of the CALFED/Title XVI review and found the project while close to meeting the requirements still lacked 3 of the 9 requirements needed to determine feasibility. Absent these items, Reclamation could not determine the feasibility of the project. This does not mean the project is not feasible, but rather that until the three remaining items are completed, Reclamation cannot provide a feasibility determination. It is expected that upon completion of the work covered by a cooperative agreement between Inland Empire Utilities Agency and Reclamation, funded in the FY 2006 appropriation, the missing items will be addressed and Reclamation can make a final determination on the project's feasibility. Until the feasibility study is completed, the Department cannot support authorization of this project.

With regard to the Cucamonga Valley Water Recycling Project, Reclamation also reviewed this project as part of the CALFED/Title XVI review and found that the data provided did not meet 5 of the 9 requirements used to determine feasibility. Absent these items, Reclamation could not determine the feasibility of the project. This does not mean the project is not feasible, but rather that until the five remaining items are completed, Reclamation cannot provide a feasibility determination.

Title II, Section 202 of the bill would authorize the City of Corona Water Utility, California Water Recycling and Reuse Project. Reclamation also reviewed this project as part of the CALFED/Title XVI review and found that the data provided did not meet 8 of the 9 requirements used to determine feasibility. Based on the technical information provided, Reclamation could not determine the feasibility of the project. This does not mean the project is not feasible, but rather that until the remaining items are completed, Reclamation cannot provide a feasibility determination.

Title II, Section 202 of the bill would also authorize the Yucaipa Valley Regional Water Supply Renewal Project. Reclamation has not been in consultation with the local district nor received any copies of a feasibility study to support the authorization of this project. Without a proper analysis to make sure this project meets appropriate federal guidelines for consideration for construction authorization, we can-

not support Reclamation's participation in the planning, design and construction activities.

With regards to all of the Title XVI projects proposed in S. 3638, as the Department has consistently stated in prior testimony, it does not believe it is prudent to authorize new Title XVI projects while a major backlog of projects already exists. The Department also believes enactment of this legislation authorizing new Title XVI construction projects is likely to place an additional burden on Reclamation's already tight budget, and could potentially delay the completion of other currently authorized projects. With the tremendous backlog of existing Title XVI projects, we cannot support the addition of new projects at this time. We note that of the 32 specific projects authorized under Title XVI to date, 21 have received funding. Three of the projects have been funded to the full extent of their authorization. Two more should be fully funded in 2006.

Title II would also authorize the Secretary of the Interior to participate with the Western Municipal Water District in the design and construction of a water supply project known as the Riverside-Corona Feeder. This is not a project that fits within the Title XVI program. This Title provides a new authorization for Federal funding for this project of 35 percent of the total project cost or \$50 million, whichever is greater.

This project would withdraw water from San Bernardino Valley groundwater aquifers that are replenished during wet years from local runoff, regulated releases from Seven Oaks Reservoir, and water from the State Water Project. It would consist of a number of wells and connecting pipelines, which would deliver up to 40,000 acre-feet of water annually to communities in western Riverside County. Project benefits include local drought protection, better groundwater management, and reduced dependence on imported water.

The economic and efficient use of water is a priority for the Department of Interior. The Department strongly encourages local water supply, recycling and desalination efforts. Partnering with state and local governments is in accord with the Secretary's Water 2025 framework for anticipating water supply crises and preventing them through communication, consultation and cooperation, in service of conservation.

Madam Chairwoman, the Department supports the type of resourceful utilization of local water supplies this bill calls for and the potential for reducing the use of imported supplies from the Colorado River and Bay-Delta. However, we cannot support S. 3638 concerning the Riverside-Corona Feeder. First, the language establishing the federal share of the project costs needs to be clarified to clearly set a maximum federal cost share. Second, we understand that feasibility level studies have not yet been completed for this project. Without a proper analysis that adheres to the "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies," and which otherwise meets appropriate federal guidelines for consideration of project authorization, we cannot support Reclamation's participation in design and construction activities.

Reclamation is currently in consultation with the Western Municipal Water District on the project and providing them guidance on their feasibility analysis and the appropriate level of NEPA compliance that will be needed. Nevertheless, we remain concerned that this is neither a Title XVI project nor is it a project with any nexus to an existing Reclamation project.

Thank you for the opportunity to convey our concerns on this legislation, and I am happy to take any questions.

H.R. 177

Madam Chairwoman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner of the Bureau of Reclamation. I am pleased to be here today to give the Department's views on H.R. 177, the Santa Ana River Water Supply Enhancement Act of 2005. The Department does not support this bill.

In 1992, Congress adopted, and the President signed, the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575). Title XVI of this Act, the Wastewater and Groundwater Study and Facilities Act, authorized the Secretary to participate in the planning, design and construction of five water reclamation and reuse projects. The Secretary was also authorized to undertake a program to identify other water recycling opportunities throughout the 17 western states, and to conduct appraisal level and feasibility level studies to determine if those opportunities are worthy of implementation. The Bureau of Reclamation has been administering a grant program to fund these Title XVI projects since 1994.

In 1996, Public Law 104-266, the Reclamation Recycling and Water Conservation Act, was enacted. This law amended Title XVI and authorized the Secretary to par-

ticipate in the planning, design and construction of 18 additional projects, including two desalination research and development projects. Since 1996, Title XVI has been amended several times, and now there are 32 projects authorized for construction in nine states.

The Department recently testified to this Committee regarding the need for reforms to the Title XVI program. As noted in our testimony, the Department continues to believe that fundamental reform is needed to ensure that the program produces results for the current needs of the West.

With respect to H.R. 177, this bill would amend Title XVI, the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Prado Basin Natural Treatment System Project, to authorize the Secretary to carry out a program to assist agencies in projects to construct regional brine lines in California, to authorize the Secretary to participate in the Lower Chino Dairy Area desalination demonstration and reclamation project, and for other purposes.

Section 2 of the bill authorizes the Secretary of the Interior, in cooperation with the Orange County Water District, to participate in the planning, design, and construction of the natural treatment systems and wetlands for the flows of the Santa Ana River, California, and its tributaries into the Prado Basin. Section 2 of the bill authorizes an appropriation of \$20,000 to carry out this function.

Section 3 of the bill authorizes the Secretary of the Interior, under Federal reclamation law and in cooperation with units of local government, to assist agencies in projects to construct regional brine lines to export the salinity imported from the Colorado River to the Pacific Ocean.

Section 4 of the bill authorizes the Secretary of the Interior, in cooperation with the Chino Basin Watermaster, the Inland Empire Utilities Agency, and the Santa Ana Watershed Project Authority, acting under Federal Reclamation laws, to participate in the design, planning, and construction of the Lower Chino Dairy Area desalination demonstration and reclamation project.

With regards to sections 2, 3 and 4, as the Department has consistently stated in previous testimony, it does not believe it is prudent to authorize new Title XVI projects while there is a major backlog of projects that already exist. We note that of the 32 specific projects authorized under Title XVI to date, 21 have received funding. Three of the projects have been funded to the full extent of their authorization. Two more should be fully funded in 2006.

The Department also believes enactment of this legislation authorizing new construction projects is likely to place an additional burden on Reclamation's already tight budget.

In addition to the proposed three projects, the Department is also concerned that under section 4, the legislation proposes a cost sharing of 25 per cent not to exceed \$50.0 million. The Department does not believe there is justification to support assigning a cap higher than the current \$20.0 million for this project, and strongly opposes this provision.

Section 5 of the bill amends Section 1631(d) of Title XVI by adding a new paragraph (3) that would amend section 1624 by increasing the Federal share of the costs of the project authorized by Section 1624, Phase 1 of the Orange County Regional Water Reclamation Project.

Section 5 proposes deviation from the existing Title XVI Section 1631(d)(1) statute capping the federal cost share at \$20.0 million. If enacted, the new section would increase the federal cost share to approximately \$52.0 million. The Department does not believe there is justification to support raising the cap for this project. Increasing the funding for this project would reduce the ability of the Federal government to provide funds for other Title XVI projects.

Section 6 of the bill authorizes a Center for Technological Advancement of Membrane Technology and Education to be established at the Orange County Water District located in Orange County, California. Section 6 of the bill authorizes an appropriation of \$2 million for each of fiscal years 2006 through 2011 for this purpose.

Reclamation currently supports several research efforts that are assisting in the development and advancement of membrane technologies. These efforts include; the Water Quality Improvement Center, located in Yuma, Arizona, the Tularosa National Center for Groundwater Desalination located in Tularosa, New Mexico, and as directed by Congress, funding assistance is provided to the Water Reuse Foundation to award research grants to support advanced water treatment research and technology transfer. Reclamation also provides research funding for the development and advancement of membrane technologies through our Desalination Water Purification Research and Development Program.

The Bureau of Reclamation and other Federal agencies are currently working to determine the appropriate role, involvement and level of federal funding for addi-

tional advanced water treatment systems research. Madam Chairwoman, the Department is not familiar with the specific research that would be supported by this Center and the specific activities to which the funding would be applied. The Department is therefore not able to determine at this time if the Center as proposed will add value to those activities already being supported through Federal funds.

Madam Chairwoman, this concludes my testimony. Thank you for the opportunity to comment on H.R. 177. I would be happy to answer any questions at this time.

H.R. 2341

Madam Chairwoman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner of the Bureau of Reclamation. I am here to present the views of the Department of the Interior on H.R. 2341, concerning the City of Austin water reclamation project in the State of Texas. While the Department encourages local water recycling efforts, we must oppose authorizing this additional water recycling project for the reasons described below.

H.R. 2341 would authorize the Secretary of the Interior to participate in the design, planning, construction of, and land acquisition for, the City of Austin water reclamation project in the State of Texas. The authority proposed in H.R. 2341 is an amendment to the Reclamation Projects Authorization and Adjustment Act, (Public Law 102-575), which limits the Federal share of project costs to 25 percent of the total project costs and restricts the Secretary from providing funding for the operation and maintenance of this project.

In 1992, the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575) became law. Title XVI of this Act, the Reclamation Wastewater and Groundwater Study and Facilities Act, authorized the construction of five water reclamation and reuse projects. In addition, the Secretary was authorized to conduct research and to construct, operate, and maintain demonstration projects. The Bureau of Reclamation has been administering a cost share program to fund these Title XVI activities since FY 1994.

In 1996, Public Law 104-266, the Reclamation Recycling and Water Conservation Act, was enacted. This Act amended Title XVI and authorized the Secretary to participate in the planning, design, and construction of 18 additional projects, including two desalination research and development projects. Since 1996, Title XVI has been amended several times and other specific pieces of legislation have been enacted such that there now are 32 projects authorized for construction in nine states, not including newly authorized projects in the Hawaii Water Resources Act of 2005.

The Department opposes authorizing additional construction projects prior to completion of feasibility studies to determine whether these particular projects warrant Federal funding. In general, Reclamation places priority on funding new projects that: (1) are economically justified and environmentally acceptable in a watershed context; (2) are not eligible for funding under another Federal program; and (3) directly address Administration priorities for the Reclamation program, such as reducing the demand on existing Federal water supply facilities.

It should be noted that the Department, through the Bureau of Reclamation, has completed an appraisal study of this proposed project in cooperation with the City of Austin. As a result of the appraisal investigation, a draft Feasibility Report and Environmental Assessment was prepared by the City and reviewed by Reclamation in December 2005. The drafts are currently being revised based on extensive agency comments and in accordance with Reclamation's Title XVI criteria. The final planning reports are scheduled to be completed by the fall of 2006. H.R. 2341 would authorize construction of the initial phases of this 27 year, \$158 million project to convey recycled water to customers. This planning work would afford the opportunity for Reclamation to determine if the proposed actions match Title XVI authority and objectives. This feasibility study is authorized under the existing provisions of P.L. 102-575, Title XVI. We recommend completing this cooperative feasibility study to prepare the necessary analyses and evaluations of the project, including National Environmental Policy Act (NEPA) compliance, prior to congressional consideration of authorization for construction.

The Department also opposes enactment of this legislation because authorizing new construction projects is likely to further burden Reclamation's already strained budget. At current funding levels, it will take Reclamation more than 10 years to complete funding of the currently authorized Title XVI projects.

We would bring the attention of the Committee to the fact that this project goes beyond the original purpose of Title XVI, which was to support development of projects that demonstrated the feasibility of water reuse and recycling. Since the viability of this technology has been demonstrated, additional water reuse and recy-

cling infrastructure most clearly falls within the purview of state and local governments which have already taken the lead in project development.

Finally, the Department opposes enactment of the provision in H.R. 2341 authorizing land acquisition prior to completion of the feasibility study. Federal authorization for land acquisition should await the outcome of the feasibility study and the determination that such lands are legitimate project components and necessary for project implementation.

In summary, the Department encourages local water recycling efforts, and is engaged in numerous water reuse and recycling projects throughout the West. However, for the reasons provided above, the Department cannot support authorizing this new construction request.

Thank you for the opportunity to comment on H.R. 2341. This concludes my statement and I would be happy to answer any questions.

H.R. 3418

Madam Chairwoman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner of the Bureau of Reclamation. I am pleased to present the views of the Department of the Interior on H.R. 3418, concerning the Central Texas Water Recycling and Reuse Project in the State of Texas. The Administration cannot support this bill.

H.R. 3418 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575), to authorize the Secretary of the Interior, in cooperation with the City of Waco and other participating communities, to participate in the design, planning, and construction of permanent facilities to reclaim and reuse water in McLennan County, Texas.

In 1992, the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575) became law. Title XVI of this Act, the Reclamation Wastewater and Groundwater Study and Facilities Act, authorized the construction of five water reclamation and reuse projects. In addition, the Secretary was authorized to conduct research and to construct, operate, and maintain demonstration projects. The Bureau of Reclamation has been administering a cost-share program to fund these Title XVI activities since FY 1994.

In 1996, Public Law 104-266, the Reclamation Recycling and Water Conservation Act, was enacted. This Act amended Title XVI and authorized the Secretary to participate in the planning, design, and construction of 18 additional projects, including two desalination research and development projects. Since 1996, Title XVI has been amended several times and other specific pieces of legislation have been enacted such that there now are 32 projects authorized for construction in nine states.

While the Department strongly encourages local water recycling efforts, we oppose authorizing this additional water recycling project for the reasons described below.

The Department opposes authorizing additional construction projects prior to completion of feasibility studies to determine whether these particular projects warrant Federal funding. In general, Reclamation places priority on funding new projects that: (1) are economically justified and environmentally acceptable in a watershed context; (2) are not eligible for funding under another Federal program; and (3) directly address Administration priorities for the Reclamation program, such as reducing the demand on existing Federal water supply facilities.

The City of Waco has developed conceptual plans for this project. However, Reclamation has not reviewed this proposal, nor conducted an appraisal study. An appraisal study will be needed to determine if the preliminary work initiated by the city meets Reclamation's requirements and to evaluate the potential for a feasibility study according to Title XVI criteria. In that respect, until we have more information, we cannot comment on the merits of the project itself and therefore cannot support H.R. 3418.

The Department also opposes enactment of this legislation because authorizing new construction projects is likely to further burden on Reclamation's already strained budget. At current funding levels, it will take Reclamation more than 10 years to complete funding of the currently Title XVI authorized projects.

We would bring the attention of the Committee to the fact that this project goes beyond the original purpose of Title XVI, which was to support development of projects that demonstrated the feasibility of water reuse and recycling. Since the viability of this technology has been demonstrated, additional water reuse and recycling infrastructure most clearly falls within the purview of state and local governments which have already taken the lead in project development.

In summary, the Department encourages local water recycling efforts. However, for the reasons provided above, the Department cannot support authorizing this new construction request.

Thank you for the opportunity to comment on H.R. 3418. This concludes my statement and I would be happy to answer any questions.

Senator MURKOWSKI. Thank you, Mr. Todd. I think your comments about the four additional water projects that we have up before us, your statement that the Bureau can't support them until we reform title XVI, goes to the importance of the legislation that Senator Feinstein and I have been working on. I appreciate your statements that you intend to continue to work with us on the remaining differences that relate to S. 3639.

In listening to your comments and also in reading your testimony that was submitted, I have to wonder if perhaps it is just that we are not necessarily defining, but choosing the terminology. In our legislation, we speak to the technical and financial viability. In the past, we've called it feasibility. Whichever wording you choose, ultimately you'd like to think you're getting to the same place in terms of determination as to whether or not you've got a project that works. So I would like to think that we can work through the issues and perhaps some of the semantics that might be bogging us down because, as you indicate, and we would certainly agree, this is too important to not move forward.

I guess I would ask for your support as well as knowing that you will be in a position to provide to us the people within your Department that we can be working with, in the very immediate future, to see if we can't work out some of these differences.

Mr. TODD. I believe that the terminology has been a problem and we're very willing to work with you on that and provide individuals to work with your staff.

Senator FEINSTEIN. I'm sorry. I can't hear you.

Senator MURKOWSKI. Just move that right up close.

Mr. TODD. I do believe that the terminology is a problem, but I think that we can work those definitions out. And certainly, we would be willing to provide the necessary staff to work with your committee staff to work out these issues.

Senator MURKOWSKI. We would like to do that in a relatively expedited timeframe here, if we can. Earlier this year, the Bureau had given us a copy of the findings of the CALFED title XVI review. The Committee had asked for this report and as part of that document, the Bureau made a determination on whether a project is feasible by evaluating the title XVI projects relative to nine specific criteria that had been laid out. Is it the position of the Bureau, I guess, to conclude that the project is feasible if it meets these nine criteria that are set out?

Mr. TODD. Yes, I believe that is our position. We have these guidelines for preparing, reviewing and processing water reclamation and reuse project proposals under title XVI and that is on our Web site. The nine steps are right here in the feasibility section. And certainly, if those are met, we believe that it would meet the criteria for being feasible.

Senator MURKOWSKI. So we ought to be able to take these nine criteria and as long as they are part of the technical viability and the financial capability, we ought to be able to get from where you are with your nine criteria to where we are with our language and get to the same point, which is a recommendation that could be

made to the Secretary as to the viability, feasibility—whatever you want to call it—of the project; is that correct?

Mr. TODD. We believe so. As a matter of fact, one of the steps in here, one of the criteria is the financial capability and it is the same as, I think, in your bill.

Senator MURKOWSKI. So it sounds like we should be able to work through these issues. I look forward to doing that with you and your staff as well.

Mr. TODD. I believe so.

Senator MURKOWSKI. OK. Senator Johnson.

Senator JOHNSON. Mr. Todd, your testimony on S. 3639 states that before projects are authorized for construction, their appraisal and feasibility studies should be completed, reviewed, and approved by the Department and OMB and then submitted to Congress. Now it is my understanding that Reclamation is not actively supporting a significant number of appraisal and feasibility studies. How much of the Department's 2007 budget request of \$10.1 million for title XVI projects is committed to reviewing and completing appraisal and feasibility studies for potential project authorizations?

Mr. TODD. Well, I don't have that figure on me. We can get that to you. I believe, though, that most of the funding level is going directly to fund construction of projects.

Senator JOHNSON. All right. But if you could get that dollar number back—

Mr. TODD. We will get that for you.

Senator JOHNSON [continuing]. That would be useful. Because, obviously, if we are not going to do the appraisal and feasibility studies, then things become more difficult. Your testimony on the specific project authorizations sets forth an administrative position that the title XVI program was intended to be a demonstration program and that it has fulfilled its purposes. You then go on to state that additional water reuse and recycling infrastructure most clearly falls within the purview of State and local governments that have already taken the lead in project development. That position seems to convey that the administration does not support continuing the title XVI program. How do you reconcile that with your other statements that you, in fact, want to work with the committee on title XVI reform?

Mr. TODD. I think the statement that the water supply for local communities is a local responsibility—now, where the Federal Government can fit in is helping and assisting in areas where we have critical water areas, and in particular, those that are particular water challenges for the Reclamation projects themselves. So, I don't think at all that we do not believe that these water reuse projects are bad projects at all. I think they are all good. But in fact, it is when does the Federal Government step in and actually assist in these. I believe that issue—and we have to have the right criteria in order to figure that out and be able to recommend when those taxpayer dollars are helping fund those projects.

Senator JOHNSON. But you see it then, that so long as we can come together on criteria—and I appreciate your nine criteria that your Department has worked up, working with this committee, but

so long as we can come together on criteria, you see—and the Department's view is that title XVI ought to be an ongoing program?

Mr. TODD. Yes.

Senator JOHNSON. And not simply a one-time-only demonstration project, but, in fact, a continuing program of a Federal, State, and local partnership kind of project?

Mr. TODD. That's correct. Now, it has evolved and largely—a lot of the techniques have been developed, that's true and demonstrated. But as long as we can get to the right criteria and get management of the program, then yes, that's where we would be. We would see it as a program.

Senator JOHNSON. Very good. I yield back.

Senator MURKOWSKI. Senator Feinstein.

Senator FEINSTEIN. Thank you very much, Madam Chairman.

Mr. Todd. I've just read your statement where you take on a number of California projects, specifically the Inland Empire Recycling Project, the Cucamonga Valley Water Recycling project, the City of Corona Water Utility, the Yucaipa Valley Regional Water Supply, and the Riverside Corona Feeder, all of which you say have shortfalls in meeting some of the requirements; right?

Mr. TODD. That's true.

Senator FEINSTEIN. Now, my question is this: What process do you recommend to reconcile this to be able to get a clear understanding of what you are asking for, so that these projects can get approved?

Mr. TODD. Well, the current nine points that we are using, we believe, are very useful for really what is out there right now and what we measure projects against. For instance, on Inland Empire, I'm told that we are very close to assembling the information or that they are close to assembling the information into a feasibility report and we have a cooperative agreement with them to do that.

Senator FEINSTEIN. Then it is likely that they will be approved?

Mr. TODD. Pardon?

Senator FEINSTEIN. It is likely that that project will be approved?

Mr. TODD. Well, I won't know until we get the report in front of us, but I believe there is a lot of information out there and we do believe that they are close. We believe it is in assembly, putting together the information that is there. Cucamonga is similar, although there were a few more things that they needed to do. So I think the feasibility nine points is right now the place where we need to start. And I don't necessarily—

Senator FEINSTEIN. Well, is there a misunderstanding from these projects, as to what the nine points are?

Mr. TODD. There could be some communication problems. I wouldn't necessarily deny that. But as I have referred to this—

Senator FEINSTEIN. I'd be very happy to convene a meeting between you and the representatives of these projects and go over the nine points and see that there is no misunderstanding.

Mr. TODD. We'd definitely do that. Certainly.

Senator FEINSTEIN. All right. I'd offer to do that then. I'll set it up, hopefully as soon as possible, and see if we can't sort of clear the decks. Now let me ask you a couple of questions about the national bill. Would you be willing to sit down with Senator Murkow-

ski's staff, and my staff, and other key staff to work through your concerns on the national bill during the month of August?

Mr. TODD. Oh, I think so, yes. Absolutely.

Senator FEINSTEIN. So that we have it done by the end of the month? Would that be agreeable with you, Madam Chairman and Senator Johnson, so that we might take a look at that?

Senator MURKOWSKI. Absolutely.

Mr. TODD. We'd make every effort to do that.

Senator FEINSTEIN. Because we thought our criteria for reviewing these projects is pretty good: the cost per acre-foot, the regional benefits, the environmental benefits, the new technologies, the cost-effectiveness compared to other alternatives, and the Federal interest quotient. If there are other substantive criteria that you think ought to be there, as long as they are not unduly cumbersome, I think it would be a good idea to know what that is. So those meetings might be able to turn that up.

Let me say very clearly, one of my concerns about an elaborate, convoluted review process that goes on and on is that the dollars are so limited and if we can spend them on projects that deliver more water bang for the buck, we're all better off than we are on endless review. Would you agree with that?

Mr. TODD. Yes, I would agree.

Senator FEINSTEIN. Well, then we ought to be able to get there. That's my hope. The two California bills before us today create 300,000 acre-feet of new water. Can you suggest a more cost-effective way to come up with 300,000 acre-feet of new water for the growing cities in the West?

Mr. TODD. Well, I certainly have not read any of the background material and studies. No, I don't have any kind of information like that.

Senator FEINSTEIN. See, I think this is the most cost-effective way we can go. And the Federal investment is so low, in the main, the communities are doing 80 percent of it and I think it is so important—I'm puzzled by the fact that Reclamation doesn't want any new projects, because the new projects may very well be more cost-effective and deliver more water than some of the older projects.

Mr. TODD. Let me speak to the support. It is a matter of backlog. We've got a tremendous backlog right now of projects that we are funding. We have about 21 of them, I believe, and in order to finish those projects, it's going to be over \$300,000 million. At the current rate, it's just a tremendous backlog in order to get to finishing any of these that we already have on the books. That's not counting the 11 or so projects that are already authorized that haven't received any funding.

Senator FEINSTEIN. Let me ask you this. We have a specific sunset provision in our national bill and it would sunset a specific project authorization if they received no funding for 10 years. Is that helpful in addressing your concerns?

Mr. TODD. I believe a sunset provision would be helpful.

Senator FEINSTEIN. How many projects would sunset if that were the provision?

Mr. TODD. Well, I'd have to get you that information. I don't—I didn't bring that kind of analysis with me, but we would certainly give that to you.

Senator FEINSTEIN. OK, because it seems to me——

Mr. TODD. Right now, for instance——

Senator FEINSTEIN [continuing]. There has to be some way of moving this process.

Mr. TODD. We would definitely work with the committee staff in order to do that.

Senator FEINSTEIN. We have California jurisdictions, you know, clamoring for attention in the Reclamation area and it seems to be the one area where local jurisdictions really believe they can make some headway.

Mr. TODD. We believe so, too. We believe that these are good projects. That's not the sticking point. The sticking point is about criteria and about the backlog and the funding levels and how we deal with that, management of that issue, those two issues.

Senator FEINSTEIN. OK, then what I would like to do is, on the five California projects that you mention in your written remarks, I'd like to convene a meeting next week and get the representatives from those projects, the key people back here and let's all sit down together and go over them, see where we are and we'll all be in the same room and hear the same thing. Does that make sense?

Mr. TODD. We would commit to that.

Senator FEINSTEIN. OK, we'll set it up then, for next week. I thank you very much.

Mr. TODD. Thank you.

Senator MURKOWSKI. Thank you. We will be working with you then.

I think, Senator Feinstein, your point of making it happen during the August recess so that we can get it done, so that we can have something to move on when we come back after the recess is important. You mentioned the backlog and how we deal with that, and the reality of where we are is when you have these projects that keep getting authorized but no funding, it's almost, "Where do you start first?" And as you've mentioned, you may have new projects coming on that might have a higher benefit to a higher number of people, with better technology, but you're put down at the bottom of a list that is seemingly endless, and because it looks that bad, nobody can even get started with it, so you're doomed before you even get going. It seems that we've got to have a process where you can kind of clear out some of the stuff that just doesn't have that viability and figure out a way to move forward.

Mr. TODD. We agree wholeheartedly with that statement. Absolutely.

Senator MURKOWSKI. Are there any other questions of Mr. Todd?

Senator JOHNSON. Let me only comment that the underlying problem here has been the allocation of funding to the BLR for these projects. We've got several in my home State that have been stretched out. In fact, we've had to come back and re-authorize a later completion date because the funding has been so deficient, compared to what their construction capability is, that the projects are costing more and more money and it stretches out a great deal of time to the disadvantaged people who need the water and to the taxpayers both. So if we're going to have these water project programs, we're going to have to do a far better job of creating a funding stream that is adequate to what it is we're attempting to do;

otherwise, we're going to wind up with very worthy projects getting nothing. We're going to wind up with projects that are stuck in a very slow walk toward their completion, which is immensely costly to the taxpayers at both the State and Federal level. So we're going to have to do a much better job working with our friends at OMB to get a much more adequate level of funding so that the BLR isn't stuck with this world of backlogged projects that grow costlier by the day and then an inability to address new projects that may be even more worthy than the ones that are under construction, for all we know. But it is going to come down to a question of budget priority, and so far, this Congress hasn't done a very good job in that regard, nor has the White House.

Senator MURKOWSKI. Mr. Todd, thank you.

Mr. TODD. Thank you.

Senator MURKOWSKI. Let's call forward the second panel. We have Mr. Joe Grindstaff, the director of the California Bay-Delta Authority out of Sacramento. We've got Chris Lippe, the director of the city of Austin Water Utility out of Austin, TX, along with Mr. Richard Atwater, who is chair of the National Legislative Committee for the WaterReuse Association, and Mr. Tom Ray, an engineering consultant from the city of Waco in Texas. Gentlemen, good afternoon. Do we have Mr. Ray? OK. All right.

Since Mr. Ray is the last one to get here, we'll start with you, Mr. Grindstaff. Why don't we start with you then and just proceed to the right. Welcome to the committee. Thank you for traveling the distances that you have to be with us to provide your comments.

STATEMENT OF P. JOSEPH GRINDSTAFF, DIRECTOR, CALFED BAY-DELTA PROGRAM, SACRAMENTO, CA

Mr. GRINDSTAFF. Thank you very much. I will assume that my written remarks are included. Thank you very much for being here, Senator Feinstein. We have worked together quite a bit on CALFED. I wanted to talk today specifically about water use efficiency and recycling, because that is really key to the future of water in California and indeed, for all the West, probably for the entire world.

As we think about water, the projects that are before you today in California have ties both to CALFED, because water supplies go from northern California down to the Inland Empire and to the Colorado River. There are links to the Federal nexus that are incredibly important. As I listened to arguments about money, I also think, to some extent, there is a false economy here, because if we have a drought and we have major economic impacts, who is going to step up? USDA and the Federal Government are going to be called to come help subsidize the impacts of a drought. It seems to me that this is one of the best ways to proactively avert the problem.

Just a couple of years ago, we were forced as a State to decrease our take, as Senator Feinstein pointed out, from the Colorado River. We decreased it by 800,000 acre-feet a year. We did that all at one time. We would not have been able to do that had we not had a CALFED program, had we not had projects like this in place. In fact, last year, Metropolitan Water District had a right to take

water from behind Hoover Dam and decided not to take that water and benefited all of the other basin States, I think partly because we had implemented these kinds of programs. They had a right, under the interim surplus criteria, to take more water than they took, but were able to make the choice to benefit everyone in all seven basin States by not taking that water because we had made these kinds of investments. I think making these kind of investments is the right thing to do. I think that in the big picture, they really do save money for the Federal Government and for the economy of the Nation, and so I encourage you to proceed with the bill in terms of figuring out criteria.

I do want to point out, I was the general manager of Santa Ana Watershed Project Authority, a regional agency that co-sponsored a study with the Bureau of Reclamation that looked at a number of these projects, starting in the 1990's, that was completed 4 or 5 years ago, that actually came out listing what the projects were, what the benefits were, what the cost per acre-foot was. Many of those projects remain unauthorized, and so my concern, also, is that the bureaucracy not take over, but that we actually be able to move ahead and get the projects on the ground and that we don't change the standards along the way as a way of really preventing the projects from moving. Thank you.

[The prepared statement of Mr. Grindstaff follows:]

PREPARED STATEMENT OF P. JOSEPH GRINDSTAFF, DIRECTOR,
CALFED BAY-DELTA PROGRAM

Chairman Murkowski and members of the Subcommittee on Water and Power, I appreciate the opportunity to appear before you today to discuss ways the federal government could or should partner with state and local governments to increase the supply and improve the quality of water resources. I have been intimately familiar with these issues both as a manager for local and regional water agencies in Southern California, then as Chief Deputy Director for the California Department of Water Resources, and now as the Director of the CALFED Bay-Delta Program.

Today I will provide an overview of the California Water Plan as it relates to recycled wastewater and conjunctive groundwater management. I will also provide you with some examples of how this works across California and discuss some of the major challenges facing us. Finally, I will conclude with recommendations from the State of California's perspective about how these vital forms of water management can be improved.

In particular, the kinds of projects envisioned by S. 3638 and H.R. 177—treating impaired surface and groundwater, wastewater reclamation and brine disposal—fit well with goals of the California Water Plan and the policy of multi-level governmental partnerships.

The recently updated California Water Plan recognizes the need for a comprehensive approach and the need to work cooperatively—with local and regional agencies and with the state and federal governments—in order to succeed in managing the state's water resources. The Plan looks at water as a resource whose management involves many responsibilities and raises many issues.

I am a firm believer that the water supply reliability and water quality issues facing California and many other parts of the nation and the world cannot be solved by any one management strategy implemented by any one level of government or private sector enterprise. Only by using all of the management options available, and through collaboration and cooperation at all levels of government and the private sector, will we be able to meet the demands of a growing population, maintain economic growth and prosperity, and do all this in a way that preserves and protects the natural environment.

WASTEWATER RECYCLING

Californians have used recycled water since the late 1800s and public health protections have been in effect since the early part of the 1900s. Recycled water use has dramatically increased in the past several decades as water agencies needed to

supplement their water supplies. Today, California's water agencies recycle about 500,000 acre-feet of wastewater annually. In fact, this increase in water recycling and the addition of 1 million acre-feet of new groundwater storage are success stories for the CALFED Bay-Delta Program's efforts to increase water supply reliability.

In 2001, the state Legislature established a 40-member Recycled Water Task Force to identify opportunities for, and constraints and impediments to, increasing the use of recycled water in California. Over the course of nearly 14 months, the Task Force conducted intensive study in collaboration with many other experts and the public to develop recommendations for actions at many levels.

Many of the Task Force recommendations are in the process of being implemented and will significantly improve both the way projects are planned and the regulatory frameworks within which they must operate. A key issue remains: increasing state and federal financial support for research and project construction.

Recycled Water Use Affordability

The cost of recycled water, relative to other water sources, will influence how much recycled water is produced for each region. Costs are dependent on the availability of treatable water, demand for treated water, the quality of the source as well as the product water, the type of the intended beneficial use, and the proximity of recycled water facilities to the end users. In addition, the need for disposal brine lines is considered a major issue for some inland agencies.

The lack of adequate local funding to plan feasible recycled water projects can slow the construction of new projects. Public funding as well as incentive measures can help advance water recycling for irrigation, making more potable water supply available. In California, we estimate there is a potential of about 0.9 million to 1.4 million acre-feet annually of additional water supply from recycled water by the year 2030.

When looking at California's overall water supply, recycling provides new water for the state only in areas where wastewater is discharged to the ocean or to salt sink. Recycling in other areas may provide new water for the water agency, but does not necessarily add to the state's water supplies. In these locations, discharged wastewater in interior California mixes with other water and becomes source water for downstream water users.

For many communities, an investment in recycled water could also provide other benefits, including:

1. More reliable and drought-proof local sources of water, including nutrients, and organic matter for agricultural soil conditioning and a reduction in fertilizer use
2. Reduction of pollutants discharged into water bodies beyond levels prescribed by regulations with the ability to increase natural treatment by land application
3. Improved groundwater and surface water quality that contribute to wetland and marsh enhancement
4. Energy savings because the use of recycled water as a local source offsets the need for even-more energy-intensive imported water

Potential Costs of Recycled Water

The estimated capital cost for the range of potential recycling in California by 2030 is approximately \$6 billion to \$9 billion. The actual cost will depend on the quality of the wastewater, the treatment level to meet recycled water intended use, and the availability of a distribution network. Uses, such as irrigation near the treatment plant, will benefit from lower treatment and distribution costs.

Irrigation of a wide array of agriculture and landscape crops can even benefit from the nutrients present in the recycled water by lowering the need for applied fertilizer. However, the use of recycled water for irrigation without adequate soil and water management may cause accumulation of salts or specific ions in soil and groundwater. Some uses, such as an industrial recycled water user farther away from the treatment plant, may need to pay higher costs for treatment and distribution. Given the wide range of local conditions that can affect costs, the majority of applications would cost between \$300 and \$1,300 per acre-foot of recycled water. Costs outside this range are plausible depending on local conditions. Uses that require higher water quality and have higher public health concerns will have higher costs.

Affordability

The cost of recycled water, relative to other water sources, will influence how much recycled water is produced for each region. The costs are dependent on the

availability of treatable water, demand for treated water, the quality of the source as well as the product water, the type of the intended beneficial use, and the proximity of recycled water facilities to the end users. In addition, the need for disposal brine lines is considered a major issue for some inland agencies. The lack of adequate local funding to plan feasible recycled water projects can slow the construction of new projects. Public funding as well as incentive measures can help advance water recycling projects that provide local, regional and statewide benefits.

Water Quality

The quality of the recycled water will affect its usage. Public acceptance of recycled water use depends on confidence in the safety of its use. Four water quality factors are of particular concern: 1) microbiological quality; 2) salinity; 3) presence of heavy metals, and 4) the concentration of stable organic and inorganic substances or emerging contaminants originating from various pharmaceuticals and personal care products, household chemicals and detergents, agricultural fertilizers, pesticides, fungicides, animal growth hormones, and many other sources.

Public Acceptance

Public perception and acceptance of some recycled water uses currently limits its application. In some areas, public concerns about potential health issues have limited the use of recycled water for indirect potable purposes, such as groundwater recharge and replenishment of surface storage, and even for irrigation of parks and school yards.

Potential Impacts

Areas in interior California that discharge their wastewater to streams, rivers, or the groundwater contribute to downstream flows. Recycling water would remove this source of water and potentially affect downstream water users, including the environment. In some instances, recycling is discouraged when dischargers are required to maintain a certain flow in the stream for downstream users.

CONJUNCTIVE WATER MANAGEMENT

During the last three years, the Conjunctive Water Management Branch of the California Department of Water Resources has implemented several integrated programs to improve the management of groundwater resources in California. These improvements cover many facets of groundwater management. They include developing a basic understanding of individual groundwater basins, identifying basin management strategies or objectives, planning and conducting groundwater studies, and designing and constructing conjunctive use projects. The goal is to increase water supply reliability statewide through the planned, coordinated management and use of groundwater and surface water resources.

When the Conjunctive Water Management Program was formed five years ago, local agencies had little trust in the overall objectives of the program and minimal interest in participating. Since that time, the Program has been able to establish strong relationships with many local agencies and has made commitments to assist efforts to plan and implement conjunctive water use projects pursuant to the program goal while, at the same time, providing both local management opportunities and water supply system reliability measures.

There is no comprehensive statewide data on the planning and implementation of conjunctive water management at the local agency level, but Department of Water Resources' Conjunctive Water Management Program data provides an indication of the types and magnitude of projects that water agencies are pursuing. In fiscal years 2001 and 2002, the Program awarded more than \$130 million in grants and loans to leverage local and regional investment in projects throughout California with total costs of about \$550 million.

Examples of Conjunctive Management

Some examples illustrate the types of conjunctive management under way on a regional and local scale. In Southern California, including Kern County, conjunctive management has increased average-year water deliveries by more than 2 million acre-feet. Over a period of years, artificial recharge in these areas has increased the water now in groundwater storage by about 7 million acre-feet.

In Northern California, Santa Clara Valley Water District releases local supplies and imported water into more than 20 local creeks for artificial in-stream recharge and into more than 70 recharge ponds with an average annual recharge capacity of 138,000 acre-feet. Conjunctive management has virtually stopped land subsidence caused by heavy groundwater use and has allowed groundwater levels to recover to those of the early 1900s.

In Southern California, the Groundwater Replenishment System is a groundwater management and water supply project jointly sponsored by the Orange County Water District and Orange County Sanitation District. The project will take highly treated urban wastewater and treat it to better-than drinking water standards using advanced membrane purification technology. The water will be used to expand an existing underground seawater intrusion barrier as well as augment water supplies for municipal and industrial uses. Phase 1 of the project is expected to produce up to 72,000 acre-feet per year of recycled water for groundwater recharge beginning in 2007.

Major Issues

Lack of Data—There is rarely a complete regional network to monitor groundwater levels, water quality, land subsidence, or the interaction of groundwater with surface water and the environment. Data is needed to evaluate conditions and trends on three planes: laterally over an area, vertically at different depths, and over time. Also, there is often a reluctance of individuals who own groundwater monitoring or supply wells to provide information or allow access to collect additional information. The result is that decisions are often made with only approximate knowledge of the system.

This uncertainty can make any change in groundwater use controversial. Additional investment in a monitoring network and data collection can help reduce this uncertainty, but must be done in accordance with a groundwater management plan that is acceptable to stakeholders in the basin.

Infrastructure and Operational Constraints—Physical capacities of existing storage and conveyance facilities are often not large enough to capture surface water when it is available in wet years. Operational constraints may also limit the ability to use the full physical capacity of facilities. For example, permitted export capacity and efforts to protect fisheries and water quality in the Sacramento-San Joaquin Delta often limit the ability to move water to groundwater banks south of the Delta. Facilities that are operated for both temporary storage of flood water and groundwater recharge require more frequent maintenance to clean out excessive sediment that often is present in flood water.

Surface Water and Groundwater Management—In California, water management practices and the water rights system treat surface water and groundwater as two unconnected resources. In reality, there is often a high degree of hydrologic connection between the two and a separation of management authority.

Authority is separated among local, state and federal agencies for managing different aspects of California's groundwater and surface water resources. Several examples highlight this issue:

- First, the State Water Resources Control Board regulates surface water rights dating from 1914, but not rights dating before 1914;
- If that's not confusing enough, SWRCB also regulates groundwater quality, but not the rights to use groundwater;
- On a local level, county groundwater ordinances and local agency groundwater management plans often only apply to a portion of the groundwater basin, and those with overlapping boundaries of responsibility do not necessarily have consistent management objectives; and finally,
- Except in adjudicated basins, individuals have few restrictions on how much groundwater they can use, provided the water is put to beneficial use on the overlying property.

Failure to integrate water management across jurisdictions makes it difficult to manage water for multiple benefits and provide for sustainable use, including the ability to identify and protect or mitigate potential impacts to third parties, ensure protection of legal rights of water users, establish rights to use vacant aquifer space and banked water, protect the environment, recognize and protect groundwater recharge and discharge areas, and protect public trust resources.

Water Quality—Groundwater quality can be degraded by naturally occurring or human-introduced chemical constituents, low quality recharge water, or chemical reactions caused by mixing water of differing qualities. Protection of human health, the environment, and groundwater quality are all concerns for programs that recharge urban runoff or reclaimed/recycled water. The intended end use of the water can also influence the implementation of conjunctive management projects. For example, agriculture can generally use water of lower quality than needed for urban use, but certain crops can be sensitive to some constituents like boron.

New and changing water quality standards and emerging contaminants add uncertainty to implementing conjunctive management projects. A water source may, at the time it is used for recharge, meet all drinking water quality standards. Over

time, however, detection capabilities improve and new or changed water quality standards become applicable. As a result, contaminants that were not previously identified or detected may become future water quality problems creating potential liability uncertainties. In some cases, conjunctive water management activities may need to be coordinated with groundwater clean up activities to achieve multiple benefits to both water supply and groundwater quality.

Environmental Concerns—Environmental concerns related to conjunctive management projects include potential impacts on habitat, water quality, and wildlife caused by shifting or increasing patterns of groundwater and surface water use. For example, floodwaters are typically considered “available” for recharge. However, flood flows serve an important function in the ecosystem. Removing or reducing these peak flows can negatively impact the ecosystem. A key challenge is to balance the in-stream flow and other environmental needs with the water supply aspects of conjunctive management projects. There may also be impacts from construction and operation of groundwater recharge basins and new conveyance facilities.

Funding—There is generally limited funding to develop the infrastructure and monitoring capability for conjunctive management projects. This includes funding to develop and implement groundwater management plans, study and construct conjunctive management projects, and to track—statewide and regionally—changes in groundwater levels, groundwater flows and groundwater quality.

Grant applications from DWR’s fiscal year 2001-2002 Conjunctive Water Management Program show project costs of increasing average annual delivery ranging from \$10 to \$600 per acre-foot. This wide range of costs is due to many factors, including project complexity, regional differences in construction and land costs, availability and quality of recharge supply, availability of infrastructure to capture, convey, recharge, and extract water, intended use of water, and treatment requirements. In general, urban uses can support higher project costs than agricultural uses. The average project cost of all applications received by DWR is \$110 per acre-foot of increase in average annual delivery. This average unit cost translates to approximately \$1.5 billion in statewide implementation costs of for the conservative level of implementation, and \$5 billion for the aggressive implementation.

RECOMMENDATIONS

California Water Plan Update 2005 is the product of a collaborative process that brought together the Department of Water Resources; a 65-member advisory committee representing urban, agricultural, and environmental interests; a 350-member extended review forum; and 2,000 interested members of the public. The result is a plan that includes the very best ideas for meeting our water challenges, and the following recommendations about conjunctive water management and wastewater recycling:

Wastewater Recycling

1. Federal, state and local funding should be increased beyond Proposition 50 and other existing sources toward sustainable technical assistance and outreach, advanced research on recycled water issues, and adequate water reuse/recycling infrastructure and facilities.
2. The state, with assistance from the federal government, should encourage an academic program on one or more campuses for water reuse research and education; develop education curricula for public schools; and encourage institutions of higher education to incorporate recycled water education into their curricula.
3. Federal, state and local agencies should engage the public in an active dialogue and participation using a community value-based decision-making model (determining what a community values, then making decisions based on that information) in planning water recycling projects.

Conjunctive Management

4. Local water management agencies should coordinate with other agencies that are involved in activities that might affect long term sustainability of water supply and water quality within or adjacent to a basin situation. Regional groundwater management plans should be developed with assistance from an advisory committee of stakeholders to help guide the development, educational outreach, and implementation of the plans.
5. Continue funding for local groundwater monitoring and management activities and feasibility studies that enhance the coordinated use of groundwater and surface water. Additional monitoring and analysis is needed to track, both statewide and regionally, changes in groundwater levels, groundwater flows, groundwater quality (including the location and

spreading of contaminant plumes) land subsidence, changes in surface water flow, surface water quality, and the interaction and interrelated nature of surface water and groundwater. There is a need to develop comprehensive data and data management systems to track existing, proposed, and potential conjunctive management projects throughout the state and identify and evaluate regional and statewide implementation constraints, including availability of water to recharge, ability to convey water from source to destination, water quality issues, environmental issues, and costs and benefits.

6. Give priority for funding and technical assistance to conjunctive management projects that are conducted in accordance with a groundwater management plan, increase water supplies, and have other benefits including the sustainable use of groundwater, maintaining or improving water quality, and enhancing the environment be given priority. Additional preference should be given for projects conducted in accordance with a regional groundwater management plan. In addition, allow funding for projects that make use of wet-season/dry-season supply variability, not just wet-year/dry-year variability.

7. Assess groundwater management to provide an understanding of how local agencies are implementing actions to use and protect groundwater, an understanding of which actions are working at the local level and which are not working, and how state and federal programs can be improved to help agencies prepare effective groundwater management plans.

8. Improve coordination and cooperation among local, state, and federal agencies with differing responsibilities for groundwater and surface water management and monitoring to facilitate conjunctive management, to ensure efficient use of resources, to provide timely regulatory approvals, to prevent conflicting rules or guidelines, and to promote easy access to information by the public.

9. Encourage local groundwater management authorities to manage the use of vacant aquifer space for artificial recharge and to develop multi-benefit projects that generate source water for groundwater storage by capturing water that would otherwise not be used by other water users or the environment. For example, through reservoir re-operation, water recycling and reuse, and water conservation.

10. Include wildlife agencies in the loop to streamline the environmental permitting process for the development of conjunctive management facilities, like recharge basins, when they are designed with pre-defined benefits or mitigation to wildlife and wildlife habitat.

Senator MURKOWSKI. Thank you, Mr. Grindstaff. And your full written testimony will be included as part of the record, as it will with everyone testifying today.

Mr. Atwater, welcome.

STATEMENT OF RICHARD ATWATER, CHIEF EXECUTIVE OFFICER, INLAND EMPIRE UTILITIES AGENCY, ON BEHALF OF THE WATEREUSE ASSOCIATION

Mr. ATWATER. Thank you again for inviting me to testify, Chairman Murkowski, Senator Feinstein, Senator Johnson. Of course, I was here with you on February 28, when we did the oversight hearing, and we've worked closely with your staff and on behalf of the WaterReuse Association. We strongly support the introduction to the bill and we've been working with your staff. Based upon your conversation today, we are more than happy to work during the month of August to fine-tune the language and work with your staff and the Bureau of Reclamation. We've also had many meetings with the Bureau and the Department of the Interior staff over the last couple of months and I am also optimistic that we ought to be able to get through the definitions and terminology of what is financially viable and technically feasible and all that. And certainly as a person who has worked on the program since its incep-

tion in 1992 and worked with Senator Feinstein to fund the first project that replaced the lost supply for the city of Los Angeles from Mono Lake and helped recover Santa Monica Bay and such, it is clear that these projects, as Joe just outlined, have many Federal benefits.

And when you consider that Lake Mead and Lake Powell and the Colorado River are half full and this year—last year was about normal, but this year is 75 percent under normal, it means we are still in this 7 to 8 year drought on the Colorado River and we all realize the economic problems that will happen from Denver to Salt Lake City to Albuquerque to Phoenix and certainly southern California and Las Vegas. It is clear that the time to act and to work together to fund these very cost-effective projects, not only given our California perspective and certainly Joe—his testimony does a very nice job of pointing out that for the last 4 or 5 years, through the CALFED process, the State of California and the Governor's Task Force in 2003 did a thorough review and identified the cost-effective projects.

In fact, the Department, which is too bad—not to be critical, but in the deputy commissioner's submittal, in his testimony, in 2002, they did submit to this committee and to the House the report that Joe referred to and it did rank—and it took 10 years of feasibility studies. And for context, the projects that you asked about, they were included in that report. They've been thoroughly evaluated. It is unfortunate because we have spent a lot of time and effort and just to remind you, the State of California, the Fish and Wildlife Service, the Army Corps of Engineers have granted permits, have thoroughly reviewed those projects and we don't need to be redundant about reviews on top of reviews.

Let me just speak a little bit about as S. 3639 and the re-authorization. The last time the program was re-authorized was in 1996 and Congress, at that time, reduced the cost share of this program to 25 percent. Now we are proposing—which we endorsed in February and you've put in the draft bill—reducing the cost share to 20 percent. As Senator Feinstein said—and I would heartily agree, and you asked Deputy Commissioner Larry Todd about it—this is the most cost-effective Federal water program in the United States and we're reducing it even further, to a 20 percent cost share. When you look at it from a dollars per acre-foot perspective and strategically developing new water supplies, water recycling, reclamation, desalinization, recovering poor quality groundwater, which is critically important in New Mexico and throughout the arid West and developing new technologies to use water and recover it so that we can beneficially use it, it is clearly the highest priority in the 21st century, not only in the United States, but as Joe said, it is an international problem.

But clearly, it is an opportunity for us to develop new technology and solve problems very cost effectively. So we look forward to working with you. In our written testimony, we have provided some details and we have already communicated that with your staff and we look forward to working with you. I guess I'll be back here next week and through the month of August. The only thing I can say is in southern California, since July 1, we have been over 100 degrees every day, so the weather is no different back home

than it is here. So we'll be happy to work with you and get this done over the next month. Thank you, again, very much for inviting the WateReuse Association to work with you on this very, very important legislation.

[The prepared statement of Mr. Atwater follows:]

PREPARED STATEMENT OF RICHARD ATWATER, CHIEF EXECUTIVE OFFICER,
INLAND EMPIRE UTILITIES AGENCY, ON BEHALF OF THE WATERREUSE ASSOCIATION,
ON S. 3639

INTRODUCTION

Madam Chairman and members of the Subcommittee, the WateReuse Association is pleased to have the opportunity to present this testimony on S. 3639 to reauthorize the Bureau of Reclamation's Reuse and Recycling Program (Title XVI) in ensuring an adequate water supply for the nation in the 21st century. I am Richard Atwater, Chairman of the WateReuse Association's National Legislative Committee, and I am representing the Association today.

I want to thank the Chairman and Senator Feinstein for introducing S. 3639 to streamline the review criteria and enhance the cost-effectiveness of the Bureau of Reclamation's Title XVI Water Reuse and Recycling Program.

As a way of introduction, the WateReuse Association (WateReuse) is a non-profit organization whose mission is to advance the beneficial and efficient use of water resources through education, sound science, and technology using reclamation, recycling, reuse, and desalination for the benefit of our members, the public, and the environment. Across the United States and the world, communities are facing water supply challenges due to increasing demand, drought, and dependence on a single source of supply. WateReuse address these challenges by working with local agencies to implement water reuse and desalination projects that resolve water resource issues and create value for communities. The vision of WateReuse is to be the leading voice for reclamation, recycling, reuse, and desalination in the development and utilization of new sources of high quality water.

I am also Chief Executive Officer of Inland Empire Utilities Agency (IEUA), located in Chino, California. By implementing aggressive conservation programs and using innovative recycling and desalting technologies to reuse our water supplies, we have reduced our potable water demand by 20% over the past five years. IEUA is a municipal water district that distributes imported water from the Metropolitan Water District of Southern California and provides municipal/industrial wastewater collection and treatment services to more than 800,000 people within a 242 square mile area in the western portion of San Bernardino County. The Inland Empire region is the "economic engine" of California and among the top 10 job creating regions in the US.

The IEUA service area population is expected to double during the next 20 years. About 7,000 new homes each year are being built in the IEUA service area. Inland Empire is *not* depending on new imported supplies from the Colorado River or Northern California through the CALFED Bay-Delta Program to meet our future water supply needs. Instead, we have developed an integrated water resources plan that will develop 95,000 acre-feet of new recycled water, desalinate over 50,000 acre-feet of brackish groundwater supplies, and, with the Metropolitan Water District of Southern California, develop 150,000 acre-feet of conjunctive use in the Chino groundwater basin. These will be the primary new water supplies to meet the rapidly growing needs of the Inland Empire region of Southern California.

A critical partner in making these new local water supplies available in our region is the Federal government. Pending in Congress are Title XVI bills that would authorize a \$20 million grant to provide a 10% Federal cost-share for the IEUA regional water recycling project of 95,000 acre-feet (total cost is \$200 million). Without a doubt this cost-sharing arrangement to develop a critical new supply for a rapidly growing region without asking for more supplies from the Colorado River or Northern California (CALFED) is incredibly cost-effective when compared to the other supply options available in the CALFED Bay-Delta Program.

On behalf of the Association's Board of Directors, I want to commend you, Madam Chairman, for convening this hearing regarding S. 3639. The hearing is especially timely, given the increasing number of challenges facing local agencies in their continuing quest to ensure adequate water supplies in the future.

THE BUREAU OF RECLAMATION'S TITLE XVI REUSE AND RECYCLING PROGRAM

Today, the West faces two daunting challenges simultaneously. The first is drought and the impacts of continued climate gyration—wild swings in previously established weather patterns. The second is the unprecedented growth throughout the Western States. Population continues to not just grow, but accelerate throughout the West! The Title XVI Water Recycling Program enables water users in the West to stretch existing supplies through the application of reclamation, reuse, recycling and desalination technologies. Title XVI was initially authorized in 1992, following a severe multi-year drought in California and other Western States. A drought of equal severity reduced the mighty Colorado River to record lows only a few years ago. We must find ways to expand the nation's water supplies, and do so without generating regional or environmental conflicts. Reusing our existing supplies and stretching those supplies is a significant part of the solution. The Title XVI program provides the authority and framework to accomplish these water resource development objectives to meet the needs of our cities and urban areas, our farms and ranches, and our diverse environment.

This legislation clarifies and makes permanent the U.S. Department of the Interior and Bureau of Reclamation's Title XVI water reuse/reclamation/recycling grant authority for the development of new sources of water. In so doing, this proposed legislation will help state and local governments and water departments and agencies develop new water and reliable water supplies.

The bill amends the Reclamation and Wastewater and Groundwater Study and Facilities Act (1992) to provide new standards and procedures for the review of water reclamation and reuse projects by the Interior Department's Bureau of Reclamation. Additionally, the legislation sets forth specific criteria to assist Congress in the evaluation and selection of projects for Federal grant funding and sets the Federal cost share at 20%. This is lower than the cost sharing requirement specified in the 1996 amendments to Title XVI, and represents the most cost-effective leveraging of Federal funds for any current Federal water resources investment!

We believe that S. 3639 addresses the important question of how to establish funding priorities. For the first time, a program is being established that provides a road map for the Secretary to determine if a project should be recommended for construction authorization. This would allow Subcommittees such as yours, Madam Chairman, to consider the value of a project to ameliorate a water supply shortage. Clearly, the ability to define priorities is critical to an enhanced Title XVI program and S. 3639 provides this framework.

Experiences with the Title XVI Program and Program Benefits

The Association and its members have a long-standing and productive working relationship with the USBR and its Title XVI program. The Title XVI program has benefited many communities in the West by providing grant funds that made these projects more affordable. The Federal cost share—although a relatively small portion of the overall project cost—often makes the difference in determining whether a project qualifies for financing. In addition, the Federal funding and the imprimatur of the United States government typically results in a reduced cost of capital.

The Association believes, first and foremost, that the Title XVI program serves a Federal interest as discussed below. Although the level of funding that the program has received over the past decade has been limited, it is still an unqualified success. Simply stated, this is one program that represents a sound investment in the future of the West by the Federal government. It delivers multiple benefits to stakeholders throughout the West, ranging from municipal and industrial to agricultural needs. Through FY 2004, the Federal investment of \$272.5 million has been leveraged by a factor of approximately 5:1. According to a recently completed study by the Council on Environmental Quality (CEQ), the non-Federal investment to date during this same period amounted to \$1.085 billion.

In enumerating specific project benefits, we must not forget the intangible benefits that exist when this critical new water supply is brought on line in addition to the financial value of such projects. These benefits include the following:

- Environmental benefits realized through the conversion of treated wastewater into a valuable new water supply;
- Reduction of the quantity of treated wastewater discharged to sensitive or impaired surface waters;
- Alleviating the need to develop new costly water supply development projects unless they are a last resort (e.g., new dams and other expensive importation aqueducts);

- Reduced dependence on the Colorado River and on the CALFED Bay-Delta System, especially during drought years when conflicts on both of these water systems are particularly intense;
- Creation of a dependable and controllable local source of supply for cities in arid and semi-arid climates such as El Paso, Phoenix, and Las Vegas;
- Reduced demand on existing potable supplies; and
- Energy benefits, including reduced energy demand and transmission line constraints during peak use periods, realized by the replacement of more energy-intensive water supplies such as pumped imported water with less energy-intensive water sources such as recycled water.

A fundamental question is “why would we want to use valuable, high quality water from the Bureau of Reclamation’s Shasta Reservoir in Northern California or Lake Powell in Utah and pump and transport it over 500 miles to irrigate a park or golf course in the Los Angeles or San Diego metropolitan areas?” Also remember that the replacement of that imported water with local recycled water will save enough energy and related greenhouse gas impacts from reduced pumping equivalent to a 500 megawatt power plant! Obviously the energy and water policy issues facing the arid West clearly justify a “strategically” small grant program to use recycled water as a means to continue to support the economic vitality of the major metropolitan areas throughout the Colorado and Rio Grande River basins.

GENERAL COMMENTS AND RECOMMENDATIONS FOR S. 3639

Overall S. 3639 provides a solid redirection of the Title XVI program. It ensures that locally developed and supported projects have a clear process to secure Federal construction authorization. As we have discussed, most recently during the Subcommittee on Water and Power’s oversight hearing on February 28, one of the most vexing challenges of the existing Title XVI program is the uncertainty that USBR will provide timely reviews of a proposed project. The ability to invest responsibility with a local community should remedy this deficiency. We are also encouraged that the Secretary has clear deadlines to act on any proposal that is submitted. This is vital to a successful program. We also believe that the decision to limit federal support to 20% of a project’s costs is reasonable and will allow local communities to commit expeditiously their share of a project’s cost.

There are a limited number of issues contained in the draft legislation that we would like to highlight as critical to a successful Title XVI program. These are outlined below.

SPECIFIC ISSUES OF CONCERN

1. The bill provisions dealing with “financially capable” and “technically viable” project sponsors should be clarified through report language to ensure an understanding that the Secretary is to provide a project sponsor with a determination that the project is viable within 30 days or the project is deemed to be viable. We believe that the success of Title XVI reforms hinge on compliance with this key deadline.

2. The checklist to determine viability provides clear direction for how sponsors are required to submit project data to the Bureau of Reclamation for review.

3. The bill appears to limit demonstration activities to the Western States by virtue of the language in Section 1602 (Purposes; Definitions). We recommend that the Secretary be provided authority to conduct research and demonstration activities in any geographic area where technology demonstrations may prove most effective, provided they have direct application and benefit to the Western States.

4. We endorse the bill’s provisions to require a project’s value to be considered within the context of how it may contribute to improving a number of circumstances, including the environment. This clearly illustrates that any project priority will deliver multiple benefits.

5. The 10-year sunset provision for projects is an important element to ensure timely review and recommendations of a project.

6. The bill’s transition process may inadvertently create unnecessary burdens. The requirement to make existing projects submit new information pursuant to the new mandates would effectively change the rules, creating new costs and delays to the project sponsor. We strongly recommend that feasibility proposals that have already been submitted not be required to comply with new rules. If a concern exists over limiting the universe of proposals that would be grandfathered into the program under the old rules, we recommend establishing a date from which the new rules would apply.

CONCLUSION

Once again, the WaterReuse Association wants to thank you, Madam Chairman, for convening this hearing. We would be pleased to work with you in addressing critical issues related to water reuse and recycling, desalination, and water use efficiency. We are strongly supportive of the Subcommittee's efforts to ensure adequate and safe supplies of water in the future for the entire country.

Senator MURKOWSKI. And we do appreciate all the work that you have contributed to date, Mr. Atwater. Thank you.

Mr. Lippe, your testimony, please.

**STATEMENT OF CHRIS LIPPE, DIRECTOR, CITY OF AUSTIN
WATER UTILITY, AUSTIN, TX**

Mr. LIPPE. Thank you. Good afternoon, Chairman Murkowski, Ranking Member Johnson, and Senator Feinstein. I really want to thank you for the opportunity to testify in support of H.R. 2341. I would also like to thank Representative Doggett for introducing this bill and our entire congressional delegation for all the hard work on Austin's behalf.

Austin Water Utility has a history of innovation and, with your assistance, we hope to pursue more pioneering work in the development of a phased, large-scale, water reclamation and reuse project. First, let me provide some background information on Austin and its water needs, its efforts to meet those needs and the role we envision for the Bureau of Reclamation's title XVI program. The city of Austin owns and operates the Austin Water Utility, which has more than 180,000 residential multi-family, commercial, industrial and wholesale connections, serving a total population of roughly 770,000 persons. The utility service area covers 450 square miles and features three major drinking water treatment plants with a combined capacity of 260 million gallons per day. On the wastewater side, Austin is served by three large and eight small wastewater treatment plants that have a combined capacity of over 150 million gallons per day.

We have operated a reclaimed water program since 1974 that provides, on average, more than two million gallons per day and growing. Austin is located in a rapidly growing region where long-range water supply planning and management is critical. As one of the several measures to assist us in meeting our water needs, Austin is relying on water reclamation. The expansion of our water reclamation system will provide a number of benefits. First, it alleviates the potential for water shortages in near- and long-term. Second, it delays and reduces annual payments under our raw water contract by millions of dollars. And finally, it reduces infrastructure costs by reducing and postponing water treatment plant and transmission mains.

The city faces two major challenges in meeting the needs of its customers. First, there is a projected water need. The city's current water rights and water contracts are expected to meet demand until approximately 2042. By 2050, however, there will be an anticipated water shortage of 42,000 acre-feet per year, which is enough water to serve 63,000 residences or 220,000 people, in contrast to our currently served population of 770,000. Water conservation measures are expected to provide half of this shortfall,

leaving the other half to be provided by some alternative measure, such as our reclaimed water program.

The second need is financial in nature and relates to funding constraints under our capital improvements plan. The city has identified almost \$1 billion in infrastructure needs in the next 5 years, through its capital improvement planning. Much of that is devoted to water and wastewater treatment plant expansions, and rehabilitation of our aging wastewater collection system to meet the needs of the growing community. This, of course, also includes funding for expanding the reclaimed water program.

The Bureau of Reclamation operates a well-respected cost share program to improve efficiency in the use of water resources. Section 1602 of P.L. 102-575 establishes those broad goals for the Bureau of Reclamation in administering title XVI programs, including identifying opportunities for reclamation and reuse of municipal waste water, investigating those opportunities and providing a 25 percent cost share for the design and construction of infrastructure. I am happy to say that an appraisal report prepared jointly by the city and the Bureau confirmed that the city of Austin's reclaimed project fits well within these broad goals.

The city continues to collaborate with the Bureau of Reclamation on investigating the potential for reclaimed water in Austin through a feasibility report. We submitted our feasibility report on December 5, 2005. Reclamation provided written comments on March 22, 2006 and we are currently addressing those comments. In addition to conforming to the general goals of the title XVI program, the city of Austin's Reclamation project meets title XVI program requirements in the areas of applicability, eligibility, financial capability, ownership, regionalism, postponed expanded water supplies, reduced diversions from water courses and improved surface water quality.

In summary, H.R. 2341 provides Federal authorization for the city of Austin to formally enter the Bureau of Reclamation's title XVI program and we are proactively working to address an anticipated water need and have developed a large-scale, phased project for the reclamation and reuse of municipal wastewater in the Austin area that fits within the goals and objectives of title XVI. We appreciate your time and support and respectfully request that the subcommittee approve H.R. 2341 and seeks its final passage. We thank you very much for your time today. This concludes my presentation.

[The prepared statement of Mr. Lippe follows:]

PREPARED STATEMENT OF CHRIS LIPPE, DIRECTOR, CITY OF AUSTIN WATER UTILITY,
ON H.R. 2341

Chairman Murkowski, Ranking Member Johnson and Members of the Subcommittee, thank you for the opportunity to appear before you today to testify in favor of H.R. 2341. I would also like to thank Representative Doggett, for introducing this bill and our entire Congressional delegation for all of their hard work on Austin's behalf.

My name is Chris Lippe, P.E., and I am the Director of the City of Austin's Water Utility. We provide water, reclaimed water, and wastewater service in Austin, the capital of Texas. With a population of approximately 770,000 Austin offers the best of big city and small town life. Austin is recognized as a leader in sustainable growth that enhances communities, enables economic development and supports the environment. Our Reclaimed Water Program is a component of that effort.

In my testimony, I will provide information on H.R. 2341, Austin and its water needs, our efforts to meet those needs, and the role that we envision for the Bureau of Reclamation's Title 16 Program in helping to meet those needs.

H.R. 2341

H.R. 2341 amends the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the design, planning, and construction of a project to reclaim and reuse wastewater within the service area of the Austin Water Utility.

ABOUT THE CITY OF AUSTIN

Austin, Texas is a vibrant community of approximately 770,000 citizens located in Central Texas and serves as the State Capital. The City owns and operates the Austin Water Utility, which has more than 180,000 residential, multifamily, commercial, industrial, and wholesale connections and draws its water supply from the Colorado River.

The City faces two major challenges in meeting the needs of its customers. First, there is a projected water need. The City's current water rights and water contracts are expected to meet demand until approximately 2042. By 2050, however there will be an anticipated water shortage of 42,096 af/yr. That is enough water to serve 63,000 residences, or an equivalent population of 221,000 in contrast to our served population of 770,000. Water conservation measures are expected to provide half of the shortfall, leaving the other half to be provided by some alternative measure, such as reclaimed water.

The second need is financial in nature and relates to funding constraints under our capital improvement plan. The City, through its current capital improvement plan has identified almost \$1 billion in infrastructure needs in the next five years. Much of that is devoted to water treatment plant expansion, wastewater treatment plant expansion, and rehabilitation of the wastewater collection system to meet the needs of a growing community. This of course does include some funding for a growing reclaimed water program.

The expansion of our water, reclamation system will provide a number of benefits. It alleviates the potential for water shortages. It defers millions of dollars in annual payments under our raw water contract. Finally, it can help defer the need for the construction of additional water treatment plants.

THE RECLAIMED WATER PROGRAM

Based on the quality of the reclaimed water, the major uses for it in Austin are for irrigation, cooling towers, and manufacturing. During peak summer demands, reclaimed water use is more than three million gallons per day, predominantly for irrigation. The Sand Hill Energy Center recently connected to the system. The Combined Transportation and Emergency Communication Center is in the process of connecting and will use reclaimed water for irrigation purposes. In the next few years, we anticipate numerous additional customers as a result of redevelopment of the City's former airport. Other potential customers, such as the University of Texas and the Austin-Bergstrom International Airport, are interested in using reclaimed water if distribution lines can be extended to their property. Major Austin employers such as Samsung are interested in using reclaimed water. The University of Texas, is making plans to connect to our reclaimed water system.

RECLAMATION AND REUSE PROJECT—CENTRAL SYSTEM

The central reclaimed system provides water from the Walnut Creek Wastewater Treatment Plant (WWTP). In 2005, the most recent full year of data, customers used almost 60 million gallons of reclaimed water. Piping in the central reclaimed system consists of 4 miles of transmission main. Pumping equipment consists of two low-service pumps, a one million gallon ground storage tank, and three high-service pumps at the Walnut Creek WWTP. The central reclaimed system has one project in the preliminary engineering design stage a two million gallon elevated storage tank and an additional mile of transmission main.

RECLAMATION AND REUSE PROJECT—SOUTH SYSTEM

The south reclaimed system consists of a pump station, a booster pump station, a 0.5 million gallon elevated storage tank, and 15 miles of piping carrying treated wastewater effluent from the South Austin Regional WWTP. Customers include the award winning Hornsby Bend Biosolids Management Facility, the Sand Hill Energy

Center, and two golf courses. In 2005 these customers used 587 million gallons of reclaimed water.

RECLAMATION AND REUSE PROJECT—SATELLITE SYSTEM DETAILS

The Austin Water Utility operates three satellite systems that are located on the fringes of its service area. With a satellite system, wastewater flows are geographically matched with potential customers and a water reclamation plant is built in the immediate vicinity. In 2005, the Davenport WWTP provided 81 million gallons of reclaimed water for golf course irrigation. The Onion Creek WWTP produced 58 million gallons of reclaimed water for golf course irrigation. Finally, the Balcones and Pickfair WWTPs provided 79 million gallons of reclaimed water, again for golf course irrigation.

RECLAMATION AND REUSE PROJECT—SYSTEM GROWTH

As mentioned above, the City has approximately 19 miles of existing transmission main in the southern and central part of its service area as well as pump stations and storage tanks at the Walnut Creek and South Austin Regional WWTPs. This existing infrastructure serves as the backbone for the growth of the reclaimed water system. Eventually, the central and south systems will connect. A schematic showing the existing and proposed reclaimed water system is attached.

With Federal assistance, the reclaimed water system can grow dramatically. The miles of transmission mains will expand to from 19 to 137, an increase of more than 700%. Storage tanks in the distribution system will grow from zero to seven with a combined storage capacity of 14.3 million gallons. Pump stations in the distribution system will increase from one to a total of five. The number of pressure zones will increase from two to five. Plant storage tanks will increase from two to three and their capacity will increase from 2.5 million gallons to 3.5 million gallons. The magnitude of system growth requires that improvements be built over a period of years. Construction is projected to ramp up in 2008 and concludes in 2035, with the system reaching full capacity in 2039.

Table 1.—EXISTING AND ANTICIPATED RECLAIMED WATER DEMAND

Source	Major 2050 Uses	Reclaimed Water Supplied in 2005 (af/yr)	2050 Reclaimed ¹ Water Supplied (af/yr)
Walnut Creek WWTP (Central System).	Irrigation (47%), cooling towers (29%), process water (24%).	104	19,231
SAR WWTP (South System).	Irrigation (63%), cooling towers (11%), process water (26%).	1,307	6,433
Balcones/Pickfair WWTPs.	Irrigation (100%)	239	239
Davenport WWTP	Not in service	249	0
Onion Creek WWTP	Irrigation (100%)	209	209
Total	2,108	26,112

¹ Exceeds 21,096 goal.

FINANCIAL CONSTRAINTS FACING AUSTIN'S WATER RECLAMATION PROGRAM

A significant constraint to implementing our Reclaimed Water Program is funding. The Environmental Protection Agency, the American Water Works Association and the Association of Metropolitan Sewerage Agencies have all documented the enormous infrastructure needs of water and wastewater utilities. Austin's infrastructure needs reflect this national phenomena. Our recently approved 5-year Capital Improvement Plan contains nearly \$1 billion worth of projects. This includes funding to alleviate sanitary sewer overflows, the construction of water treatment plants, the upgrading of wastewater treatment plants, and the rehabilitation of water and sewer mains. Construction of reclaimed water projects is part of this and promotes prudent financial management by offering the potential to defer some of the water treatment plant projects.

We acknowledge that under the Title 16 Program, federal funding is capped and that the City will have to cover the bulk of the costs under Title 16. We estimate the City's portion as being 87% of the total cost and the City is prepared and com-

mitted to fully fund its portion. However given the importance of addressing water needs and water quality, federal assistance with this project is appropriate and welcome.

Table 2.—MAJOR RECLAIMED WATER COMPONENT COSTS

[In millions of \$]

Service Area	Project Completed or Funded	Future Projects	Total Project Cost	Funding Shortfall
Early System Improvements	4.0		4.0	
Central/South	19.0	158.4	177.4	158.4
Satellite	4.3		4.3	
Total	27.3	158.4	185.7	158.4

BUREAU OF RECLAMATION'S TITLE 16 PROGRAM

The Bureau of Reclamation operates a well-respected water reclamation program, referred to as the Title 16 Program. It is designed to improve efficiency in the use of water resources in the western states. Section 1602 of Public Law 102-575 establishes broad goals for Reclamation in administering the Title 16 Program. These goals include:

- Identifying opportunities for reclamation and reuse of municipal wastewater,
- Investigating those opportunities and,
- Providing a cost-share opportunity for an appraisal and feasibility study and for the design and construction of permanent facilities to reclaim and reuse municipal wastewater.

The City of Austin's Reclaimed Water Program fits well within these broad goals. An Appraisal Report prepared jointly by the City and the Bureau of Reclamation that was completed in April 2004 confirmed this. The Appraisal Report concluded that there was a Federal interest in pursuing water reclamation and reuse investigations in Austin and recommended that a Feasibility Report be done.

The City continues to collaborate with the Bureau of Reclamation on investigating the potential for reclaimed water in Austin. Specifically, we signed a cooperative agreement with the Bureau of Reclamation in September 2003 to jointly prepare a Feasibility Report. Austin submitted its Feasibility Report to Reclamation on December 5, 2005. Comments were received from the Bureau on March 22, 2006. We are currently addressing those comments and will resubmit the Feasibility Report soon. While the Feasibility Report is not final, we are confident that it will support Austin's entry into the Bureau of Reclamation's Title 16 Program.

In addition to conforming to the general goals of the Title 16 Program, the City of Austin's Reclamation project meets the following specifics for the Title 16 Program:

Applicability—Austin is located in Texas, which is one of the seventeen western states under the Bureau of Reclamation's jurisdiction.

Eligibility—Austin is a municipality and therefore capable of entering into a cost-sharing agreement with the Bureau of Reclamation.

Financial capability—Austin has dedicated revenue sources through water and wastewater user fees and has demonstrated financial capabilities as evidenced by the investment grade rating of its outstanding bonds.

Ownership—Austin will hold title to the facilities and be responsible for their operation and maintenance.

Regional perspective—Austin's Reclamation Project is consistent with state authorized regional water supply plans for the Colorado River.

Postpones new or expanded water supplies—Austin's Reclamation Project has the potential to postpone the expansion of water treatment plants through more efficient use of existing water resources.

Reduces diversions from existing watercourses—Austin's Reclamation Project will reduce existing diversions from the Colorado River through more efficient use of existing water resources.

CONCLUSION

In summary, the expansion of our water reclamation system provides a number of benefits. It alleviates the potential for water shortages in the near-and long-term.

It delays and reduces annual payments under our raw water contract by millions of dollars. Finally, it reduces infrastructure costs by reducing and water plant sizing.

H.R. 2341 will authorize federal participation in the City of Austin's Reclaimed Water project under the Bureau of Reclamation's Title 16 Program. I believe that the project fits within the goals and objectives of the Title 16 program and respectfully request that the Subcommittee approve H.R. 2341 and seek its final passage. We appreciate your time and support. Thank you again for this opportunity to testify.

Senator MURKOWSKI. Thank you, Mr. Lippe.
Mr. Ray, welcome.

STATEMENT OF J. TOM RAY, PROJECT MANAGER, CENTRAL TEXAS WATER RECYCLING PROJECT, LOCKWOOD, ANDREWS & NEWNAM, INC.

Mr. RAY. Thank you. Good afternoon, Madam Chairman, Senator Feinstein. It is a privilege. My name is Tom Ray. I am the project manager for the Central Texas Water Recycling Project. I am also an engineer and a program manager with the firm of Lockwood, Andrews & Newnam, a long-time Texas firm.

You have my written comments, so I just want to highlight a few points out of that testimony. First of all, I do want to extend my appreciation to Senator Hutchison and certainly my sincere gratitude to Congressman Chet Edwards for introducing this legislation, and Congressman John Carter for co-sponsoring the measure. Senator Hutchison, Congressman Edwards and Congressman Carter have been very supportive of water measures in central Texas, and certainly central Texans appreciate all of those efforts and I wanted to note that. Also, I certainly appreciate the efforts of this subcommittee in moving forward with modifications, including H.R. 3418, in consideration today.

I think it is appropriate with the hot weather that is occurring in Texas and California that these measures be considered on a timely basis. Certainly, in Texas, we have been faced with record drought conditions. In fact, the drought that we are in today has exceeded, in many part of our State, the historical record drought. So we are looking for every means possible to preserve and conserve our water resources.

The association that I represent, the Texas Water Conservation Association, has recognized water reuse and recycling as an important step throughout the State to augment our water supplies. The recent statewide planning process that has been done in 16 different areas of the State—each of those areas has recognized water reuse and water recycling as an important component of the strategies to meet the long-term future water shortages in the State of Texas.

The long drought conditions are one thing; we also are having additional stress on our water supplies by additional growth that is taking place. The area of McLennan County is located along the Interstate Highway 35 corridor that is between Austin to the south and the Dallas/Fort Worth Metroplex to the north. Rapid growth is occurring along that corridor and increasing water demands result from that. So the citizens of Central Texas are taking steps to meet that growth and to deal also with the drought conditions that have happened recently in Central Texas.

The local cost for water supply, for augmenting our water supply, has been very high of late. They have included water quality protection measures for both our surface water and ground water supplies. They've included water treatment, expansion and advanced treatment processes to meet Federal and State requirements, as well as to remove taste and odor components from our drinking water supply. As a result, the drinking water itself is very expensive. So reuse is a means of avoiding the use of this very expensive water and to be able to use recycled water for such applications as irrigation, cooling water and other industrial processes.

To do that, the citizens of Central Texas have looked to move the location of wastewater treatment in McLennan County from a downstream remote area to the area where growth is taking place in central Texas. What that means is the treatment plants are available to provide recycled, highly-treated effluent to this growing area along the IH-35 corridor. Also, our industrial users are located in that area, as well, so the central Texans are looking at ways to maximize the potential for use and reuse.

Reuse, I would also mention to you, helps us to meet peak demands. And, again, on days and summers like this where we have extremely hot conditions, our peak use increases very, very high, very much. And today, treated water is being used to apply for irrigation and industrial cooling water and other uses. Tomorrow, we hope to be able to use reuse water for those purposes during these types of days and be able to reduce the stress on our surface water supplies and our water treatment plants.

I would mention, Madam Chairman, I think you've done this in the right order. The Waco and McLennan County project is somewhat modest, but I think it does typify the importance of title XVI to Texas. We would generate about 10,000 to 11,000 acre-feet of additional water for our area, which is very important to us in these drought conditions.

In summary, let me say that we certainly support H.R. 3418. We think that this particular project could provide enough water that 10,000 to 11,000 acre-feet would be equivalent to the use of about 20,000 households and we think it is significant, and again, we appreciate your consideration and we strongly support H.R. 3418. It is what can make the difference in whether this reuse component of this overall project is done or not. The local cost to our taxpayers and rate payers is very high, so if we have that additional partnership from the Federal Government, it could make the difference between whether we do this environmentally-sound and water-conserving measure or not, and I think that is the importance of H.R. 3418. And I appreciate your being here today and being able to testify on the bill.

[The prepared statement of Mr. Ray follows:]

PREPARED STATEMENT OF J. TOM RAY, PROJECT MANAGER, CENTRAL TEXAS WATER RECYCLING PROJECT, LOCKWOOD, ANDREWS & NEWNAM, INC., ON H.R. 3418

Good afternoon, Senator Murkowski and Senators. My name is Tom Ray. I am project manager for the Central Texas Water Recycling project and an engineer and program manager with the engineering firm of Lockwood, Andrews & Newnam, Inc.

Thank you for the opportunity to testify in support of including H.R. 3418, the Central Texas Water Recycling Act of 2005 and for the leadership of this subcommittee in scheduling this hearing. The incredibly hot summer that we are having in Texas and that our friends are having in California is a reminder of how our

water resources can be stretched to the limit by forces of nature and the demands of rapidly increasing populations. It is also a reminder of the importance of the projects that are being considered today before this subcommittee. I also want to express my sincere gratitude to Congressman Chet Edwards for introducing this legislation and to Congressman John Carter for cosponsoring this measure. Both Congressman Edwards and Congressman Carter have been very supportive of initiatives to support water resources throughout Central Texas, and Central Texans certainly appreciate their work on this legislation.

Much of Texas is in the grips of an extreme drought. It is recognized that every existing water resource that has the potential to augment our water supplies must be conserved and used efficiently. This is recognized on a statewide basis by the Texas Water Conservation Association that has emphasized the value of water reuse throughout the State. Recently adopted Statewide water plans, under the direction of the Texas Water Development Board, have identified water reuse as a critical component of future strategies to meet water shortages in each of the 16 planning areas of the State. In Central Texas, and particularly among the cities located in McLennan County, reuse is a major component of our current plans. Reuse of treated wastewater effluent is included in the current expansion of the area's regional wastewater treatment system.

In addition to prolonged drought conditions that stress our existing surface and groundwater supplies in Central Texas, demands on our water supplies continue to increase due rapid population growth that is occurring, particularly along the IH-35 corridor. As a result of these two factors, increasing demands due to population growth and continuing drought conditions, cities in Central Texas have invested significant local funds in a number of supply enhancement and water treatment projects in recent years. These costly efforts include water quality protection programs for our major surface water and groundwater resources, enlargement of the conservation pool of Lake Waco, and investments in advanced water treatment processes to meet and exceed federal and state standards as well as to remove taste and odor. All of these investments are substantial for the citizens of McLennan County and Central Texas. As a result, the cities are actively pursuing means to maximize those investments and to conserve our valuable water resources. Water recycling and reuse of reclaimed wastewater effluent is therefore a key component of this effort. H.R. 3418 will help us to succeed in this effort to replace the use of costly, treated water supplies for uses such as irrigation, cooling water and other industrial uses.

Reuse supplies will help us cope with seasonable demands and peak water use. With temperature repeatedly reaching well over 100 degrees this month, it emphasizes the seasonal effects on water use and water demands. To help address the spikes in demand due to seasonal water use, the community of cities in McLennan County is incorporating reuse into the current plans to expand the regional wastewater treatment system. As opposed to expanding the central wastewater treatment located in a remote, downstream area, the expansion will be accomplished with "satellite" wastewater treatment plants that will be located in areas near the high growth corridors. This growing areas that include industrial, commercial, and residential as well as park lands and golf courses owned by the cities, will have the opportunity to reduce dependence on the use of costly treated water by having high quality, wastewater effluent available for irrigation and industrial uses. The "McLennan County Regional Satellite and Reuse Project" will provide a unique combination of reuse benefits at an outlying treatment facilities located in the major growth corridor.

The Central Texas Water Recycling Act will help support these efforts to provide sustainable water supplies in this area of Texas.

With this background, let me summarize the specific need for and benefits of the reclamation and water recycling project. Today, the growth areas of the regional wastewater collection facilities are hydraulically overloaded. In addition, the Central Wastewater Treatment Plant, which currently treats all wastewater generated by the serves all of the six cities that comprise the regional wastewater system, is nearing its permitted discharge capacity. The Texas Commission on Environmental Quality is requiring plans for the expansion of the existing wastewater treatment capacity.

A comprehensive engineering solution to this wastewater challenge is the construction of a satellite wastewater reclamation plants and facilities to in part provide benefits from the reuse of the reclaimed effluent. The benefits of satellite plants are significant, in addition to avoiding expensive relocation of infrastructure and downstream conveyance improvements (estimated at \$2.1 million), the plants will provide capacity for future growth in the "high growth" corridor, and significantly, the reclaimed water produced at the proposed reclamation plant can be readily de-

livered to dozens of end users within the nearby vicinity. Not only would this reclaimed water be a revenue generator, it would also help reduce the summertime peak water demands at the regional-water treatment plant.

In summary, this legislation will not only provide for conservation of our community's water supply but will also reduce cost to the taxpayers and provide benefits to the environment as treated effluent is not dumped into river but is used to sustain habitat in our parks and recreational areas. Recycling of highly treated wastewater provides an additional valuable resource for a large number of identified reuse applications, including golf courses, landscape irrigation, industrial cooling water, and other industrial applications. The initial projects eligible for funding under this legislation can provide up to 10 million gallons per day of reuse water; thereby, reducing the water demand on Lake Waco. This is enough water supply to meet the needs of over 20,000 households.

Senator Murkowski and members of this subcommittee, we strongly support H.R. 3418, and the assistance it will provide for the McLennan County Regional Satellite and Reuse Project. The community of cities in McLennan County has committed significant funding to support the development of this project.

We welcome the opportunity to partner with the Bureau of Reclamation to design, plan and construct a consolidated system to improve the efficient use of water resources in McLennan County.

Thank you for allowing me to appear before you today.

Senator MURKOWSKI. Thank you. It is important for us to hear the reminders of the specific application to these water projects in their areas and the significance of why we need to reform this title so we can make these happen. I appreciate your comments.

Mr. Atwater, I've got some questions for you, and these are all in context as they relate to S. 3639. As you know, we've got a series of deadlines that have been incorporated into our proposed legislation, deadlines where the Secretary has to comply, and it has been suggested to us that perhaps some of our deadlines are a little bit too tight. Can you speak to the issue of the deadlines, whether we are giving enough time for the appropriate proposal to be reviewed? Just give me your sense as to where we are with these deadlines.

Mr. ATWATER. Thank you. That's an excellent question. Working with your staff, the WateReuse Association thinks generally—we've reviewed it among our membership—that those deadlines are reasonable. We've had some discussions with the Department of the Interior and the Bureau of Reclamation and they would like a little bit more flexibility. And that is certainly a dialog we ought to have, but on the face of it, I think those deadlines are very workable. And as we all know, without deadlines, reviews don't get done, so having a deadline is a good thing. And we ought to, as we discussed, have that conversation during the month of August, and if there needs to be a little bit of fine tuning, we are certainly willing to participate in that discussion.

Senator MURKOWSKI. Good. We will put that on our list of to-do's then for August. It was suggested by Mr. Todd that really what we needed to be focusing on was to create this priority ranking system to guide the projects that are funded, and he spoke about defining the criteria and getting the management right and we're going to be OK. In terms of creating a priority ranking system, do you think that this is the appropriate approach to take?

Mr. ATWATER. We certainly welcome a competitive ranking system. At the last hearing on February 28, I think we discussed this. And I pointed out that certainly in California, the State of California has a process and Joe's organization, the CALFED Bay-Delta, in fact, had a task force report and was working with the

State Water Board that funds water recycling projects by the State, with EPA funding. They rank projects.

And this is a good example where the Bureau doesn't have to do a new set of rankings. We have existing processes. And, in fact, since 1992, they've done a Bay Area study and they've done the southern California one, and I can say that because our project in Inland Empire was ranked No. 1. We've gone through that process and we've already spent many millions of dollars and I know that's why Senator Feinstein keeps pointing out that we don't need to reinvent the wheel here and do a new procedure.

I think there are ample reviews already developed and certainly we may need to have maybe a little bit of a history lesson for the Bureau that we don't need to redo that process. I think that is something that we ought to discuss with them in August, that there are existing detailed studies that have looked at both, in isolation, individual projects within a watershed, within the region and within the State and within the context of the Colorado River problems. I think Joe mentioned that quite clearly, that we've already done that kind of analysis.

Senator MURKOWSKI. And if we move forward with our provision, that provides for a sunset after 10 years.

Mr. ATWATER. Absolutely.

Senator MURKOWSKI. This, in fact, also helps to establish a priority, does it not?

Mr. ATWATER. Yes, it does, and both the House—in the passage of bills, they've already put in individual authorizations—and with your S. 3639 making that a generic sunset provision, I think that really addresses the backlog issue.

Senator MURKOWSKI. We, in our legislation, lay out a number of criteria and Senator Feinstein has mentioned what those specific criteria are. These are the criteria that the Secretary would be looking to. They are not exactly identical to what came out, the criteria that I referenced with Mr. Todd. In terms of establishing a set of criteria that are workable from all perspectives, are you satisfied with the set of criteria that we have laid out with in S. 3639?

Mr. ATWATER. Yes, we are. The Association thinks the criteria is an improvement over the existing Bureau of Reclamation's 1998 guidelines that they haven't updated since then. It will work well in being clear what project sponsors are expected to document to meet the congressional and administration goals for the program.

Senator MURKOWSKI. I think this is where we want to get to. We don't want to have to have a Member of Congress call a meeting between those that are putting together the specific water projects and the Bureau so that we all can agree that we are in alignment on the criteria. They need to be out there, transparent and understandable. Everybody has to know that this is what we are dealing with, it can't be subject to interpretation, if you are trying to put together the proposal, as opposed to what the agency might be looking at. So I'm hopeful that we're able to really give some parameters to this criteria so that the expectations are well understood.

Mr. ATWATER. Yes. And the only thing we would suggest is when you move this bill, the Committee report language, you can provide further, if you will, administrative details, so that there is no ambi-

guity and clarify, so we avoid, in the future, unfortunately having hearings where maybe there is some clarity that needs to be explained to the Bureau of Reclamation as to how they apply your criteria.

Senator MURKOWSKI. It has been pointed out a couple of times this afternoon that we deal with a series of reviews, and the analysis process that is 10 years in the making, that oftentimes what we're doing is just spending all of our time reviewing something and we are not actually getting to the water, we are not making the project happen. Does this legislation, as we currently have it now, does it get us away from that continual review by use of the financial and technical viability, moving it away from the approach that we have had in the past. Do you think we're getting there?

Mr. ATWATER. I think it is a major step forward and I think at this point in time, obviously we have to apply it, but I think it will be a significant improvement over the current practice.

Senator MURKOWSKI. We know that we can improve the current practice. We, in the legislation, authorize funding to the Secretary to allow for planning assistance to the interested communities; how do you think this is going to help?

Mr. ATWATER. I think it does help. There are some cases, the city of Austin is a good example, where they are working very closely and they've completed an appraisal report and now they are working with the Bureau of Reclamation on a detailed feasibility report. As we discussed at the February 28 hearing, at the Association, there are many agencies who are willing to be very proactive and fund all of the feasibility report, complete all their studies, technical work, financial, all of the pre-construction activities, submit to the Bureau and have them review it, and that works well, too.

I think your criteria allow for both approaches, which I think is an excellent example where, again, it highlights the cost effectiveness of the program where the local sponsors are really investing and actively developing their project and the Bureau's partnership role can be just a review and certification that has been completed, meeting your criteria.

Senator MURKOWSKI. We have talked about some of the research and the technology development that goes into many of the projects as they relate to water recycling, and this committee has certainly supported that. The legislation encourages a strong, vibrant research program. Is that necessarily where we should be going with the research or should we be focused more on making these projects that are happening on the ground right now? Just give your opinion on that.

Mr. ATWATER. We strongly support that at the Association. We have an excellent partnership between our WateReuse Association Research Foundation and the Bureau of Reclamation. And, of course, Chairman Domenici's legislation and the work that he has sponsored with Sandia Labs, with the Bureau of Reclamation and the Research Foundation and other research entities has really been cutting edge over the last half a dozen years and it continues to grow. So we would say that the research component is a significant part of expanding the use and recovery of poor-quality water, whether it is reclamation of wastewater, cleaning up contaminated groundwater, recovering water, or improving water use efficiency

throughout the United States. And obviously it has international implications.

New technology is an important part of what we want to promote, but in the overall scheme of things, I would say that if we had \$100 million, we would want to spend \$90 million on constructing new projects and developing new water supplies, spend maybe another \$5 million on the technical planning, all of that, and then the remaining \$5 million per year would be on the R&D. Just to throw out numbers and have my constituents, who will probably change the numbers. But in round numbers, that kind of conceptually—we ought to continue that level of—there is always a research cutting edge to try new technology and we think that ought to continue to be a key part of the Bureau of Reclamation's title XVI program.

Senator MURKOWSKI. I think that is important. I may have an extra question for you, but Senator Feinstein, if you want to go ahead.

Senator FEINSTEIN. Thank you very much, Madam Chairman. Mr. Atwater, really for my own benefit, I was looking at the Inland Empire Utilities project in this and the process that you have to go through, and because you are associated with that project, it is my understanding it meets six out of the nine requirements and it doesn't meet three, one being NEPA compliance, one being specific financial capability information, and one being research needs. Let me ask you this. I don't even understand why research needs is a requirement.

Mr. ATWATER. That is a very good question. We did submit the paperwork and complied with that in January 2006. On the financial capabilities, of course, that's been reviewed and approved by the State of California. And last year, we gave the Bureau of Reclamation our detailed 10-year, \$200 million capital improvement program and our adopted financial plan.

Senator FEINSTEIN. So they have a 10-year capital improvement program?

Mr. ATWATER. We submitted all of that paperwork and they have it. So going back to your new criteria of financial viability, we have adopted rates, approved financial plans, and all that has been submitted to the Bureau of Reclamation. We met that criteria and we have submitted all of the NEPA documentation. Just as a footnote, we completed our Comprehensive California Environmental Act EIR in 2002, which has been reviewed and approved by both EPA and the Corps of Engineers. We sent all the paperwork to the Bureau of Reclamation, they have just not finished. And it really is—it's not even a public review, it's just a minor administrative review of the NEPA document. So we've completed all the paperwork.

Senator FEINSTEIN. Now, NEPA compliance is not one of our requirements in this bill.

Mr. ATWATER. Nor should it be. We had a meeting with—and I don't know if Ted Bolin is here, but the Council of Environmental Quality, which reviewed the title XVI program. Working with your staff, we've had discussions with him. We really do think that the NEPA review, from a Federal standpoint, ought to be earlier, and I just pointed that out and we talked about this briefly.

Senator FEINSTEIN. You mean before it is even submitted?

Mr. ATWATER. Well, yes. When you are doing the planning is when you ought to do the NEPA review, not at the time of construction. The truth is, in the title XVI program—let's be real clear, in the history of the program, not one of the projects has ever risen to a full environmental impact statement. And, in fact, they are not controversial, they really are an administrative paperwork issue. So it suggests that NEPA review is a critical element for project feasibility review, when it really is "Check the box, did you complete the paperwork?"

Senator FEINSTEIN. So would you suggest that we have something in the bill that deals with that?

Mr. ATWATER. I don't think it is necessary, because under the existing Federal requirements with CAQ and each Federal agency, if the Department of Commerce or the USDA gives a cooperative—any type of grant, they always do NEPA compliance, but it always is that level of review. I don't know if you need any new statutory language to have them comply with NEPA, the National Environmental Policy Act, and the CAQ guidelines. Each Federal agency's department already has adequate requirements on that. It is pretty routine.

Senator FEINSTEIN. I don't know if you've looked through these. It is sort of interesting to look through the actual projects and then the requirements. I mean you have to—you're required to study other alternatives. I mean, I don't know a better alternative than recycling. So if you have to—coming from local government, if I would look at this, I'd say, hmmm. It's all bureaucracy.

Mr. ATWATER. Well, we do. And as Joe will tell you, at the CALFED level, they've done extensive stakeholder discussions and an evaluation of water recycling, water use efficiency, the whole comprehensive strategy to solve the State-wide problems. And, of course, the Department of Water Resources adopted the State water plan and they do that every 5 years. And they comprehensively evaluate and that's, of course, your point. They recommend that water recycling, ground water management, water conservation, were all, as you stated quite clearly, the key measures to solve water supply problems in California and at the local level. When they say alternatives, we do things like, "Do we run the pipe down this street versus another street?" We do that level of engineering, but it is certainly not to do with the basic question, "Should you do more water recycling in Rancho Cucamonga?" As Congressman Dave Dreier pointed out, it's clear that we ought to do it.

Senator FEINSTEIN. Let me ask this question of all of you. Let me quickly run through, once again, the requirements that we would have: the cost per acre-foot of water produced, whether it can demonstrate regional benefits, what the environmental benefits are, whether it demonstrates new technologies, the cost-effectiveness of the project compared to others and whether it addresses certain Federal interests. Now I candidly think we have to be more specific about what we mean by each of these or they're going to get in the same conundrum they were in before, because these are pretty non-specific. If I put on my local government hat and look at this: "Well, what Federal interests are they talking about? Is it just endangered species? Is it something else?" I think we have to have very specific requirements. So I would respectfully submit that this

needs more work and if the four of you have any input right now, I'd certainly love to hear it. Let's hear from the great State of Texas.

Mr. LIPPE. I had one thought on the new technology and the research question and that is that it seems a natural outcome of developing an operating system, an operating program. For example, in Austin, there are a number of chip makers, chip manufacturers for computer chips, and they are very interested in using reclaimed water for—huge amounts of water that that industry uses and so there is some—but it is very important to them that it work, that it not interfere in any way with their processes, so there is some research that those companies would be interested in doing. But the water needs to be—

Senator FEINSTEIN. Very pure, very high quality.

Mr. LIPPE. We would need to be able to deliver the water at a high quality to those locations in the first place. Second, the next phase of our project is to deliver the reclaimed water to the University of Texas campus. They have a number of cooling towers and a lot of landscaped irrigation. It is a very large campus, so I just connect that with a research university being able to take one further step once they have the water around their campus. They are actually putting pipes in the ground, in advance, in anticipation of this reclaimed water arriving to their campus. But, obviously, a university could grab that as an opportunity to do some research as well. So, not necessarily an either/or, do we do the projects, do we do the research, but to me, it is going to be a natural outcome. And I guess I was—well, this is a separate question, but something that was on my mind was, as we enter into this process or the new criteria, is there a—I guess you would call it a grandfathering of programs like ours that are hopefully 1 month away from finishing feasibility or having a final one accepted?

Senator FEINSTEIN. Good question. What do we do? I'm told there are transition procedures in the bill. Well, let me go on. Mr. Grindstaff, Mr. Atwater, do you have any concerns about these requirements or beefing them up or changing them, making them more specific?

Mr. GRINDSTAFF. I'll answer. We run a lot of grant programs at the State level and have had a lot of experience, and to a large extent, what we are talking about here today is transitioning the Bureau of Reclamation from an agency that really helped build the West. I mean, we have to give them credit for a lot of what is in the western United States, but transitioning them from what they have always done, which is design things and build them themselves, to a grant-making agency, I think the more policy direction you give them, having received policy direction from the State legislature, from Congress myself, I think that is very helpful in their efforts to set up this new program, because this will become then kind of something that I would expect, over time, will expand within their budget. People will recognize this.

Senator FEINSTEIN. Joe, let me ask you this. Would you put on your grant hat and then go back and look at the bill language for these sections?

Mr. GRINDSTAFF. I will commit to do that. And beyond just me, I'll have staff look at it that are smarter than I am.

Senator FEINSTEIN. OK. And give us some recommendations, because I think the requirements ought to be crisp, and not vague, but specific, so that even somebody like me reading them would know exactly what I have to do to satisfy them.

Mr. GRINDSTAFF. Agreed. I will do that.

Senator FEINSTEIN. Thank you, Madam Chairman. I appreciate it.

Senator MURKOWSKI. Mr. Atwater?

Mr. ATWATER. There are good examples of it. All the States work with either a—am I on?

Senator MURKOWSKI. There should be a little light in the button.

Mr. ATWATER. I know. I'm going to have to practice this. But what I was going to say is a good example is EPA with its Clean Water program, with all the States. They have guidelines and that has worked well over the years and that is an example of where their grants and SRF low-interest loans—they have specific statutory guidelines in the State of California. All the States administer that in a like manner. As Joe pointed out, in the CALFED program, they have administered a wide range of grant programs with both the Federal agencies and the State. I think the Senator is right. We ought to be able to work together with the Bureau and make sure there is no ambiguity when we get done in the month of August.

Senator FEINSTEIN. Thank you. If I were looking at this, I would have a criteria bang for the buck. I mean, I know exactly what that means.

Mr. GRINDSTAFF. Absolutely.

Senator FEINSTEIN. I think that is the kind of thing that we have to get down to—in other words, the number of acre-feet per dollar spent—so that you really know whether you've got a cost-effective project before you.

Mr. GRINDSTAFF. And that really adds incentives for agencies to really cut down their requests for money because they know they are going to be judged by how many dollars per acre-foot it costs the Federal Government to get this project done. So they may reduce the amount of the request in order to be more competitive. So I agree 100 percent.

Senator MURKOWSKI. It seems that so many of the problems that we have had, historically, as we try to move forward with any of these programs, has been a competition. Everybody has their project that they are trying to advance. Senator Johnson mentioned the funding aspect of it and that is a reality that we must deal with. But we also have to deal with the reality that definable, concrete—not vague, not ambiguous—criteria need to be set so that those of you who are working to advance these projects, coming to Congress, seeking the authorization and, ultimately, the funding. Know what you can count on and what you cannot count on and what you are up against.

I think it is our job to help you in that effort. As I look at projects that we have had before the subcommittee this afternoon and roll them in with all the others that we have had an opportunity to hear since I've been chairing this subcommittee, I don't think we've had one project where the Bureau has been able to give their support, because we don't have the criteria, the management

and the funding all pulled together so that we can move forward with it. You either fix and reform the title XVI program or you have to deal with the reality that we're just offering legislative carrots out there that have nothing inside of them.

The programs are far too important to do that. I would like to think that if we are successful with good legislation—and I will ask all of you that are at the table here today and those that are listening from the audience's perspective, because you have an interest in this, we are looking for assistance in making sure that we've got good legislation moving forward that will accomplish what we have set out to do. I'd like to think that if we can get the reform right, that we can actually see some of these projects checked off this list and this backlog that you have been living with for far too long can be made to disappear, that we move forward with it. We will look forward to seeing many of you in August and I appreciate your contribution, your hard work. And Senator Feinstein, thank you for all of yours. I appreciate it.

[Whereupon, at 4:07 p.m., the hearing was adjourned.]

[The following statement was received for the record:]

STATEMENT OF THE CITY OF AUSTIN, ON S. 3639

The City has reviewed S. 3639 and came up with the comments pasted below. If you would like to talk about these issues in more detail, I can arrange put you in touch with the person in the City who is working on its Title XVI project. Please let us know if you have any questions or need more information. I hope your August recess is going well. Thanks.

The good news is that S. 3639's grandfathering provisions are flexible and we can easily work within them. The bill also streamlines the Title XVI process, which is needed. We did however notice two things that will improve the bill if changed:

1) Section 1604(c)(2)(B) requires that within 30 days of the submission of a project, the Secretary issues written notice on whether or not their is sufficient information to evaluate the project. The checklist for this includes "engineering plans". Our experience is that engineering plans can be a significant component (up to 15%) of project costs and, ideally, are finalized immediately prior to construction. A Title XVI Program participant would want to know whether or not federal matching grants are available well in advance of expending funds for engineering plans. A preliminary engineering report is done to scope a project. It is conducted earlier and at much less expense. It also contains enough information to determine whether or not a project is technically viable. We recommend that "engineering plans" be replaced with "preliminary engineering report" in Section 1604 (c)(2)(B).

2) In Section 1604(c)(2)(D) there is a requirement for a "financial plan" for a project. We feel this is vague, especially since many of our current difficulties with the Title XVI Feasibility Study review relate to financing. Does this mean an engineering cost study, does this mean a schedule for the expenditure of funds, does this mean a life cycle cost study, does this mean an analysis on the impact of rates? We recommend that "financial plan" be changed to "evidence of financial capability, such as a bond rating or prospectus/underwriter's report for a planned bond issuance".

APPENDIX
RESPONSES TO ADDITIONAL QUESTIONS

RESPONSES OF P. JOSEPH GRINDSTAFF TO QUESTIONS FROM SENATOR MURKOWSKI

Question 1a. Reclamation's testimony indicates that under the CALFED Program, it has reviewed at least three of the Title XVI projects that would be authorized by S. 3638.

Does the CALFED Program share Reclamation's view that the feasibility of those projects cannot be determined? Is the State of California providing financial assistance for the projects included in S. 3638?

Answer. S. 3638 includes four projects for funding under Title XVI of Public Law 102-575 and one project that may not be related to Title XVI.

For the *Cucamonga Valley Water District Recycling Project*, a feasibility study is currently underway. The feasibility study is funded through a plan of study grant that the State Water Resources Control Board (Board) has awarded to the District. Because the study has not been completed, the Board has not determined that the project is feasible.

Some phases of the *Inland Empire Utilities Agency Regional Water Recycling Project* (Phases 1 and 2), *Yucaipa Valley Water Supply Renewal Project*, and *City of Corona Water Recycling and Reuse Project* have been approved and/or received funding from the Board. Feasibility of these projects has been determined based on state and federal requirements and provisions of state bond funding requirements (see discussion below on selection criteria).

The Riverside-Corona Feeder Project, and other phases of the three projects listed above, is included in an Integrated Regional Water Management Implementation proposal that has been submitted to the Board for funding consideration. This proposal is currently under review as part of a competitive ranking and selection process according to state bond law.

Question 1b. What Funding Criteria does the state use in deciding on whether or not to provide financial assistance?

Answer. The Board provides funding to local agencies for water reclamation projects from a variety of funding sources. The State Revolving Fund Loan Program (SRF) is a low interest revolving loan program that was initially capitalized through federal grants and state bond sales. The other primary source of funds for water reclamation projects has been general obligation bonds approved by the voters. The Board provides construction grants and loans as well as planning grants to assist local agencies to conduct feasibility studies for water reclamation projects before they are implemented.

Federal provisions applicable to the SRF and state bond legal requirements are incorporated into the funding criteria for each of the funding programs. For the SRF and water recycling program, applications are reviewed 1) based on readiness to proceed, 2) for determination of engineering, institutional, and financial feasibility, 3) based on assessment and assurances of there being a recycled water market, 4) for compliance with California Environmental Quality Act, and 5) for cost-effectiveness. Projects funded through other grant programs are selected for funding through a competitive process as required by the state bond law. The review and selection criteria are established in the bond funding program guidelines that are adopted through a public review process. The review criteria include scientific merit and project effectiveness evaluation.

Because some water reclamation projects benefit the Sacramento-San Joaquin-San Francisco Bay-Delta region by reducing water diversions from the bay and delta, CALFED has a role in the administration of state funds. Proposition 50, passed in 2002, requires that Proposition 50 funds for water reclamation provide benefits to the Delta. The California Bay Delta Authority, which administers CALFED, reviewed and concurred with the Board Water Recycling Funding Program Guidelines and approved the projects eventually recommended for funding.

Question 2. During your testimony at the subcommittee hearing, you indicated that during the last year, California entities had not taken Colorado River water that they were otherwise entitled to because of projects such as those authorized under Title XVI. Could you please elaborate on that situation and how much water was retained for use or carry-over in the Colorado River system (thereby benefiting other states)?

Answer. The U.S. Department of the Interior adopted a Record of Decision for Colorado River Interim Surplus Criteria (ISC) in 2001 and California's Colorado River water contractors executed the Quantification Settlement Agreement and other related agreements in 2003. Together, these documents establish a framework under which California local agencies holding federal water delivery agreements may receive surplus Colorado River water. The ISC allows contractors serving municipal and industrial uses, namely Metropolitan Water District of Southern California (MWD) in California's case, to take surplus water based on specified hydrologic/reservoir storage criteria. Based on hydrologic conditions, surplus water was available to MWD in 2003 and 2004, but not in 2005. Surplus water is again available in 2006. However, MWD has not taken *any* of the ISC surplus water to which it was entitled. Annual maximum amounts of that surplus water: 2003—107 TAF; 2004—70 TAF; 2005—0; 2005—272 TAF (projected).

For comparison purposes, MWD's 2005 Urban Water Management Plan shows that, in 2004, MWD member agencies produced the following amounts of water in their service areas: Water recycling—75 TAF (with MWD financial support), 134 TAF (without MWD financial support); Groundwater recovery—43 TAF (with MWD financial support), 21 TAF (without MWD financial support).

MWD is not planning to take surplus Colorado River water in 2006 because this year was very wet in Northern California and, hence, MWD received a full allocation from the California State Water Project. Colorado River water not taken by MWD will remain in storage in Lake Mead. Following the recent five year drought in the Colorado River system, overall reservoir storage remains low. Current reservoir system storage is at only 58% of capacity.

RESPONSES OF RICHARD ATWATER TO QUESTIONS FROM SENATOR MURKOWSKI

Question 1. As noted in the February oversight hearing, the Administration has opposed most, if not all the Title XVI projects that members of Congress have proposed for authorization in the last 2 Congresses. Has the lack of Administration support stymied the progress in developing and implementing water reuse projects in the West?

Answer. Yes. Federal support can often make the difference in the financibility of a project. If a local government agency can demonstrate to the capital markets that even a small Federal subsidy is available, this can make the difference in whether a proposed financing package is accepted. General Eugene Habiger, former General Manager of the San Antonio Water System (SAWS), emphasized the value of Title XVI grants in testimony before the House Subcommittee on Water and Power on March 27, 2003. Habiger noted that "in terms of Title XVI, we received \$200,000 about six years ago, which proved to be invaluable with [SAWS'] recycled water program." Habiger continued by noting that these Federal programs are viable and shouldn't be considered as "cash cows," but as leveraging mechanisms.

Douglas Scott, Director of U.S. Water/Sewer Group for Fitch Ratings, testifying at the same hearing, made the following statement. "Opportunities exist for the Federal government to participate in types of projects or in individual projects with direct grants which would leverage local dollars and possibly decrease the need for Federal involvement on a larger scale in the future." The WateReuse Association agrees strongly with Scott's statement.

The Federal imprimatur can also result in a lower cost of capital (i.e., a lower interest rate) which can save the local agency and its ratepayers substantial dollars over the life of a bond. In sum, many more beneficial water reuse projects might have been initiated over the past five years had the current Administration been more supportive of Title XVI.

At the February 28 hearing of the Senate Subcommittee on Water and Power, Virginia Grebbien (General Manager, OCWD) and Richard Atwater (Chairman of the WateReuse Association's National Legislative Committee), both indicated that based on their experiences, that Federal grants under Title XVI do provide a significant financial boost and "Federal stamp of approval" that provide the incentives to implement a water recycling project.

Question 2. Reclamation opposes the authorization of any new Title XVI projects prior to Administration review and approval of appraisal and feasibility studies. Do

you agree that Congress should not authorize any projects that have not had the benefit of an in-depth feasibility analysis? What are the primary issues that exist with having Reclamation being the entity with responsibility for assessing the feasibility of a project?

If the Bureau would adhere to its own guidelines and provide timely responses to local government agencies which are applying for Title XVI projects, the current process would be workable. The Bureau appears to be saying that, due to lack of funds and the existing sizeable backlog of projects, they are reluctant to approve any new projects. The Bureau needs to set forth a clear set of rules and guidelines and then be responsive to local agencies that are spending large sums of money on the preparation of feasibility studies.

With respect to whether Congress should or should not authorize projects that have not had the benefit of an in-depth feasibility analysis, S. 3639 provides a mechanism for Congress to authorize projects if the Bureau does not respond to a local agency within 180 days after completion of a feasibility study. The Association strongly supports this "trigger," which would allow the Congress to authorize a project in the absence of a timely response by the Bureau.

The primary issues that exist with having Reclamation being the entity with responsibility for assessing the feasibility of a project are as follows: 1) the Bureau appears reluctant to approve any project, regardless of the degree of diligence and the appropriateness of a local water reuse project; 2) the Bureau does not appear to be applying its own guidelines in an even handed, equitable manner; 3) the Bureau does not provide timely responses; and 4) the Bureau, through its actions during the current Administration, appears to have relegated the Title XVI program to the "back burner" and has focused most of its attention on its Water 2025 program.

Through its Water 2025 program, the Department of the Interior has recognized that there are critical water shortages facing the Western U.S. and it is clear that water recycling is one of the most cost-effective solutions for alleviating these problems. As retired Commissioner John Keys has stated many times, recycled water is the "last river" that can be tapped to solve the water problems in the West. Therefore, the Association strongly recommends increased funding for Title XVI given that the benefits of water recycling are significantly higher than the modest 10-20 Federal share of the capital costs!

[Responses to the following questions were not received at the time the hearing went to press.]

COMMITTEE ON ENERGY AND NATURAL RESOURCES,
SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS,
Washington, DC, August 3, 2006.

Mr. LARRY TODD,
Deputy Commissioner for Policy, Administration, and Budget Bureau of Reclamation, Department of the Interior, Washington, DC.

DEAR MR. TODD: I would like to take this opportunity to thank you for appearing before the Senate Subcommittee on Water and Power of the Committee on Energy and Natural Resources on Thursday, July 27, 2006 to give testimony on S. 3638, S. 3639, H.R. 177, H.R. 2341, and H.R. 3418.

Enclosed herewith please find a list of questions which have been submitted for the record. If possible, I would like to have your response to these questions by Thursday, August 17, 2006.

Thank you in advance for your prompt consideration.

Sincerely,

LISA MURKOWSKI,
Chairman.

[Enclosure.]

QUESTIONS FROM SENATOR MURKOWSKI

Question 1. Your testimony on S. 3639 states that "before projects are authorized for construction, their appraisal and feasibility studies should be completed, reviewed, and approved by the Department and OMB and submitted to Congress." It's my understanding that Reclamation is not actively supporting a significant number of appraisal and feasibility studies. How much of the Departments' 2007 budget request of \$10.1 million for Title XVI projects is committed to reviewing and completing appraisal and feasibility studies for potential project authorizations?

Question 2. The Administration's position promotes the use of "ranking criteria" to help identify the projects most worthy of federal investment. Has Reclamation de-

veloped such ranking criteria? Given the very limited amount of funding for Title XVI projects in the President's budget, there must be some objective assessment being used to determine which projects should be funded. How does Reclamation develop its annual budget request for Title XVI projects?

Question 3. Please identify with specificity the factors that Reclamation believes that must be met in order for a Title XVI project to demonstrate "feasibility".

Question 4. In Reclamation's view, would any of the projects within S.3638 help alleviate significant water conflicts or shortages or add to the water supply in a crisis area? What is the nexus between the projects in S. 3638 and other Reclamation projects or interests?

Question 5. With respect to H.R. 177, have feasibility studies and cost estimates been provided for the projects that would be authorized under sections 2, 3, & 4? If so, are the projects "feasible", applying Reclamation's criteria?

Question 6. With respect to H.R. 2341, the Administration testimony raises 2 issues: (1) that the feasibility studies and NEPA analysis need to be completed; and (2) that there will still be a need to an evaluation of whether the project meets Title XVI authority and objectives. When do you expect to both the feasibility studies and the NEPA analysis to be complete? Please state with specificity and completeness, what Reclamation's views are with respect to "Title XVI authority and objectives".

Question 7. The Administration testimony continues to reference the backlog of Title XVI projects already authorized. Yet the Administration's budget proposals continue to suggest budget cuts in excess of 50% for this program. Why does the Administration continue to recommend slashing the funding for Title XVI projects? If you believe that some projects that are currently authorized do not merit funding, please identify those projects.

COMMITTEE ON ENERGY AND NATURAL RESOURCES,
SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS,
Washington, DC, August 3, 2006.

Mr. CHRIS LIPPE,
Director, City of Austin Water Utility, Austin, TX.

DEAR MR. LIPPE: I would like to take this opportunity to thank you for appearing before the Senate Subcommittee on Water and Power of the Committee on Energy and Natural Resources on Thursday, July 27, 2006 to give testimony on H.R. 2341.

Enclosed herewith please find a list of questions which have been submitted for the record. If possible, I would like to have your response to these questions by Thursday, August 17, 2006.

Thank you in advance for your prompt consideration.

Sincerely,

LISA MURKOWSKI,
Chairman.

[Enclosure.]

QUESTIONS FROM SENATOR MURKOWSKI

Question 1. Your testimony makes clear that Austin has already implemented some reclaimed water projects.

Question 2. Is federal assistance necessary to continue with expansion of Austin's reclaimed water system? With respect to the additional facilities contemplated in H.R. 2341, how long would it take to initiate construction upon enactment of H.R. 3418? What additional activities would need to occur prior to construction?

COMMITTEE ON ENERGY AND NATURAL RESOURCES,
SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS,
Washington, DC, August 3, 2006.

Mr. TOM RAY,
Engineering Consultant, Waco, TX.

DEAR MR. RAY: I would like to take this opportunity to thank you for appearing before the Senate Subcommittee on Water and Power of the Committee on Energy and Natural Resources on Thursday, July 27, 2006 to give testimony on H.R. 3418.

Enclosed herewith please find a list of questions which have been submitted for the record. If possible, I would like to have your response to these questions by Thursday, August 17, 2006.

Thank you in advance for your prompt consideration.

Sincerely,

LISA MURKOWSKI,
Chairman.

[Enclosure.]

QUESTION FROM SENATOR MURKOWSKI

Question 1. Has a detailed study been completed for the McLennan County Regional Satellite and Reuse Project? If so, what is the overall cost of the project? How long would it take to proceed to construction upon enactment of H.R. 3418? What additional activities would need to occur prior to construction?

○