S. HRG. 110–170

CURRENT WATER AND POWER BILLS

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER AND POWER

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

ON

S. 1054	**S. 1472**
S. 1475	**H.R. 30**
H.R. 122	**H.R. 609**
H.R. 1175	**H.R. 1526**

AUGUST 1, 2007

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

U.S. GOVERNMENT PRINTING OFFICE

38–512 PDF WASHINGTON : 2007

For sale by the Superintendent of Documents, U.S. Government Printing Office
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CURRENT WATER AND POWER BILLS

WEDNESDAY, AUGUST 1, 2007

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

The subcommittee met, pursuant to notice, at 2:32 p.m. in room SD–366, Dirksen Senate Office Building, Hon. Jon Tester, presiding.

OPENING STATEMENT OF HON. JON TESTER, U.S. SENATOR FROM MONTANA

Senator TESTER. I'll call the hearing before the Water and Power Subcommittee to order. It's my pleasure to welcome everybody here. This afternoon's hearing—a special welcome to you, Chairman Edwards—we have two panels of witnesses here today. Several have traveled across the country to provide us with their views. I want to thank you all for your efforts.

The bills before us today all seek assistance from the Federal Government Bureau of Recs Title XVI Water Reuse and recycling Program. The include the following: S. 1054 and H.R. 122 authorize Reclamation's participation in two water recycling projects in the San Bernardino County, California; the second one is S. 1472, authorizing Federal support for the North Bay Water Reuse Program in Northern California; the third on, S. 1474, H.R. 1526, authorizing support for the Bay Area Regional Water Recycling Program, it's in the San Francisco area; the fourth one, H.R. 30, authorizing Reclamation's assistance with the expansion of a recycled water project in Riverside County, California; fifth, H.R. 1175, authorizing an increase in the cost ceiling for water reuse projects in Orange County, California; and last, H.R. 609, sponsored by Representative—Chairman Edwards, who is with us here today, which would authorize Reclamation's participation in water recycling project in Central Texas.

Before we get started, I'd like to quickly note that, although we don't have any Title XVI projects in Montana, we do have our fair share of water issues, including drought, climate change, and competing demands, all contribute to the growth, and the amount of pressure on our finite water resources.

Increasing the efficient use of water is a key to meeting our future demands, there's no question about that, and Title XVI appears to be a valuable program from that standpoint.

Although water is primarily a State and local responsibility, it is important for the Federal Government to be a constructive partner in addressing the water-related challenges before us. Title XVI seems to meet that test, and notwithstanding the Administration's opposition to the bills before us, we'll press forward, and continue to support those projects that prove to make sense from a technical, economical, and environmental perspective.

With that, since the committee is loaded with people, we will go right to Chairman Edwards to make his statement, and then we'll proceed, proceed on.

So, Chairman Edwards, thank you for being here today, and please go ahead with your statement.

STATEMENT OF HON. CHET EDWARDS, U.S. REPRESENTATIVE FROM TEXAS

Mr. EDWARDS. Chairman Tester, thank you very much. While the committee room may not be full, I've learned in my time here in the Congress, one member of the Senate with a conscience and the title Mr. Chairman can do an awful lot of good.

That's why I consider it a personal privilege to have your time, and to be able to testify before you, sir.

I want to thank you, Mr. Chairman, for your leadership, your personal leadership, in seeing that our Nation uses its natural resources in a responsible way. With your help, we want you see that my home town of Waco, Texas, and surrounding communities are part of that effort.

Specifically, H.R. 609, the Central Texas Water Recycling Reuse Act, would allow a region that is a key part of our Nation's trade and transportation corridor, to use highly treated wastewater—rather than drinking water—for industrial uses, and irrigation of parks and recreation areas.

I want to extend a special thanks to my colleague, Senator Hutchison, for her sponsorship on the Senate side of the Capitol, of this bill.

With our city's location on Interstate 35, Mr. Chairman, which is a key part of the Canada-Mexico-U.S. trade corridor, Central Texas is realizing significant population growth, and will for the years ahead.

Add to that the warm climate, and 100 degree days, which are typical in July and August, along with serious droughts in recent years, one can easily see why water reuse will be crucial for our area's future.

Mr. Chairman, our communities have made a personal financial commitment to this project, a major commitment, and I appreciate your focus that water issues should, predominantly, be local and State responsibility, and that's why I'm proud that our community has bellied up to the bar, and committed millions of dollars for this project.

But today, we join with you in asking for a partnership with the Federal Government to expand these important efforts in water reuse. It is my pleasure, and privilege, to introduce to you, the Waco City Manager, Larry Groth.

Mr. Groth, a friend of mine, has been an outstanding leader for our community, and it is his vision, hard work, and tenacity that have led to the passage of H.R. 609 in the House.

Thank you, Mr. Chairman, for your time.

Senator TESTER. I appreciate that. Mayor Groth is here?

Mr. EDWARDS. It's City Manager, Larry Groth, from the city of Waco.

Senator TESTER. Welcome. Good to have you here.

Mr. EDWARDS. Thank you.

Senator TESTER. Chairman Edwards, thank you very much for your time. I appreciate your comments very, very much. With that, do you have any further comments?

Mr. EDWARDS. No, sir.

Senator TESTER. It's not on the agenda, but Mayor, do you have anything you'd like to say?

Mr. GROTH. Yes, sir, if I may.

Senator TESTER. OK.

Mr. GROTH. Good afternoon, my name is Larry Groth. I'm City Manager for the city of Waco.

Senator TESTER. Yes.

Mr. GROTH. I'm here to testify in support of H.R. 609, if that's satisfactory.

Senator TESTER. You are on the next panel. So, we will hold off, and I will thank Chairman Edwards for being here. I appreciate your proactivity on these issues, and I appreciate you coming to the hearing today.

Mr. EDWARDS. Thank, thank you, Mr. Chairman.

Senator TESTER. While the next panel comes up, which consists of Larry Todd, and we'll get you next, Deputy Commissioner, Bureau of Reclamation.

While Larry is coming up, I would just ask unanimous consent, which I think will happen, that the comments by Dianne Feinstein, the Senator out of California, be attached to the hearing record.

[The prepared statement of Senator Feinstein follows:]

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

I want to thank the Subcommittee—and you, Senator Tester—for holding this important subcommittee hearing to authorize several Bureau of Reclamation "Title XVI" water recycling projects in California and Texas. A year ago, this subcommittee held hearings on many of these bills. The imperative for passing them is greater today.

According to Science Magazine this past April,

> . . . there is a broad consensus amongst climate models that this region (Southwest US) will dry significantly in the 21st Century and that the transition to a more and climate should already be underway. If these models are correct, the levels of aridity of the recent multiyear drought, or the Dust Bowl and 1950s droughts, will, within the coming years to decades, become the new climatology of the American Southwest.

The message is simple. Given that today's drought conditions are expected to become the typical water year in the decades to come, California must both use its existing water supplies more efficiently and it must stretch those supplies. That is precisely what the Bureau of Reclamation's Title XVI water recycling program does. The Bureau needs to make this a priority program, in California and across the entire West.

Recycled water is not only an important strategy for adapting to climate change, it also is an excellent way to reduce our greenhouse gas emissions because it is so much less energy intensive than importing water supplies from other regions. One of the bills before you today involves an Inland Empire Utilities Agency recycled

water program. This agency's recycled water programs are projected to reduce energy use by about 3,000 kilo-watt hours per acre-foot (kwh/af), according to a study prepared by Professor Robert Wilkinson, of the Bren School of Environmental Science and Management at the University of California, Santa Barbara, and author of the Methodology for Analysis of the Energy Intensity of California's Water Systems and An Assessment of Multiple Potential Benefits Through Integrated Water-Energy Efficiency Measures (2000).

These energy savings add up. If the projects in the five California water recycling bills before you are built, they will provide approximately 220,000 acre-feet per year of new water supply. This would reduce California's energy usage by about 75 megawatts per year and reduce our greenhouse gas emissions by about 220,000 tons of greenhouse gases in CO_2 equivalents per year. This is the same effect asremoving 38,000 cars per year from the road. (Source: EPA conversion factor).

The reality of our current drought also points to the need for these water recycling projects. California is experiencing record dry conditions, the Colorado River at Lake Mead is down some 100 vertical feet and presently is at the lowest level it has been since it was dedicated by President Franklin Roosevelt in 1935. And, we now are hearing predictions that these droughts can last not just years but decades.

Recycled water is a uniquely important source of water supply to our cities and states in the context of climate change because it is one of the few supplies that will be untouched by the lack of rainfall. In times when water is short, recycled water projects will still be producing the same amount of water year after year that can supply industries and irrigate parks, schools and play yards. By using recycled water for non-potable uses, we can stretch our drinking water supplies for the critical uses of supplying our homes and businesses.

This means that recycled water is one of the most important new sources of supply for the Nation and especially that portion of the Nation called the "arid West". Furthermore, recycled water is a supply that is available to all of our communities, not just in the dry Southwest. Climate change will affect water supplies available in the rest of the country as well, and the projects that are being developed in Californiaare just the beginning of what can be done across the Nation.

The Title XVI program—and the Federal participation—is often cited as the determining factor in the creation of local partnerships to support these projects. The Federal cost-sharing is limited to 25% and is as low as 10%–20% for many of the projects before you today (the Inland Empire Utilities Agency project seeks only a 10% federal cost-share). We leverage limited Federal dollars to stretch limited water supplies throughout California.

You will hear from representatives and community leaders on behalf of more than a dozen California water agencies on the following five bills:

- S. 1054 and H.R. 122, to authorize the Secretary of the Interior to participate in the Inland Empireregional recycling project and in the Cucamonga Valley Water District recycling project;
- S. 1472, to authorize the Secretary of the Interior to create a Bureau of Reclamation partnership with the North Bay Water Reuse Authority and other regional partners to achieve objectives relating to water supply, water quality, andenvironmental restoration;
- S. 1475 and H.R. 1526, to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Bay Area Regional Water Recycling Program;
- H.R. 30, to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Eastern Municipal Water District Recycled Water System Pressurization and Expansion Project; and
- H.R. 1175, to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to increase the ceiling on the Federal share of the costs of phase I of the Orange County, California, Regional Water Reclamation Project.

I thank the Chairman again for holding this hearing, and hope the Committee speedily marks up these bills and reports them to the Senate floor.

Thank you.

Senator TESTER. Yes, yes, yes. OK. Yes, before starting, there are additional statements that the subcommittee has received on several bills before us today. That testimony, as well as Senator Feinstein, as well as the written testimony of today's witnesses will be made a part of the official hearing record.

Senator TESTER. Larry Todd, who is Deputy Commissioner of the Bureau of Reclamation.

Welcome, Larry. Please go ahead and provide a brief testimony—a brief summary of your testimony—and following that, we'll have a few questions, and we'll proceed to the second panel. Welcome.

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

Mr. TODD. Thank you, Mr. Chairman. I am Larry Todd, Deputy Commissioner with the Bureau of Reclamation. I'm pleased to be here today to provide testimony on S. 1054, S. 1472, S. 1475, H.R. 30, H.R. 609, and H.R. 1175.

The projects authorized in the bills before us today could potentially provide a needed increase in localized water supply, and decrease dependence on imported water in California and Texas. S. 1472 would authorize the planning, design and construction of water reclamation and reuse projects and the North Bay Water Reuse Program.

S. 1054, S. 1475, H.R. 20, H.R. 609, and H.R. 1175, would each amend the Reclamation Wastewater and Groundwater Study and Facilities Act, to include the Inland Empire, and Cucamonga Valley Water District Recycling projects, the Bay Area Regional Recycling Program, a Eastern Municipal Water District Recycled Water Project Expansion, a Central Texas Water Recycling and Reuse project, and Phase I of the Orange County Regional Water Reclamation project.

While these goals of these bills are commendable and important, the Department has concerns about each, and thus cannot support any of the bills.

The primary concern is that any new projects would compete for limited funds with other, previously authorized, projects. To date, there are 32 specific Title XVI projects authorized, 21 of which have received some form of Federal funding. Reclamation is currently facing an estimated $328 million funding backlog for these projects, and the bills before us today would authorize an additional $132 million of projects.

The President's Fiscal Year 2008 budget included $10.1 million in funding for projects already underway. But with tight budgets, these funds compete directly with the needs of aging infrastructure and projects underway throughout the West, and it is difficult to provide the funding needed to eliminate this backlog.

While budgetary concerns remain paramount, we believe feasibility studies should be completed prior to authorization, in order to fully assess the engineering realities and cost effectiveness of proposed projects.

Except for S. 1054, studies are still needed for projects contained in these bills. Both projects in S. 1054 have completed feasibility requirements, and have been deemed feasible.

Apart from feasibility and budgetary concerns, S. 1472 does not cite the Reclamation Wastewater and Groundwater Study and Facilities Act as the authority for the planning, design and construction of the project, and Reclamation is unclear as to whether this is a Title XVI bill.

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 noted, and believe, that the Title XVI program has already achieved its original purpose of demonstrating new technology.

Given tight budget constraints, it is particularly important that the Administration and the Congress identify the projects most worthy of Federal investment.

While Reclamation cannot support the new water recycling project authorizations before us today, we understand that Title XVI is a living program in which the Federal role in assisting local construction is important, and well-established.

To that end, Reclamation has set about revising and improving its directives and standards that govern the Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors, in weighing the merits, and ultimate feasibility of proposed water recycling products.

A new revised draft of this document will go out for public review this month, and is expected to be finalized in late October.

Mr. Chairman, thank you, again, for this opportunity to present testimony before the subcommittee, and I am available to answer any questions.

[The prepared statements of Mr. Todd follow:]

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

ON H.R. 30

Mr. Chairman and Members of the Subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to be here today to give the Department's views on H.R. 30, the Eastern Municipal Water District Recycled Water System Pressurization and Expansion Project Act. The Department cannot support H.R. 30.

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 Bureau of Reclamation has been administering a grant program to fund these Title XVI projects since 1994, and the Act has been amended to authorize a total of 32 projects.

H.R. 30 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (43 U.S.C. 390h et seq.), to authorize the Secretary of the Interior to participate in the design, planning, and construction of improvements to the Eastern Municipal Water District's reclaimed water distribution system in Riverside County, California. It provides for Federal funding of 25 percent of the total project cost or $12 million, whichever is less.

Eastern's five water reclamation plants currently produce about 52,000 acre-feet per year. The reclaimed water is distributed by a gravity flow system primarily serving agricultural users. This project would create a pressurized distribution system suitable for municipal users, including at least four reservoir tanks of about 4 million gallons capacity each, with associated pipelines and pumping stations. The distribution system may also be expanded eastward to serve existing citrus groves. Project benefits include local drought protection and reduced dependence on imported water.

Mr. Chairman, the Department supports efforts to increase local water supplies and increase recycled water use in southern California. However, given the costs of the currently active Title XVI projects, we cannot support the authorization of new projects at this time. Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million.

Additionally, Reclamation is currently working with the District to review the technical work completed to date and to identify the additional work necessary to

prepare a complete feasibility report meeting the feasibility requirements of Title XVI projects. However, because the technical studies are not complete, the feasibility and cost effectiveness of this project cannot be determined, as required by Title XVI.

While Reclamation does not support new authorizations for Federal cost sharing of water recycling projects, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation has set about revising and improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

Mr. Chairman, this concludes my testimony. Thank you for the opportunity to comment on H.R. 30. I would be happy to answer any questions at this time.

ON H.R. 609

Mr. Chairman and members of the Subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to present the views of the Department of the Interior on H.R. 609, concerning the Central Texas Water Recycling and Reuse Project in the State of Texas. The Department cannot support H.R. 609.

H.R. 609 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. It also provides for Federal funding of 25 percent of the total project cost.

Mr. Chairman, the Department supports efforts to increase local water supplies and increase recycled water use. However, given the costs of the currently active Title XVI projects, we cannot support the authorization of new projects at this time. Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million.

In addition, the Administration does not support construction authorizations when a Feasibility Report has not been completed. These reports ensure that proposed projects are cost-effective, meet environmental compliance requirements, and are consistent with the overall objectives of the Title XVI program. Reclamation recently met with the local sponsor to discuss Federal funding under the Title XVI program, as well as appraisal and feasibility report requirements. Receipt of these reports would enable Reclamation to comment on the merits and determine the project's qualification for consideration of Federal funding.

While Reclamation cannot currently support new water recycling project authorizations, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation is in the process of improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can work more closely with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

Thank you for the opportunity to comment on H.R. 609. This concludes my statement and I would be happy to answer any questions.

ON H.R. 1175

Mr. Chairman and Members of the Subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to be here today to give the Department's views on H.R. 1175, a proposal to increase the federal share of the costs of Phase I of the Orange County, California, Regional Water Reclamation Project. The Department cannot support H.R. 1175.

H.R. 1175 would amend Section 1631(d) of Title XVI, the Reclamation Wastewater and Groundwater Study and Facilities Act, of Public Law 102-575, the Reclamation Projects and Authorization Adjustment Act of 1992, to authorize the Secretary of the Interior to gradually increase the ceiling on the Federal share of the costs of Phase I to $51,874,849 by Fiscal Year 2016. As you are aware, current federal law limits the Federal share of individual project costs to 25 percent of the total, or a maximum federal contribution of $20 million.

This project is being constructed in phases. When completed, the first phase will produce about 72,000 acre-feet per year of recycled water which will be used primarily to recharge the region's groundwater basin. Construction is currently on schedule for completion in November 2007. Reclamation is currently authorized to

participate in the first phase of the project, up to the ceiling of $20 million. Through Fiscal Year 2007, Reclamation will have spent approximately $17.4 million on Phase I leaving about $2.6 million in federal funds remaining to be provided. Of this, $1.5 million is included in the President's budget request for FY 2008.

While the Department has funded and continues to support this local project, given the costs of other currently active Title XVI projects, we cannot support this $32 million increase in the authorized cost ceiling. Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million. If this bill is enacted, it could increase pressure for higher federal contributions to other currently authorized projects, which would increase the burden on an already strained budget.

While Reclamation does not support new authorizations or increasing the ceilings for Federal cost sharing of water recycling projects, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation has set about revising and improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

Mr. Chairman, this concludes my testimony. Thank you for the opportunity to comment on H.R. 1175. I would be happy to answer any questions at this time.

ON S. 1054

Mr. Chairman and Members of the Subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to be here today to give the Department's views on S. 1054, the Inland Empire Regional Water Recycling Initiative. The Department cannot support S. 1054.

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 Bureau of Reclamation has been administering a grant program to fund these Title XVI projects since 1994, and the Act has been amended to authorize a total of 32 projects.

S. 1054 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (43 U.S.C. 390h et seq.), to authorize the Secretary of the Interior to participate in the design, planning, and construction of two water recycling projects located in San Bernardino County, California. The first project authorized in the bill is the Inland Empire Regional Water Recycling Project. This very large water recycling project located in the Chino Basin and sponsored by the Inland Empire Utilities Agency, involves at least five wastewater treatment plants and an extensive recycled water distribution system. In addition, the bill authorizes the Cucamonga Valley Water Recycling Project. This project, sponsored by the Cucamonga Valley Water District, consists of two satellite wastewater treatment plants and associated recycled water distribution systems, located in Rancho Cucamonga.

The Federal cost share of the Inland Empire and Cucamonga Water Recycling Projects would not exceed 25 percent, and appropriations of $20 million and $10 million, respectively, are authorized.

Mr. Chairman, the Department supports efforts to increase local water supplies and increase recycled water use in southern California. The Inland Empire Utilities Agency and the Cucamonga Valley Water District each submitted a feasibility study on their respective projects. Reclamation has reviewed both feasibility studies, and compared the documents to the elements of a complete feasibility study as defined in the "Guidelines for Preparing, Reviewing, and Processing Water Reclamation and Reuse Projects under Title XVI of Public Law 102-575, as Amended." Reclamation found that both reports were complete, and met all the elements, and therefore have been deemed feasible.

While we recognize the local sponsors for the work they have done on these important projects, given the costs of the currently active Title XVI projects, we do not support the authorization of new projects at this time. Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million.

While Reclamation does not support new authorizations for Federal cost sharing of water recycling projects, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation has set

about revising and improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

Mr. Chairman, this concludes my testimony. Thank you for the opportunity to comment on S. 1054. I would be happy to answer any questions at this time.

ON S. 1472

Mr. Chairman and members of the subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to provide the Department of Interior's views on S. 1472, the North Bay Water Reuse Program Act of 2007. The Department cannot support S. 1472.

S. 1472 would authorize the planning, design, and construction of water reclamation and reuse projects in the North Bay Water Reuse Program. S. 1472 would require the project be constructed in two phases, the first phase being the main treatment and main conveyance system, and the second phase being the sub-regional distribution system.

Mr. Chairman, the Department supports efforts to increase local water supplies and increase recycled water use. However, given the costs of the currently active Title XVI projects, we cannot support the authorization of new projects at this time. Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million.

In addition, the Administration does not support construction authorizations when a Feasibility Report has not been completed. From Fiscal Year 2003 through 2006, Congress appropriated a total of $1.25 million for feasibility investigations to the Sonoma County Water Agency to determine if the project has engineering and economic feasibility. The Agency also studied whether the project proponents have financial capability, and evaluated the environmental effects of the project, in accordance with the Bureau of Reclamation's guidelines for Title XVI.

In December 2006, the Sonoma County Water Agency submitted a draft report that covered a portion of the information required for a feasibility determination. In April 2007, Reclamation provided comments on the report and also reminded the Sonoma County Water Agency that the environmental and economic information still needs to be submitted in order for Reclamation to complete the feasibility determination.

Apart from this consideration, S. 1472 contains unclear authorization language. As introduced, the legislation does not cite the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, Title XVI), as the authority for the planning, design, and construction of the project. Therefore, it is unclear if the intent of S. 1472 is to authorize the North Bay Water Reuse Program as a Title XVI project. If it is not the intent, then the feasibility study referenced above would need to meet the requirements of the of the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, also known as the Federal P&Gs for water resource development. Either way, it is premature to authorize the North Bay Water Reuse Program for construction before a feasibility study has been approved.

While Reclamation does not support new authorizations for Federal cost sharing of water recycling projects, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation has set about revising and improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

Mr. Chairman, this concludes my testimony. I would be pleased to answer any questions.

ON S. 1475

Mr. Chairman and members of the subcommittee, I am Larry Todd, Deputy Commissioner for Policy, Administration and Budget with the Bureau of Reclamation. I am pleased to be here today to provide the Department of the Interior's views on S. 1475, the Bay Area Regional Water Recycling Program Authorization Act. The Department does not support S. 1475.

S. 1475 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575, 43 U.S.C. 390h et seq.) to include authorization for construction of seven new projects. These new projects are the Mountain View Moffett Area Reclaimed Water Pipeline Project; the Pittsburg Recycled Water

Project; the Antioch Recycled Water Project; the North Coast County Water District Recycled Water Project; the Redwood City Recycled Water Project; the South Santa Clara County Recycled Water Project; and the South Bay Advanced Recycled Water Treatment Facility. The Federal share of the costs to implement each of the seven new Title XVI projects would not exceed 25 percent. S. 1475 also establishes a Federal cost ceiling for each of the seven new projects, collectively totaling $27.5 million.

Of the 32 specific Title XVI projects authorized to date, 21 have received funding. The remaining estimated total authorized Federal cost share of these 21 active Title XVI projects is at least $328 million. Given the costs of the currently active Title XVI projects, we do not support the authorization of new projects at this time.

I would like to briefly describe the status of these projects, most of which are already under review by Reclamation's Regional and Area Office staff. Of the seven projects providing new Title XVI construction authorization, the South Bay Advanced Recycled Water Treatment Facility, is already authorized by Congress and is considered feasible under Reclamation guidelines. Two additional projects—the Pittsburg Recycled Water Project and the Mountain View/Moffett Area Recycled Water Project—have received feasibility determinations from Reclamation.

Meanwhile, the sponsors of the South Santa Clara County Recycled Water Project and the Antioch Recycled Water Project have not yet completed a review of their draft feasibility reports and environmental documents. Therefore, the feasibility reports do not meet the requirements for Title XVI feasibility studies.

Feasibility reports for the last two projects identified for construction authorization in S. 1475—the North Coast County Water District Recycled Water Project and the Redwood City Recycled Water Project—were reviewed by the Bureau of Reclamation in 2006. The feasibility reports for both projects needed additional environmental and financial capability information. To date, the project sponsors have not provided this additional information in order for Reclamation to complete the determination of feasibility.

Although one of the projects included in the bill is already authorized for design, planning, and construction, and two of the projects have feasibility reports that meet the requirements of Title XVI feasibility studies, the remaining four projects do not have feasibility reports that meet those requirements. As such, the Department believes that it is premature to authorize projects prior to completion of feasibility reports.

While Reclamation does not support new authorizations for Federal cost sharing of water recycling projects, we understand that the projects established by Title XVI are important to many water users in the West. To that end, Reclamation has set about revising and improving its Directives and Standards that govern reviews of Title XVI projects. By doing so, we believe that Reclamation can play a more constructive role with local sponsors in weighing the merits and ultimate feasibility of proposed water recycling projects.

The Department appreciates local efforts to address future water issues. However, in light of the concerns expressed above, we do not support S. 1475. That concludes my prepared remarks. I would be pleased to answer any questions.

Senator TESTER. Thank you. I appreciate your summary.

Mr. Todd, a couple questions. I believe that your testimony said that Reclamation supports efforts to increase use of recycled water, and that you're in the process of improving guidelines. Yet, you also stated that you oppose each bill, citing the backlog, which quite honestly, I can appreciate.

But, your annual budget does not address the backlog, in fact, I believe it recommends a 50 percent cut. So, what's occurring financially doesn't match up with what is being said from a policy standpoint. I was wondering why? Why is this the case?

Mr. TODD. The competition for dollars in keeping facilities running, and constructing new projects, like Animas la Plata, and keeping our dams safe—which are very high priorities—is just tremendous amount on the small budget that Reclamation has. I believe that we have had—over the last several years, about $10 million that we have proposed in the Title XVI funding, and I don't see that increasing significantly.

If it were to increase significantly, we would really have to take it from other important projects, as well. So, quite frankly, we just can't increase it without harming other priorities.

Senator TESTER. What's the value of improving the guidelines, if the dollars aren't going to be there?

Mr. TODD. The guidelines are about the engineering and the economics of that particular project. We do believe in these projects, absolutely, and we also believe in, that it is a local responsibility. So, together with those two philosophies, we believe that if the Federal Government can, in fact, deem these feasible, that it gives some confidence to the project. We believe that that's important, it's an important leadership role in Title XVI.

Senator TESTER. Local responsibility for funding?

Mr. TODD. Pardon?

Senator TESTER. You said it's—you believe it's a local responsibility, so you think the local entities should be taking care of the funding of these projects?

Mr. TODD. We certainly believe that it is a local responsibility, and do believe that the majority of the funding—even in these bills—do come from the locals, and so we do want to support the ideology of those programs.

Senator TESTER. OK. I'll get some more questions, but I've just got to make a real quick comment.

I mean, water infrastructure is so critically important. Water resources—regardless of what they say about oil and gas and all of that good stuff—water is more important than anything. I mean, it's tough to survive without it. You know, I continually hear about infrastructure needs, and whether you're talking Texas, or you're talking California, or you're talking Montana, or North Dakotas—anywhere you want to go, a lot of this stuff either isn't there, or it's flat worn out, if it is.

I don't know, maybe it's because of what's going on in our foreign policy, maybe it's some other reason, but I would just tell you, I would hope that somebody is bucking the Administration on these 50 percent cuts in funding. That's all. I mean, somebody's got to stand up and ask for what's right.

As I understand it, there are several ongoing initiatives in California to develop strategies, restore the health of the Sacramento San Joaquin Bay Delta. Is Reclamation involved in those initiatives, and if so, will the North Bay Water Reuse Program contribute to a larger restoration effort there?

Mr. TODD. Yes, we are involved in Bay Delta, and how all of that operates, certainly. Any time that any of these projects, Title XVI, I believe North Bay would probably be one of those, can reduce the import of water, would certainly help that situation there. I don't think there's any doubt about that.

Senator TESTER. Testimony by North Bay Water Reuse Authority indicates that feasibility studies and environmental documents for the program will be completed by the end of 2008. Do you agree with the timeframe? Will Reclamation have completed its review of those documents in a similar timeframe?

Mr. TODD. Excuse me, Senator, I missed the particular ones that you were talking about.

Senator TESTER. North Bay Water Reuse Authority feasibility study and environmental documents for the program, due to be completed by the end of 2008. Just wondering if you guys agreed with that timeframe, and if Reclamation will have completed its review in a similar timeframe?

Mr. TODD. Certainly when—on that, when we get the information, and I believe it would be true in this case, when we get all of the information, we have been responsive within two to six, 7 months in being able to make a call on feasibility. So, we stand ready to——

Senator TESTER. OK.

Mr. TODD [continuing]. To deal with that, when we get all of the information in.

Senator TESTER. OK, your testimony in Central Texas bill indicates that Reclamation has not yet received any feasibility reports from the local sponsors, correct?

Mr. TODD. That's correct.

Senator TESTER. OK, testimony on the second panel indicates that such reports have been provided to Reclamation, can you clarify that?

Mr. TODD. I believe that we have met with the city of Waco, and talked over initial information about what a Title XVI and a Reuse Program might be. However, I do not believe that the City has actually submitted a feasibility report for us to review, and make a call on.

Senator TESTER. Hopefully we'll get some further clarification from that from their perspective.

The Administration—at least it sounds like the Administration—does not support the Orange County bill because of the precedent it might set in increasing the Federal contribution ceiling to an amount greater than $20 million. Have there been any individual Title XVI projects that have received a Federal contribution in excess of $20 million, to date?

Mr. TODD. There may be—there may be up to $25 million, and I can't recall exactly which ones right now, but maybe $25 million. But I do not believe that any of them have been to the extent of the Orange County 1175. That one, I think, goes all the way up to fifty-one or two million, I believe. I do not believe any of them have been up that high.

Senator TESTER. Is the Orange County program one project, or is it a number of different projects?

Mr. TODD. This is—this particular bill addresses Phase I, and there are three phases to that project. So, the increase in ceiling would be just for Phase I, which I believe is supposed to be completed here, fairly soon.

Senator TESTER. So, it is your thought that the Orange County program is one project?

Mr. TODD. Yes, I believe it's one project.

Senator TESTER. OK. With respect to the Bay Area Regional Program, your testimony states that four of the projects within the bill are not yet considered feasible by Reclamation. Two of these projects—the South Santa Clara Projects, and the Antioch Project—need completion of a review of the feasibility reports and

environmental documents. When do you anticipate those to be completed?

Mr. TODD. In the Bay Area, I think that there are six or seven projects—six projects. San Jose, South Bay is already authorized, Pittsburgh has been deemed feasible, Mountain View has been deemed feasible, Antioch and Santa Clara are the ones that we are reviewing in process right now. We believe we will have that out shortly, and there is some communication with those projects, about the information. So, we believe that we'll have answers, here, soon.

Senator TESTER. Which is how—what's, how long is "shortly," or "soon"?

Mr. TODD. You know, I don't have the exact timeframe, but there is environmental information, I believe, and economic information that was necessary. So, as soon as we get that information, we can certainly look at it, and make a call on feasibility.

Senator TESTER. So, you haven't got—I shouldn't say "got"—you haven't received all of the information?

Mr. TODD. That's correct.

Senator TESTER. That's been the hold up?

Mr. TODD. That's correct, on those two.

Senator TESTER. OK. That's fine. I will anticipate when you get that information would be done—week, two?

Mr. TODD. I don't know if it would be that soon. But, certainly, I think our record, since last year when we put these new procedures in place, we've been very responsive, within a couple of months, maybe up to 4 months, depending on the complexity of the project.

Senator TESTER. Is there any way to speed that up? Assuming you get those documents?

Mr. TODD. Certainly will, you know, we're going to make it a priority if we possibly can. But, we only have a certain amount of staff that's doing this work, so——

Senator TESTER. OK. I just—once again—thank you for, thank you for being here. I appreciate, appreciate your perspective. So, thank you very much.

Mr. TODD. Thank you.

Senator TESTER. While—hang on here for a second—while Larry is going down, we need Rich Atwater, Gary Darling, Larry Groth, Bill Long, Randy Record.

For our second panel, we have Rich Atwater, with the Inland Empire Utilities Agency, on S. 1054, and H.R. 122; Bill Long, representing the North Bay Water Reuse Authority on S. 1472; Gary Darling with the Delta Diablo Sanitation District on S. 1475 and H.R. 1526; Randy Record, with the Eastern Municipal Water District, on H.R. 30; and Larry Groth, representing the city of Waco Texas on H.R. 609. Hopefully I didn't butcher anybody's names in that process. A little bit? I'm sorry.

But we want to welcome each one of you, and want to thank you very much for traveling to be here. I would ask you, as I did Larry Todd, for you to summarize your testimony, and we'll start with Mr. Atwater, and we'll proceed down the line.

Thank you, gentlemen.

STATEMENT OF RICHARD W. ATWATER, GENERAL MANAGER AND CEO, INLAND EMPIRE UTILITIES DISTRICT

Mr. ATWATER. Thank you, Mr. Chairman, and I appreciate very much the opportunity to testify today.

My name, for the record, is Richard Atwater, and I'm the General Manager, and CEO of the Inland Empire Utilities Agency, and I also wanted to submit for the record—besides my written testimony—a letter from the Cucamonga Valley Water District that provides background and documentation for their Bureau of Reclamation-approved feasibility study, and their project which is part of our regional program to develop recycled water.

Senator TESTER. It will be included in the record.

Mr. ATWATER. Let me just give you a little bit of background. My written testimony talks about all of the activities in the history of our projects, they go back to 1991. Let me just briefly summarize that.

The Secretary of the Interior in 1991, Secretary Johanns, initiated the regional studies—the Southern California Regional Water Recycling Studies—and since that time, the Bureau of Reclamation, with its non-Federal partners, including the State of California, the Metropolitan Water District, and the other water agencies from San Diego, to LA, to Ventura County—have spend in excess of $20 million in doing studies.

Deputy Commissioner Larry Todd is correct, our report—which we completed in 2002, in October 2006, the Bureau did determine our project to be feasible. In fact, the Bureau of Reclamation's own report in 2002, 5 years ago, evaluated and identified over 400,000 acre feet of new recycled water in Southern California, throughout the area, and ranked our project as the most cost effective in the State.

That's not to say, not all of them are great projects, in fact, I'll talk about that later. The Governor of California had a water recycling task force in 2003, that report recommended over a million acre feet, and the State Water Plan, adopted in 2005 says the only new significant water supply in the State of California is recycled water.

So, when we talk about the San Francisco Bay Delta, the ongoing drought in the Colorado River, which doesn't quite get to Montana, but certainly dramatically effects Wyoming, Colorado, New Mexico, Utah, Nevada and Arizona, is dramatic, and with global climate change it's going to get more severe. We don't know when the drought's going to end.

But from our perspective, recycled water is probably the most cost effective new supply in the arid West, and throughout the Western States. The irony is, in Florida, they do twice as much as we do in California, which shows you our goals may be too modest, and we ought to be doing a better job.

Besides spending $20 million with the Federal Government over the last 15 years, there are a lot of good projects that are underway. What I remind everybody, not too many years ago, 5 percent of the Bureau of Reclamation budget was spent on water recycling.

Today, that $10 million that the Chairman alluded to in your comment to the Bureau of Reclamation represents 1 percent of the Bureau's budget. If Congress and the Administration would just

earmark, and fund water recycling at the 5 percent historic level, you would develop more new water supply than the remaining 95 percent of the Bureau's budget. So, it kind of points out the importance of what we can accomplish.

The second point that I'd make is when we talked about the Bay Delta, Southern California very dependent upon Colorado River water, and water from Northern California, chairman, you're from Montana, one of the things you don't appreciate is, when we import water 500 miles from Northern California, or from the Rockies, it takes a heck of a lot of energy to bring it to LA and San Diego. It takes one- fifth to one-sixth the amount of energy to reuse the water locally. In our service area alone, that's equivalent to a 50 megawatt power plant. So, the energy value—besides the environmental values, and the multiple endangered species on the Colorado River, and in the San Francisco Bay Delta, the energy benefits, you'll see that in Senator Feinstein's written testimony—whether you believe in global climate change or not—the environmental air pollution benefits are rather dramatic. When you look at the price of oil today, we probably ought to look at ways to use water more wisely, because it's a very significant energy savings.

A quick footnote, in California, 20 percent of all electrical use in the State of California is relating to pumping, and using, and treating water. So, it's a significant energy impact.

So, in closing, let me just again say that, I've been working with the Bureau of Reclamation since 1991 on Title XVI projects, the first one that was ever funded—we did get $50 million, to correct the record—was from the Bureau of Reclamation, and it was strongly supported by the Federal Government, by the State of California, just like our projects that we're working on in the Bay Area, and Southern California—there's no opposition to any of these projects, it's just a lack of funding. They have broad support from all of the community interests—the environmental community, business leaders, every one of our City Councils in our service area, our local newspapers have written editorials every year, in support of getting these projects funded.

So it's one that I think, when you consider that we're asking the Federal Government to contribute 10 percent of a $300 million project, to develop over 100,000 acre feet, I'll challenge the Bureau of Reclamation, find me a more cost-effective Federal investment, in California or anywhere in the Colorado River Basin.

Thank you very much for the chance to testify today.

[The prepared statement of Mr. Atwater follows:]

PREPARED STATEMENT OF RICHARD W. ATWATER, GENERAL MANAGER AND CEO, INLAND EMPIRE UTILITIES AGENCY, ON S. 1054 AND H.R. 122

INTRODUCTION

Thank you, Chairman Bingaman and members of the Subcommittee for Water and Power, for the opportunity to testify today. I am the General Manager and CEO of the Inland Empire Utilities Agency. On behalf of the Board of Director's of the Inland Empire Utilities Agency, I am testifying today in support of S. 1054 and H.R. 122. The federal investment of $30 million represents an approximate 10% cost-share of a total capital investment of over $300 million to develop in excess of 100,000 acre-feet (AF) of new recycled water supplies.

I. Inland Empire Utilities Agency and Chino Groundwater Basin Region

The Inland Empire Utilities Agency, a municipal water district under California law, was organized in 1950 by a popular vote of its residents. The service area of the Agency is entirely in San Bernardino County in southern California and has a current population of approximately 800,000. The IEUA service area is rapidly growing and is projected to grow to 1,200,000 within the next 20 years. The Chino Groundwater Basin is an adjudicated aquifer under the continuing jurisdiction of the California Superior Court with a Watermaster governing all water rights under a Judgment approved in 1978. The Chino Basin also is home to 250,000 dairy cows, the most densely concentrated population of dairy cows in North America. Overall water use is about 350,000 acre-feet annually, 70 percent of the supplies are from local sources within the Santa Ana Watershed. With the rapid growth, demand from MWD could increase from 70,000 acre-feet per year currently to 150,000 acre-feet in 2020 unless we work together to develop recycled water supplies, develop groundwater storage and continue to implement progressive water conservation programs! However IEUA, Chino Basin Watermaster and in cooperation with many other agencies have developed a "Drought Proof Plan" that will develop over 100,000 acre-feet of new recycled water plus additional brackish groundwater desalination supplies (50,000 acre-feet) and groundwater conjunctive use storage (500,000 acre-feet).

The Agency has been a member agency of the Metropolitan Water District of Southern California (wholesale distributor of Colorado River and State Water Project supplies) since 1950 and distributes about 70,000 acre-feet of imported water to the cities of Chino, Chino Hills, Fontana (through the Fontana Water Company), Ontario, Upland, Montclair, Rancho Cucamonga (through the Cucamonga County Water District), and the Monte Vista Water District. The Agency also provides wastewater treatment service (four regional water recycling plants that produce about 60 million gallons per day or 63,000 acre-feet per year). Excess recycled water flows downstream into the Santa Ana River and the Orange County Water District recharges that water into the Orange County groundwater basin for drinking water.

The Agency is also a member of the Santa Ana Watershed Project Authority (SAWPA) and is an active member of the Santa Ana River Watershed Group and the Chino Basin Watermaster. As a member agency of SAWPA, the Agency's water projects are closely coordinated with the SAWPA watershed wide planning and the funding of priority projects through California Water Bonds approved by the voters (1998, 2000, 2004, and 2006).

Chino groundwater basin is one of the largest in Southern California. The Chino Basin Watermaster adopted an Optimum Basin Management Plan (OBMP) in 2000 to protect the water quality of the basin and to manage the local supplies effectively to the maximum benefit of the local ratepayers. A key element is the expansion of the conjunctive use operation of the Chino Basin to expand the storage and recovery by approximately 500,000 acre feet, roughly equivalent to the $2 billion Diamond Valley reservoir built by MWD.

The key benefits of the Chino Groundwater Basin regional "OBMP" water plan are as follows:

Benefits

- Provide a more dependable local water supply and reduce the likelihood of water rationing during future droughts;
- Reduce electrical energy needed to pump water from northern California (State Water Project) equivalent to a 50 megawatt power plant and thus would reduce CO_2 emissions by over 100,000 tons per year;
- Provide a "drought water supply" to industry and provide incentives to attract new industry and jobs in the Inland Empire region;
- Environmental protection—enhance the water quality of the Santa Ana River and protect Orange County drinking water supplies through implementation of comprehensive lower Chino Dairy area manure management strategy;
- Reduce imported water use in the rapidly growing Inland Empire region (upper Santa Ana River Watershed) and thereby contribute in a significant manner to the statewide CALFED Bay-Delta and Colorado River solutions through more efficient use of existing local supplies;
- Assist in solving multiple Endangered Species Act problems within the Santa Ana Watershed, the CALFED Bay-Delta program, and the Colorado River/ Salton Sea through more efficient water usage; and
- Implement a sustainable long-term Chino Basin groundwater storage and recovery program that maintains the salt balance of the Santa Ana River watershed.

Santa Ana River Watershed Planning and Partnerships

- The Santa Ana Watershed Project Authority (SAWPA) led "One Water-One Watershed" dialogue with all interested parties through its nationally recognized watershed planning process that will result in an updated Integrated Water Resources Management Plan;
- All local governments within the three counties (San Bernardino, Riverside and Orange) are working cooperatively together to manage growth and plan for the water/wastewater infrastructure needed to meet the needs of this rapidly urbanizing watershed;
- Partnerships with industry including dairies (Milk Producers Council), manufacturing, and developers have resulted in creative solutions to local water quality problems (e.g. the Santa Ana brine sewer to the ocean); and
- Customers throughout the Watershed are implementing water use efficiency practices or using recycled water to reduce costs, enhance reliability, and drought proof the watershed.

II. Chino Basin "Drought Proofing Strategy"

The IEUA Urban Water Management Plan, adopted in December 2005, and the Chino Basin Watermaster Optimum Basin Management Plan adopted in July 2000, document the overall strategy for improving the water supply reliability in the Chino Basin area.

- Water Conservation—10% savings 35,000 AF;
- Water Recycling—100,000 AF;
- Local Groundwater Storage and Conjunctive Use—500,000 AF of new storage;
- Groundwater Cleanup—Chino Desalters 50,000 AF;
- Stormwater—25,000 acre-feet of new yield;
- Renewable Energy and Organics Recycling—Clean energy through dairy manure biodigesters, solar and composting of biosolids (goal of 10 megawatts by 2010); and
- Water Quality Management—Partnership with Orange County on Prado Wetlands.

WATER CONSERVATION (35,000 ACRE-FEET PER YEAR, 10 PERCENT OF OVERALL USE)

IEUA and its retail utilities are committed to implementing the Memorandum of Understanding (MOU) regarding Urban Water Conservation in California. IEUA is an active member of the California Urban Water Conservation Council (CUWCC). Currently, the Agency is expanding its conservation efforts to promote both water and energy conservation programs to our customers. IEUA's goal is to reduce water demands by 10 percent (35,000 acre-feet per year) through aggressive implementation of customer conservation programs. As a result of the current drought conditions, IEUA has initiated a number of new innovative programs in partnership with the cities and local governments on outdoor native landscape policies and promoting expanded residential and school conservation programs to improve water use efficiency.

WATER RECYCLING (100,000 ACRE-FEET)

IEUA owns and operates four water recycling plants that produce high quality water that meets all state and federal requirements for non-potable landscape irrigation (including farmers), industrial uses, and groundwater replenishment. The Agency recycles about 6,000 acre-feet annually and has a plan to increase to approximately 100,000 acre-feet annually over the next decade by constructing a "purple" recycled water pipeline system to hookup existing large customers and dual plumbing upfront in new master planned communities.

IEUA is also planning for future new smaller water recycling plants in the northern part of the service area to provide recycled water to communities (Upland, Fontana, and Rancho Cucamonga) without the need to pump the water to them. The Cucamonga County Water District (CCWD) proposed satellite plant authorized by S. 1054 and H.R. 122 would be the prototype of this "satellite" technology plant to reduce energy use of pumping recycled water to the higher elevations along the San Gabriel Mountains.

LOCAL GROUNDWATER STORAGE AND CONJUNCTIVE USE (500,000 ACRE-FEET OF NEW STORAGE)

Without the Chino Basin area, the Watermaster is implementing an Optimum Basin Management Plan to enhance the conjunctive use storage of the Chino Basin. The Optimum Basin Management Program developed over the past two years by

the Chino Basin Watermaster would implement a comprehensive water resources management strategy to drought proof the area and enhance the yield of the groundwater basin. The Chino Basin Watermaster has developed a conjunctive use program to store 500,000—1,000,000 acre-feet of imported water in wet years for drought year withdrawal for both local, regional and statewide availability. In June, 2003 IEUA, Chino Basin Watermaster, Three Valleys Municipal Water District, Western Municipal Water District and the Metropolitan Water District executed an agreement for the initial 100,000 acre-feet of storage and recovery projects ($27.5 million funding from MWD and California DWR) and recently MWD approved (June 2007) the next phase of expansion to 150,000 AF.

GROUNDWATER DESALINATION (50,000 ACRE-FEET)

Historically, Colorado River water (relatively high salinity) and agricultural practices have caused areas of the Chino Basin to have high salts that make the water unfit for domestic uses. To correct this problem and to recover this poor quality water, the Chino Basin Optimum Management Plan recommends implementation of groundwater cleanup projects to pump and treat poor quality groundwater to meet drinking water standards. Additionally, the desalination projects of the lower Chino Basin area will protect and enhance the water quality of the Santa Ana River and the downstream use by Orange County. H.R. 177 would provide authorization under the Bureau of Reclamation's Title XVI program to provide funding for the Lower Chino Area desalter and brine line improvements for the SAWPA SARI brine system recommended in the Southern California Comprehensive Water Reclamation and Reuse Study (USBR, 2003) and the joint MWD/USBR Salinity Management Study (1999).

STORMWATER (25,000 ACRE-FEET ANNUAL AVERAGE OF NEW CAPTURE)

A critical issue facing the coastal plain of Southern California as the region continues to urbanize and hardscape our landscapes will be how to implement both small scale and larger scale projects for stormwater capture to allow percolation into our groundwater basins. IEUA in coordination with the Chino Basin Watermaster, the San Bernardino County Flood Control District and the Chino Basin Water Conservation District is developing an integrated recharge master plan to optimize the capture of stormwater with replenishment of imported water from MWD and our local recycled water to enhance the storage and recovery of water from the Chino Basin.

IEUA is also sponsoring work, in part funded by the CALFED Bay-Delta Program, with the Rocky Mountain Institute, on small scale, on-site (neighborhood development) stormwater management strategies to enhance percolation of rainfall to minimize runoff, contamination of rainfall before it percolates, and cost effectively reduce flood control requirements. IEUA is currently working with cities and developers to develop new standards for new developments that will reduce on-site urban stormwater runoff and increase recharge of the Chino groundwater basin.

RENEWABLE ENERGY AND ORGANICS MANAGEMENT

The energy crisis reminds all of us working on the water problems facing California how incredibly dependent the imported water infrastructure of southern California is on cheap, low cost electricity to pump imported water into our region.

IEUA in response to the energy crisis and our need to be a steward of our environment has developed a Chino Basin Organics Management Strategy that will:

- Produce through anaerobic digestion enough methane gas for 10 megawatts of clean, renewable electric energy by 2008;
- Constructed award winning LEED Platinum IEUA Headquarters Complex and Chino Creek Park (2007), which includes solar and energy recovery features;
- Cost effectively recycle organic wastes into fertilizer products in an environmentally safe manner that will reduce many thousands a year of long haul diesel truck trips per year in joint project with the Los Angeles County Sanitation Districts;
- Reduce significantly air and water pollution from dairy cow manure; and
- Minimize the need for electric power from the grid for operating the Chino Basin desalination and water recycling plants.

WATER QUALITY MANAGEMENT

IEUA and Orange County Water District executed a Memorandum of Understanding in October 2002 to cooperate in water quality management issues in the Prado wetlands area. In 2006, the Chino Creek Integrated Watershed Plan was

completed. Current projects include development of the lower Cucamonga Creek wetlands restoration project (City of Ontario), completion of the Chino Creek Native and Educational Park (IEUA) and other trail and habitat improvements along Chino Creek (cities of Chino and Chino Hills).

III. IEUA Proposed Regional Water Recycling Projects S. 1054/H.R. 122

In August, 2002, the Board of Directors of the Inland Empire Utilities Agency, after receiving approval and endorsement by the Chino Basin Watermaster, SAWPA and all the local cities and retail water agencies within its service area adopted its Regional Water Recycling Feasibility Study and certified the Environmental Impact Report. The feasibility study fully complied with the U.S. Bureau of Reclamation's guidelines for Title XVI Projects (December 1998) and was formally approved in October, 2006, by the U.S. Bureau of Reclamation. IEUA has also received all the regulatory and NEPA approvals for implementing the water recycling projects from federal agencies (Army Corps of Engineers, EPA and USFWS). The Cucamonga Valley Water District Feasibility Report was also approved by the U.S. Bureau of Reclamation in 2006.

The planning for the IEUA regional water recycling began in the early 1990s with the initiation by the U.S. Bureau of Reclamation in 1991 of the Southern California Comprehensive Water Reclamation and Reuse Study (SCCRRWS). During the past 15 years the Bureau and its southern California water agency partners have spent over $20 million in feasibility studies evaluating water recycling projects throughout the coastal plain of the MWD service area. As a result, the IEUA Feasibility Report development has coordinated with many agencies and is consistent with the adopted Plans of the following agencies:

- SCCRRWS (in 2001 the Bureau of Reclamation ranked the IEUA project as the most cost effective recycled water project in southern California);
- Metropolitan Water District of Southern California's Integrated Resource Plan;
- Santa Ana Watershed Project Authority's Integrated Watershed Plan;
- Santa Ana Regional Water Quality Control Board's Santa Ana River Basin Plan approved IEUA water recycling projects in 2004;
- California Water Recycling Task Force Report (2003) recommends implementing statewide water recycling projects to develop 1.5 million acre-feet;
- MWD/USBR Salinity Management Study (adopted by MWD Board of Directors 1999);
- California Water Plan, Bulletin 160 (2004) identified water recycling as the only new significant water supply; and
- The State Water Resources Control Board (SWRCB) has reviewed and approved the IEUA Feasibility Report and funded Phases 1 and 2 of the capital improvement program.

The expansion of the Regional Recycled Water Program has been designed to occur in phases in order to maintain a balance between capital expenditures, sources of funding, and the development of a customer base for the delivered water. Since 2002, IEUA has spent over $80 million in constructing improvements to the Chino Basin recharge facilities and building recycled water "purple" pipes and pumping plants to deliver recycled water for irrigation, industrial customers and replenishment of the groundwater aquifer. Every year the IEUA Board of Directors, after consulting with all the water agencies and cities within its service area, updates and adopts a new 10 year capital improvement program for the regional recycled water program to ensure that all the priority recycled water facilities are built to meet the needs of the region.

IEUA continually evaluates the capital funding needs for the Recycled Water Expansion Program and has determined that with State and Federal funding assistance of the $300 million capital improvement program over the next decade it will accomplish the goal of delivery of 100,000 acre-feet annually of recycled water for beneficial reuse.

In closing, Chairman Bingaman and members of the Committee, I appreciate very much your consideration and support for S. 1054 and H.R. 122. Water recycling and groundwater desalination are critical new supplies for Southern California that have statewide benefits by reducing the significant energy use to pump water to southern California and also help solve the Bay/Delta and Colorado River supply issues. Clearly, water recycling throughout the arid southwest is the most significant new supply that can be cost effectively developed to meet the growing needs for urban water supplies. It is imperative for the Bureau of Reclamation to provide the water policy leadership and to increase funding through Title XVI to assist in meeting these critical water supply problems facing the arid southwest portion of the United States.

Finally, the numerous scientific studies of the implications of Global Climate Change are that it may increase significantly the potential for severe long-term droughts affecting the arid southwest. Therefore, it is imperative that projects like the Inland Empire regional water recycling be implemented immediately to reduce the economic impacts of water shortages. In summary, the multiple environmental and economic benefits to the nation and the relative cost effectiveness of these energy efficient new recycled water supplies for a modest federal investment of only $30 million certainly document the value of authorizing H.R. 122 and S. 1054.

Senator TESTER. I appreciate your summary, and we'll have some questions later on.

Mr. Darling.

STATEMENT OF GARY DARLING, GENERAL MANAGER, DELTA DIABLO SANITATION DISTRICT, ANTIOCH, CA

Mr. DARLING. Mr. Chairman, good afternoon. My name is Gary Darling, and I am the General Manager of the Delta Diablo Sanitation District, in Antioch, California.

I appreciate the invitation to appear, on behalf of the Bay Area Regional Water Recycling Program, called BARWRP, for short, coalition. At the outset, I want to extend the coalition's deepest appreciation to Senator Feinstein for her vision and leadership in introducing S. 1475, which will help eight Bay Area communities, a region with a growing population, limited water resources, and a unique environmental setting to increase their municipal water supplies through recycled water projects.

I also want to commend Senator Boxer, for her—for being an original co-sponsor of the bill.

Mr. Chairman, as a matter of background, BARWRP is a collaboration of 17 Bay Area public entities that provide water and wastewater utility service to over one-sixth of the population of California. BARWRP completed a Master Planning Study in 1999, and identified 125,000 acre feet per year of feasible recycled water opportunities, and 240,000 acre feet per year by 2025. Since then, the Bay Area has invested nearly $300 million in developing recycled water projects.

BARWRP's efforts have received assistance from the State of California through Proposition 50, and are in need of additional support for implementation through the Federal Government.

The regional approach that we've taken in the Bay Area, ensures that potential projects, with the greatest potential, and Statewide benefit, receive the highest priority and support for implementation.

While recycled water is an asset to any community, in the San Francisco Bay Area, the benefits of water reuse extend through California's network of water supplies to the State and Nation. The region is part of the Sacramento, San Joaquin Delta System, the largest estuary on the West Coast of North America, and a source of drinking water for two-thirds of California's population.

As a result, the Bay Area communities help address the needs of the entire State when we pursue our recycled water opportunities.

Specifically, S. 1475 would help the eight Bay Area communities increase their municipal water supplies through innovative, and much-needed, water recycling projects. These projects offer significant benefits for California and the Federal Government. Benefits

include the preservation of State and Federal reservoir water supplies for higher uses, rather than for urban landscape irrigation, and particularly in drought years.

On a regional and local basis, the benefits include the preservation of our declining water supplies from the Sierra, and Delta, for higher uses, drought-proof assistance for the region—as you know, the California snow pack was at its lowest in 19 years—provision of a sustainable and reliable source of water in light of climate change, and results in reduction in wastewater discharges, into the sensitive Bay Delta environment. These projects are ready to proceed, and start delivering their benefits.

The projects have been repeatedly vetted, both internally and at the local level, through the various steps of the State process, and the Federal review process. Two of our projects—as Mr. Todd mentioned—the Pittsburgh Project, and the Mountain View Palo Alto Project have met all of the criteria under Title XVI guidelines, and are actually in construction. We've had to move those projects forward, at this point in time, or risk losing our State funding that we receive through Proposition 50.

One clarification to Mr. Todd's testimony, the project that he mentioned—the Antioch Project? Actually, all of the information has been submitted to the Bureau of Reclamation, including all of the NEPA compliance, and so we're just awaiting for the final action on behalf of the Bureau. But all of that information was submitted.

These seven projects are estimated to created over 12,000 acre feet of new water, annually in the short term, and over 37,000 acre feet of water in the long term.

It's also noteworthy that each of the sponsors in the Bay Area are committed to satisfying all of these Title XVI criteria. We're not seeking to have the projects legislated into compliance. Timing—as I mentioned before—is critical. Two of the seven project are in construction. Without a Federal partnership, the projects are under funded.

Regarding the Pittsburgh Project, Mr. Chairman, I want to call the subcommittee's attention, one difference between S. 1475, and H.R. 1526, the House-passed companion bill—during the committee markup process in the House, the authorization level for the Pittsburgh Project was increased from $1.4 million to $1.75 million, to reflect updated project cost estimates. As the subcommittee gives further consideration to S. 1475, we would respectfully request that the same change be made to that subsection of the bill.

Last, the bill would urge the Bureau of Reclamation to fully fund the San Jose Water Reclamation Reuse Project—already authorized by law—but woefully under funded, to date.

Mr. Chairman, water recycling offers great potential to States like California that suffer droughts, suffer from droughts, and have limited freshwater supplies. To address these issues, S. 1475 would establish a partnership between the Federal Government and the local communities to implement a regional water recycling program in the Bay Area. This legislation is critical to meeting the needs of the Bay Area, accordingly, the Coalition strongly urges support of S. 1475.

Thank you.

[The prepared statement of Mr. Darling follows:]

PREPARED STATEMENT OF GARY W. DARLING, GENERAL MANAGER, DELTA DIABLO SANITATION DISTRICT, ANTIOCH, CA, ON S. 1475

Mr. Chairman and Members of the Subcommittee, good afternoon. My name is Gary Darling and I am the General Manager of the Delta Diablo Sanitation District in Antioch, California.

I appreciate the invitation to appear this afternoon to offer testimony on behalf of the Bay Area Regional Water Recycling Program (BARWRP) Coalition, a partnership of Bay Area Regional Water Recycling agencies, in strong support of S. 1475, the "Bay Area Regional Water Recycling Program Authorization Act of 2007."

At the outset, I want to extend the Coalition's deepest appreciation to Senator Feinstein for her vision and leadership in introducing this much-needed water legislation which will help eight Bay Area communities—a region with a growing population, limited water resources, and a unique environmental setting—increase their municipal water supplies through innovative water recycle projects. I also want to commend Senator Boxer for being an original cosponsor of the bill.

Mr. Chairman, as a matter of background, BARWRP is a collaboration of 17 Bay Area public entities that, in cooperation with state and federal governments, provide water and wastewater utility service to over one-sixth of the population in California. BARWRP's mission is to pursue water recycling in the San Francisco Bay Area from a regional perspective. The Bay Area Water Recycling Master Plan, completed in 1999, identified 125,000 acre-feet per year of feasible recycled water opportunities by 2010, and 240,000 acre-feet per year by 2025. Since then, BARWRP agencies have invested nearly $300 million in local funds to water recycling projects, and many more projects are ready to be built. BARWRP efforts have received assistance from the State through Proposition 50 funding opportunities, and are in need of additional support for implementation. The regional approach taken by Bay Area agencies ensures that potential projects with the greatest regional and statewide benefit receive the highest priority and support for implementation. S. 1475 embodies these principles as espoused by the Coalition.

While recycled water is an asset to any community, in the San Francisco Bay Area the benefits of water reuse extend through California's network of water supplies to the State and Nation. The region is part of the Sacramento-San Joaquin Delta System—the largest estuary on the west coast of North America and a source of drinking water for two-thirds of California's population. As a result, Bay Area communities help address the needs of the entire region as they pursue recycled water opportunities.

Specifically, this bill would help the eight Bay Area communities increase their municipal water supplies through innovative and much-needed water recycling projects.

These projects offer significant benefits. For California and the Federal Government such benefits include: the preservation of State and Federal reservoir supplies for higher uses rather than for urban landscape irrigation, particularly in drought years; and, a cost effective, environmentally friendly, implementable solution for increased dry year yield in the sensitive Bay-Delta region. The development of this new dry year yield advances the 1992 Central Valley Improvement Act, which directs the U.S. Bureau of Reclamation to identify new dry year water yield projects. Regional and local benefits include: the preservation of ever-declining water supplies from the Sierra and Delta for higher uses; drought-proof assistance for the region (as you know, California's snowpack is at its lowest in 19 years); provision of a sustainable and reliable source of water in light of climate change; provision of environmental enhancement opportunities; and results in a reduction in wastewater discharges to the sensitive Bay-Delta environment.

The bill would authorize the Secretary of the Interior to participate in the following Bay Area Water Reuse Projects: Antioch Recycled Water Project (Delta Diablo Sanitation District, City of Antioch); North Coast County Water District Recycled Water Project (North Coast County Water District); Mountain View/Moffett Area Water Reuse Project (City of Palo Alto, City of Mountain View); Pittsburg Recycled Water Project (Delta Diablo Sanitation District, City of Pittsburg); Redwood City Recycled Water Project (City of Redwood); South Santa Clara County Recycled Water Project (Santa Clara Valley Water District, South County Regional Wastewater Authority); and, South Bay Advanced Recycled Water Treatment Facility (Santa Clara Valley Water District, City of San Jose). This Coalition or partnership is a great example where project sponsors have come together to purse a federal partnership as a region on a water supply issue, rather than as individual agencies.

The bill provides that each community with a project would be eligible to receive 25% of the project's cost. The total cost of the seven projects is $110 million, but the Federal Government's share is only $27.5 million. State money is available for a portion of the project costs. For the most part, the projects are ready to proceed and start delivering their benefits—the projects having been repeatedly vetted, both internally at the local level and through the various steps of the federal review process. In fact, two of the projects—Pittsburg and Palo Alto—have met USBR's strict Title XVI Feasibility Guidelines and are the first projects in the history of the Title XVI program to do so. However, Federal funding is needed for all of the projects to make implementation a reality.

These seven projects are estimated to create 12,205 acre-feet of new water available annually in the short term, and 37,600 acre-feet annually in the long term, all while reducing demand on the Delta and on existing water infrastructure.

It is also noteworthy that each of the sponsors of the projects listed in the Bill have committed to satisfying all of the USBR Title XVI feasibility criteria. Sponsors are not seeking to have their projects' legislated into compliance.

Timing for a federal partnership is critical. Two of the seven projects listed in the bill, Pittsburg and Palo Alto, have received a State grant funding commitment which requires that construction begin by July 15, 2007. Without a federal partnership in place at the start of fiscal year 2008, the projects are underfunded and may not proceed.

Regarding the Pittsburg project, Mr. Chairman, I want to call to the Subcommittee's attention one difference between S. 1475 and H.R. 1526, the House-passed companion bill. During the committee markup process in the House the authorization level for the Pittsburg project was increased from $1.4 million to $1.75 million to reflect updated project cost estimates. As the Subcommittee gives further consideration to S. 1475 we would respectfully request that the same change be made to that subsection of the bill.

Lastly, Mr. Chairman, the bill would urge the U.S. Bureau of Reclamation to fully fund the San Jose Area Water Reclamation and Reuse Project, already authorized by law and woefully underfunded to date.

Members of the Subcommittee, water recycling offers great potential to states like California that suffer periodic droughts and have limited fresh water supplies. To address these issues, S. 1475 would establish a partnership between the Federal Government and local communities to implement a regional water recycling program in the Bay Area. This legislation is critical to meeting the water needs of the Bay Area. Accordingly, the Coalition urges support of S. 1475.

Thank you.

Senator TESTER. Thank you for your summary. I appreciate it and your testimony. Thank you very much.

We'll go to Mr. Record.

STATEMENT OF RANDY A. RECORD, BOARD MEMBER, EASTERN MUNICIPAL WATER DISTRICT, RIVERSIDE COUNTY, CA

Mr. RECORD. Thank you, Mr. Chairman, good afternoon. I have submitted a written statement, and I have a statement here that I was kind of going to summarize, but Mr. Atwater is a colleague and a neighbor, and we work together, and he said a lot of things that I was going to, and I'd just as soon not repeat that, and you probably don't want to hear it twice.

Senator TESTER. That's fine.

Mr. RECORD. I would like to say that I'm a board member for Eastern Municipal Water District, they are a member agency of the Metropolitan Water District, and I am their representative on that Board. I'm also a farmer in Southern California, and my family's been farming for—I'm fifth generation. Without recycled water, we wouldn't be able to farm as we have for the last several years.

We wouldn't have a reclaimed distribution system, as we do today, if it weren't for the Federal Government helping us back in the eighties through P.L. 84, 984—which is a program administered by the Bureau of Reclamation.

We import 80 percent of our water for Eastern Municipal Water District through Met, which comes from Colorado River, as well as Bay Delta. We all know the challenges that we have there. We're turning to local resources as our most reliable and cheapest source of water. I also should add that Riverside County—which Eastern is located in—is very aggressive on water conservation and water efficiency. We don't go out and try to get support for projects without doing what we can at home to make sure that we're taking care of the water that we already have.

There are four components to H.R. 30, and by the way, I'd like to thank our Congressional delegation for supporting this bill, it passed the House earlier this year. We have a sanctioned wildlife recycled water storage project, which will allow us to build storage for reclaimed water, environmental benefits are obvious, but then during the summer when demands are high, we can pull that water back out, and help continue a great ag area that we have.

We also have a citrus-growing region that relies on groundwater that is great water for potable use. This will help us get reclaimed water up to the citrus, so that we can replace the use of the potable groundwater with reclaimed water. We also need to expand the current system that we have, to reach more customers, and we also need to pressurize that system, so that we can serve smaller customers, such as landscape, for municipalities, and also park and rec.

It's difficult for them to pressurize the water that they use. It would make more sense for us to do that as the provider of the water.

I think the most important part of this is that we are, in Southern California, we are inland, we are really shouldering the burden for the growth that we've seen in California that supports LA and San Diego, and Orange Counties, and as the gentleman from Texas stated, we're also an area that the whole country relies on from trade. We have a lot of good importing that comes through our region, and we're happy to be able to do that for the rest of the county.

We think it's appropriate that we have some funding to help us make our water system more reliable, so that we can continue agriculture, and we can continue to make best use of the water we have, use it as many times as we can before it goes onto the next area. Then, so farmer to farmer—I agree with what these gentlemen are saying. These are all good projects. At some point, the Federal Government needs to just spend a little bit more for a great benefit to the region.

Thank you very much.

[The prepared statement of Mr. Record follows:]

PREPARED STATMENT OF RANDY A. RECORD, BOARD MEMBER, EASTERN MUNICIPAL WATER DISTRICT, RIVERSIDE COUNTY, CA, ON H.R. 30

Good Afternoon Chairman Bingaman and other distinguished members of this Subcommittee. My name is Randy Record, and I am a Board Member for the Eastern Municipal Water District (EMWD). I also serve as EMWD's representative on the Board of the Metropolitan Water District of Southern California. On behalf of EMWD and its Board of Directors, it is my privilege to present this testimony to you today on H.R. 30 and to discuss the water resource benefits the bill will promote. I would like to thank the four members of our congressional delegation for supporting this bill, which passed the House earlier this year by voice vote.

EMWD provides water supply, wastewater collection and treatment, and water recycling services to over 650,000 people in one of the nation's most rapidly growing areas. EMWD's 555 square mile service area includes the Cities of Moreno Valley, Perris, San Jacinto, Hemet, Murrieta and Temecula, as well as unincorporated portions of Southwest Riverside County.

Like most water agencies in Southern California, EMWD depends upon imported water from state and federal water projects, namely the Sacramento Bay-Delta and Colorado River, for much of its water supply. EMWD recognizes that increasing pressure on these resources and the need to balance urban, agricultural, and environmental water demands will further stress these state and federal water projects limiting the availability of water for use in our service area. We are responding to this challenge by being a leader in water conservation and investing heavily in the development of local water resources. EMWD's on-going programs include management and protection of existing potable groundwater production, brackish groundwater desalination, and groundwater recharge and storage. However, our largest, oldest and most successful local resource development effort is our water-recycling program.

In Southern California, recycled water is routinely used for agricultural irrigation, municipal and residential landscape irrigation, industrial processes, environmental enhancement, and is even used in recreational impoundments permitted for full body contact. In the past 10 years, due to extensive research and elaborate public awareness programs, public acceptance of recycled water has been greatly enhanced. This coupled with the easing of regulatory restrictions has enabled local water agencies to tap into this most important resource to meet the ever-increasing need for water. Water recycling, until recently considered an innovative use of resources, is becoming commonplace as pressures on potable water supplies continue to grow.

EMWD's recycling program began in the early 1980's, and currently EMWD sells about 21,000 acre-feet per year (AFY) of recycled water to customers at 320 different sites, ranking EMWD as one of the top four water recycling agencies in California. We have constructed more than 130 miles of large diameter recycled water pipeline (18"—54") which link five (5) regional waste water treatment facilities. In addition, more than 6,000 acre-feet (AF), or about two billion gallons of storage pond capacity have been constructed at 10 locations throughout our service area for seasonal storage of any surplus recycled water. This successful program, which meets the present needs of EMWD, would not have become a reality without the financial assistance provided by the Federal government through the PL84-984 program that is administered by the U.S. Bureau of Reclamation.

EMWD's water recycling transmission system was designed to provide irrigation water to large agricultural customers, and agriculture still accounts for 60 percent of EMWD's total recycled water sales. Other uses include municipal irrigation such as parks, schools, golf courses, a regional energy center, and environmental enhancement. EMWD also supplies recycled water to the California Department of Fish and Game's San Jacinto Wildlife Area, the only wildlife area in the state to use recycled water. While our recycled water system is adequate to meet the needs of our agricultural customers, EMWD is beginning to experience difficulties with a rapidly growing municipal market. Our system lacks the operational storage, flow control and system pressure needed to provide the "on-demand" service required by municipal customers.

As development continues in our service area, the municipal irrigation and industrial demand will continue to grow. And, unless remedied, our growing operational difficulties will ultimately limit our ability to serve these emerging demands with recycled water and will result in placing these demands on our potable water system.

Recognizing the need to expand its recycled water program, EMWD developed the EMWD Recycled Water System Pressurization and Expansion Project, H.R. 30. H.R. 30 represents the next stage in the development of EMWD's water recycling program. H.R. 30 will provide vital financial assistance to expand an already successful water recycling program by constructing the facilities needed to establish operational pressure zones, complete the transmission system, and to extend service to new municipal customers.

The project will provide local as well as regional and statewide benefits. EMWD's customers will benefit from the development of an affordable, drought-proof local water supply. Expanded water recycling in EMWD will also help achieve the local resource development goals established in the Metropolitan Water District of Southern California's Regional Integrated Resources Plan. At the state and national level, by reducing EMWD's demand for imported water from the Sacramento Bay-Delta and the Colorado River, the project will also support long-term water management efforts such as the CALFED Bay-Delta Program.

The initial projects resulting from H.R. 30 will result in 15,000 acre-feet of new water annually at a cost of $110 per acre-foot over the life expectancy of the project. This is $464 less than what we currently pay for imported water. In addition to stretching existing water supplies, H.R. 30 has significant greenhouse gas reduction benefits. The carbon dioxide reduction attributed to the initial projects is roughly 13,950—31,500 tons per year, and the energy savings is 31,650—71,250 megawatt-hours. The California State Energy Resources Conservation and Development Commission's Integrated Energy Policy Report (CEC–IEPR) concluded that, in many areas of the state, recycled water is the least energy-intensive source of new water supply. Increased use of recycled water statewide will reduce California's energy consumption and help meet the state's goal of reducing greenhouse gas emissions, as required by the California Global Warming Solutions Act of 2006.

In summary, I would like to stress that your efforts here today are critically important to California and the nation. California is currently experiencing unprecedented multiple threats to its water supply including continuing drought, unstable levees in the delta, crumbling infrastructure, climate change concerns, and population growth. Recycled water is a new water supply that is available even in the driest years. It is not vulnerable to natural disasters such as earthquakes, in the same way that imported water is susceptible, and it requires less energy use compared to the pumping of imported supplies.

Without the federal cost share of 25 percent that H.R. 30 would provide, EMWD will not be successful with developing the new water supply this project creates. The Bureau of Reclamation has reviewed and provided tentative approval for the feasibility study required for H.R. 30 and we are awaiting the official approval notice.

Mr. Chairman, I would like to thank you and the Subcommittee members again for the chance to testify before you today. Your support for H.R. 30 is crucial in helping make EMWD's System Pressurization and Expansion Project a success.

Senator TESTER. Thank you for your testimony, and I agree.

Mr. Groth, you're up now. Rock and fire.

STATEMENT OF LARRY GROTH, CITY MANAGER, WACO, TX

Mr. GROTH. Thank you, sir.

Good afternoon, my name is Larry Groth, I'm City Manager of the city of Waco, Texas. I thank you for the opportunity to testify in support of H.R. 609, the Central Texas Water Recycling Act of 2007. We do deeply appreciate the committee's continued interest and leadership with regard to this critical issue.

I do want to express my sincere gratitude to Congressman Edwards, for introducing this legislation. Congressman Edwards has been very supportive of water initiative in Central Texas, and we certainly appreciate his work on this legislation, and all that he does for our community.

Waco, Texas is the urban center of a rapidly growing McLennan County. Waco and its surrounding cities have a long history of a cooperative and regional efforts on water resources, including joint ownership, and operation of the regional sewer treatment facility.

Waco and McLennan County are fortunate to have a vibrant economy with a growing population, and excellent quality of life for residents, however, as you know, growing populations require more and more water.

As recognized in the recently approved Regional Water Plan for the Central Texas region, population growth in the counties within the I–35 corridor have been rapid since 1970, and with all indications will continue to grow.

Within McLennan County, all cities are expected to experience sustained growth over a period from 2010, to 2060. Waco's expected to grow about 26 percent during this period, and the surrounding cities will grow even more rapidly.

In addition to growth and industrial development, as has been mentioned before, Central Texas must respond to drought conditions, and seasonal demands on our water supplies. The water supply storage available from Lake Waco to Central Texas is fixed, the use of ground water supplies must be limited to protect the underground aquifers.

With growth and drought in Texas driving the need for more water supply in the future, how we use our limited, existing supplies is critical. Cities in Central Texas have invested significant local funds, and a number of supply enhancement, and water treatment projects in recent years. As a result, we are actively pursuing means to maximize those investments, and to conserve our valuable water resources through reuse.

H.R. 609 will help us succeed in this effort, to replace the use of costly and limited treated water supplies for such uses as irrigation, cooling water, and other industrial uses.

The Central Texas Reuse Program is a multi-dimensional program consisting of a number of efforts. Reclamation and reuse, conservation, water quality protection, environmental restoration, all organize into a series of projects or components which provide optimal use and proper management of limited water resources available to Central Texas communities.

An overview report, and limited feasibility information was provided to Reclamation. The Reclamation staff has been very helpful in reviewing the report, and working with us to better understand Title XVI as a whole. We certainly are willing to submit any further feasibility studies, as required, at the appropriate time.

Let me summarize the specific needs for, and the benefits of, reclamation and water recycling project. Today, the high-growth areas in our community, and with the regional wastewater collection facilities, are basically hydraulically overloading. In addition, our central wastewater treatment plant is nearing permeated discharge capacity, which is a challenge, but also offers a great opportunity. We are currently in the permeating process for a comprehensive engineering solution to this wastewater challenge, through the construction of satellite, wastewater reclamation plants, and facilities which provide benefits from the reuse of reclaimed effluent. The benefits of satellite plants are significant. In addition to avoiding expensive relocation of infrastructure, and downstream conveyance improvements, the plants will provide capacity for future growth, in a high-growth corridor, but most significantly, the reclaimed water produced will be at locations that can be readily delivered to dozens of end- users within the nearby vicinity.

The initial projects available for funding under this legislation can provide up to 10 million gallons a day for reused water, thereby reducing the demand on our Lake Waco. This is enough water in Texas to meet the needs of over 20,000 households.

Mr. Chairman, we strongly support H.R. 609, and its assistance it would provide for the Central Texas Reuse Program. The cities in McLennan County have committed significant funding for the support of the development of this project.

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

Thank you very much for allowing me to testify.
[The prepared statement of Mr. Groth follows:]

PREPARED STATEMENT OF LARRY GROTH, CITY MANAGER, WACO, TX

Good afternoon. My name is Larry Groth. I am the City Manager of the City of Waco, Texas. Thank you for the opportunity to testify in support of H.R. 609, the Central Texas Water Recycling Act of 2007 and for the leadership of this Committee in scheduling this hearing. We were privileged to also appear before you this time last year in support of H.R. 3218 which is identical to H.R. 609. We deeply appreciate this Committee's continued interesting and leadership with regard to the water reuse issue and in the Central Texas Water Recycling Act of 2007. I want to express my sincere gratitude to Congressman Edwards for introducing this legislation. Congressman Edwards has been very supportive of water resources initiatives in Central Texas, and we certainly appreciate his work on this legislation.

Waco is the urban center of a rapidly growing McLennan County. Waco and the surrounding cities of Bellmead, Hewitt, Lacy-Lakeview, Lorena, Robinson, and Woodway have a long-history of cooperative and regional efforts on water resources, including the joint ownership and operation of the WMARSS. Waco and McLennan County are fortunate to have a vibrant economic with growing population and excellent quality of life for residents. However, with growing population there is an increasing demand for water. Many of the surrounding communities rely on nearby Lake Waco in the Bosque River basin as the primary water supply source. Several cities also have groundwater sources from the Trinity Aquifer. Electric power generation is another critical factor of the economy of Central Texas and is an important component of the Central Texas Reuse program.

The Waco and McLennan area is within the IH–35 corridor. Population growth within this corridor continues to significantly outpace state-wide growth rates. The regional water plan for central Texas states that population growth in counties within the IH–35 corridor "has been rapid since 1970, averaging 3.9% annual." For this area, the future water demand is about 51% of the central Texas region's total demand in the year 2000, and it is expected to keep growing at a rapid rate. Within McLennan County, all cities are expected to experience sustained growth over the period from 2010 to 2060. Waco is expected to grow by about 26% during this period from a 2010 population of 121,355 to a 2060 population of 152,715. Cities surrounding Waco will grow even more rapidly: the City of Hewitt is expected to growth from a 2010 population of 11,085 to a 2060 population of 19,170 or a 51.3 percent increase.

In addition to growth and industrial development, Central Texas must respond to drought conditions and the seasonal demands that drought imposes on our water supplies. With the recent heavy rains, the memory of severe drought conditions be grow faint; but, in fact, we know from experience that drought conditions will reoccur in Central Texas and that recent droughts have actually been more severe than in the past.

The water supply storage available from Lake Waco to Central Texans is fixed; the groundwater supplies must be limited to wise use that protects our underground aquifers. With growth and drought in Texas driving the need for more water supply in the future, how we use our limited, existing supplies is decisive. 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.

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 the 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. 609 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 temperatures in Central Texas that typically reach over 100 degrees during the summer, we must respond to 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 reuse of treated wastewater effluent is the priority component of the "Central Texas Reuse Program."

The Central Texas Reuse Program is multi-dimensional consisting of a number of efforts—reclamation and reuse, conservation, water quality protection, environmental restoration—organized into a series of projects or components to provide optimal use and proper management of the limited water resources available to the Central Texas community. The need for proper water resources management to optimize the use of the limited surface and ground water supplies in Central Texas has been recognized by the City of Waco and the cities comprising the Waco Metropolitan Area Regional Sewerage System. Working together these cities support the Central Texas Reuse program, which is a comprehensive program to optimize on a regional basis the area's water resources through conservation, reuse and recycling projects. The efforts will include municipal, industrial and electric power generation customers. The Central Texas Water Recycling Act will help support the efforts to provide sustainable water supplies in this area of Texas.

An an overview, a feasibility report on the Central Texas Reuse Program was submitted to the Bureau of Reclamation. The Reclamation staff has been very helpful in reviewing the report and working with us to better understand the Title XVI as a whole.

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 delivered 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.

Mr. Chairman and members of this subcommittee, we strongly support H.R. 609, and the assistance it will provide for the Central Texas Reuse Program. 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 TESTER. Mr. Long.

STATEMENT OF BILL LONG, CHAIRMAN, NORTH BAY WATER REUSE AUTHORITY, NORTH SAN PABLO BAY, CA

Mr. LONG. Good afternoon, Mr. Chairman. My name is Bill Long, and I am Chair of the North Bay Water Reuse Authority.

I'm pleased to be here today to support the interests of Sonoma, Napa, and Maroon Counties, in their efforts to address the problems of agricultural and urban water supply, wastewater discharge, and the restoration of critical ecosystems.

The North Bay Water Reuse Program was developed to address all of these concerns, providing solutions that have multiple benefits. I'm grateful, on behalf of the counties, for the support of Senators Feinstein and Boxer, in introducing the North Bay Water Reuse Bill of 2007.

The North Bay Water Reuse Program would significantly reduce wastewater discharges into San Pablo Bay, which is part of San Francisco Bay, by providing the infrastructure necessary to treat wastewater from several communities, and use it to irrigate vineyards, restore wetlands, and meet urban needs.

The Program will provide 21,000 to 29,000 acre feet of recycled water each year. Since the total demand for the vineyards in the program area is only 12,600 acre feet, water to meet all of the irrigation needs—it will be available to meet all irrigation needs, and provide water to help restore wetlands.

During the winter months, when irrigation demands are significantly reduced, a large part of the recycled water would be diverted to some saline ponds along San Pablo Bay. With infusions of fresh water, these salt ponds—currently devoid of life—will eventually be returned to their historical aquatic and wetland habitat. This will allow the habitat to, once again, be used by shoreline and migratory birds, especially during the late fall, winter, and early spring, when hundreds of thousands of birds migrate along the Pacific flyway.

Additionally, since the recycled water supplies created by the program would be used to replace water that vineyards now draw from local streams, natural flows of water would be left in streams for multiple benefits to the environment. There would be enough water in the streams to restore the shrimp population in many locations, including several places where the shrimp no longer exist.

Also, with additional water left in streams, the habitat for threatened populations of salmon and steelhead will be substantially improved, helping with the recovery of these species.

As you know, California is facing critical water shortages, and the situation expected only to get worse in the future. For this reason, the State of California is aggressively promoting what it calls Integrated Regional Water Resource Management. The goal is to improve operational and economic efficiencies of water management, by establishing regional partnerships, that can optimize water use for multiple benefits.

The North Bay Program will allow a local, regional, State and Federal partnership that will reduce long-term operational costs, and provide a new, high-quality, recycled water source. This water

source will be flexible enough to allow water to be distributed where it is needed, whether it is for irrigation, environmental, or urban uses.

Let me also take a moment to point out the multiple energy benefits of this program. Coastal and estuarial wetlands sequester large quantities of carbon-rich sediments from watersheds, storing as much as 40 percent of global, terrestrial carbon.

Also, the program partners are installing energy-efficient projects, such as solar panels, and low energy pumps to help reduce energy needs.

We are committed to operating the most sustainable, and energy-efficient manner in playing our part to reduce impact of global warming.

We desperately need more win-win projects like this in the North Bay, and I know the same is true for the rest of California and the arid West. We are nearing completion of a feasibility study for this study in collaboration with our Federal partner, the Bureau of Reclamation. The study bears out the points I've already made today, and we are eager to move forward, and believe it is a national model of innovative, regional approaches to sustainable and efficient and optimized water management.

I thank the subcommittee for its consideration of this worthwhile program, and I again would like to thank Senators Boxer and Feinstein for having the vision to promote this important legislation. Thank you.

[The prepared statement of Mr. Long follows:]

PREPARED STATEMENT OF BILL LONG, CHAIRMAN, NORTH BAY WATER REUSE AUTHORITY, NORTH SAN PABLO BAY, CA, ON S. 1472

Good morning Chairman Bingaman and Members of the Subcommittee. My name is Bill Long and I am Chairman of the North Bay Water Reuse Authority in the North San Pablo Bay region of California. I am here today to represent interests in Sonoma, Napa and Marin Counties. I am honored to be here and grateful that Senators Feinstein and Boxer have introduced the North Bay Water Reuse Bill of 2007. The North Bay Water Reuse Program addresses not only the problems of agricultural water supply and wastewater discharge requirements facing the North Bay region, but also aids in the restoration of aquatic and wetland ecosystems. Furthermore, it also is a model for innovative water efficiency management approaches that are particularly well suited for application in California and much of the arid west.

The North Bay Water Reuse Program is a unique regional effort that will meet the needs of urban and agricultural water users and the environment. Existing water supplies are being stretched to the limit and we must take advantage of the proven technology of using high quality recycled water in place of precious and limited potable water sources. The North Bay Water Reuse Program will provide new water supply while at the same time reduce diversions from streams and rivers that are already over-tapped.

REGIONAL WATER CHALLENGES

The North Bay Region of California is north of San Francisco on the San Pablo Bay, part of the Sacramento-San Joaquin Delta and San Francisco Bay system, which is the focus of a long-term federal and state environmental restoration effort.

Many of the growing urban communities of the North Bay region currently discharge their treated wastewater into the San Pablo Bay (the Bay). By the year 2020, the region's treatment plants will be discharging 36,000 acre-feet of wastewater into the Bay each year. This method of wastewater disposal is not sustainable in the long-term.

Meanwhile, agricultural producers in the North Bay region have experienced, and will continue to encounter, major water shortages. One recent drought was so severe that some growers resorted to trucking water to their vineyards to irrigate their grapes. As the population grows in California, so too will the strain on water sup-

plies in a region already struggling with a severe groundwater overdraft and dwindling streams and rivers.

As agencies and farmers grapple with these problems, state and federal authorities are working to find a way to restore 9,000 acres of tidal marshes in the North Bay that were converted to solar salt evaporation ponds during the 1950s. Today, approximately 1,900 of those ponds sit as sterile, saline waste ponds unsuitable to sustain wildlife. Finding a reliable source of non-salt water is essential to rehabilitating these wetlands.

URBAN, AGRICULTURAL AND ENVIRONMENTAL BENEFITS

The North Bay Water Reuse Program would significantly reduce wastewater discharges into the San Pablo Bay by providing the infrastructure necessary to gather treated wastewater from several communities and deliver it as irrigation water for vineyards and other agricultural uses in the summer. During the off-season, the water would be sent to the salt ponds to reduce, and eventually eliminate, the concentrations of highly saline water.

By implementing the Program, we can provide 21,000 to 29,000 acre-feet of recycled water to meet all of the irrigation water needs of down-valley vineyards, thereby leaving water for in-stream beneficial uses and reducing groundwater overdraft. These amounts would also be sufficient to offer cities in the region supplies to meet their recycled water needs.

The recycled water supplies would be used by vineyards to replace water they now draw from regional streams. These streams were historically home to California fresh water shrimp, as well as to small populations of anadromous salmon and steelhead. California freshwater shrimp now reside only in a small number of isolated pockets due to alteration of stream habitat, particularly by water diversions and removal of riparian vegetation. Diversions for agricultural have left only remnant populations of steelhead and salmon in these streams.

By providing growers with an alternative source of water, the North Bay Water Reuse Program would make it possible to maintain enough water in the streams to restore shrimp population in several places where they have ceased to exist. In addition, habitat for the threatened populations of salmon and steelhead will be tremendously improved, which will assist in the recovery of the species.

During the winter months when irrigation demands are significantly reduced, a large part of the recycled water supply made available by the Program would be diverted to restoration of the saline ponds.

With infusions of freshwater, the ponds will eventually be used again by bird populations, especially during late fall, winter and early spring as migration along the Pacific Flyway occurs. The population numbers of various species wintering in the region run into the tens and sometime hundreds of thousands of birds. Shorebird counts in recent years range up to one million wintering individuals. They use all available productive wetlands, traveling from site to site to feed on invertebrates. Waterfowl use also is high, with populations of various species in the tens of thousands, ranging up to about 100,000 individuals within each species. The California Department of Fish and Game reports that there was much more waterfowl use of the site before they were converted to salt ponds. If restored to tidal action, the site also can support estuary fish such as Delta smelt and other species.

SUMMARY OF LEGISLATION

S. 1472 would authorize the Secretary of the Interior to participate in the North Bay Water Reuse Program through the Bureau of Reclamation, which is at the forefront of the larger Bay-Delta restoration effort. The bill authorizes the Secretary to provide technical and financial assistance for a phased implementation of the North Bay Water Reuse Program. The Feasibility Study and Environmental Documents are expected to be completed by the end of 2008. Implementation of the Program could begin the following year. S. 1472 would provide federal financial assistance for planning, design and construction of regional and sub-regional water treatment and distribution systems, limited to the lesser of 25 percent of the total cost or $25 million.

PROVEN BENEFITS AND SAFETY OF RECYCLED WATER

Recycled water is now used widely on many crops in many areas. Many vintners in the North Bay region already apply recycled water from regional treatment plants to their vines. The only reason more growers don't use recycled water is because delivery pipelines have yet to be constructed.

Recycled water is an excellent solution to our agricultural water shortages in California. Recent reports from the State Water Resources Control Board estimate that

48% of the total volume of California's reclaimed water is used for agricultural irrigation.

Tertiary treated water is a proven product, here in California and around the world. In Monterey County, 12,000 acres of vegetable crops are irrigated with reclaimed water in a program that was started in the mid 70's. In Florida's Water Conserv II program citrus crops are irrigated in the worlds largest agricultural reuse program.

The trend in agricultural reuse projects is growing around the world and countries such as Australia have over 50 active programs using recycled water. All of these examples have been rigorously studied by the scientific community and it has been demonstrated that reclaimed water is a safe, healthy, sustainable water supply for agriculture. Grape growers around the region are eager to participate in the Program.

CONCLUSION

In summary, the North Bay Water Reuse Program is a model for the future. It is a win-win project that will protect the environment, as well as meet the future water needs of urban and agricultural water users in the North Bay region of California. It will require vision and broad collaboration to make the program a success. Our federal partners are critical to the success of this collaboration.

The communities of the North Bay are grateful to Senators Feinstein and Boxer for introducing the North Bay Water Reuse bill. It will allow us to embark on a Program that can be replicated nationwide. It will help assure that agricultural and environmental water supply needs in the North Bay region are permanently met, groundwater basins are recharged, stream flows for threatened fish species are enhanced, and discharges into the San Francisco and San Pablo Bay are reduced.

Senator TESTER. Thank you very much, Mr. Long, I appreciate your testimony.

I appreciate the testimony of all the panelists.

We'll start with Mr. Atwater. You note, as others have, that it's imperative for Reclamation to increase the funding through Title XVI to meet the water demands in your neck of the woods. What are the implications of Reclamation not increasing the Title XVI projects?

Mr. ATWATER. When you consider, for example, the Colorado River provides drinking water supplied to all the major metropolitan cities in that area, from Denver to Salt Lake City to Albuquerque, to Phoenix/Tucson, Las Vegas and the 18, 19 million people in the metropolitan LA/San Diego area—if we don't stretch our supplies, we're talking about major economic hardships. This year, Denver has to release water they normally divert from the Colorado River down the river to meet the treaty obligations with Mexico and the Lower Basin States.

We're in a long-term sustained drought. Every one of those major metropolitan areas are actively looking at ways to stretch their supply in a more efficient way. Whether it's—as Randy pointed out, farmers in the same river basic, or we in urban settings—we have the largest concentration of dairies in my area, and our largest customer are the dairies—we're talking about major economic hardship if we don't develop these supplies.

Going back to my earlier testimony, 5 percent of the Bureau's budget would develop more water supply than the rest of the Bureau's budget to do these water recycling projects. To me, that's a pretty clear, compelling argument why we ought to increase the funding, and move forward on these projects now. We don't know how long this drought's going to last, and how water shortages, you know, every year we're living off of how much snow we're going to get next winter.

Senator TESTER. Right.

Along those same lines, then, the Inland Empire and Cucamonga Projects—if, if the Federal support is not immediately forthcoming, due to the backlog that Mr. Todd talked about, given the fact that the Federal planning dollars represent about 10 percent of the overall project costs, will they still be constructed?

Mr. ATWATER. Certainly that's a decision of our Board of Directors and our rate payers, and certainly the State of California. We seek help from them, and they've been very helpful, they've proved their first two phases. I think the reality is, it will slow us down. When you consider that that 10 percent investment leverages that much money, when you take that and extrapolate that with all of the projects that we've talked about today, you really do get a large bang for you buck, so to speak, value-added, and you start seeing the compelling opportunities, whether it's in Texas, Colorado, Arizona or California. So, those of us that, you know, have been working on the water wars for a long time—solving water problems take generations. I don't think we have the time to wait another generation to solve these problems.

Senator TESTER. OK, thank you.

Mr. Darling, there was some difference in testimony between what Larry Todd said about the information that was in, particularly on the Antioch Project. You said all of the information was in, I believe Mr. Todd said it wasn't—the only thing I ask is this: You're both here. Get together and figure out what you don't have, or what you have, and it might have got lost in the mail, who knows. So, you can get it squared away.

In relation to—if my notes are right, if my notes are right—without getting into a debate about what's in and what's out, the South Santa Clara County Project, all of the information is not in on it yet, if that's—a head nod will work, yeah? That's correct?

Mr. DARLING. That's correct, that's correct.

Senator TESTER. The others are, from your perspective, right?

Mr. DARLING. Two of them are actually, not only the information's in, but actually declared feasible——

Senator TESTER. Right.

Mr. DARLING. Those now are going under construction, because we'd lost our State funding. The State stepped forward, so——

Senator TESTER. Good.

Mr. DARLING [continuing]. We'd lose it if we didn't move forward.

Antioch Project, all information is in, the NEPA process is near complete——

Senator TESTER. OK.

Mr. DARLING [continuing]. But the others are not quite as far along, but they, we do want them to be authorized for the Bureau to participate in the final feasibility determinations, ultimately, then, design and construction.

Senator TESTER. OK, good.

Have all the funding arrangements been made for the participating communities to cover the local share of the $110 million in estimated costs, then?

Mr. DARLING. The typical formula that we're proceeding forward with, for example, on the Pittsburgh project, is that the local funding share is 50 percent, the State funding share is 25 percent, and

the Federal funding share is 25 percent, that's our target funding for that project.

To date, on the Pittsburgh project, costs went up, as they normally do in the—the local cost share has increased, and the local agencies have agreed to that. The State cost share is in place—25 percent—and so the Federal cost share is the only lacking portion for funding for that project.

Senator TESTER. OK, so the local cost share is in place?

Mr. DARLING. Yes, the local communities are very supportive of these, of this program.

Senator TESTER. OK, and what are the implications if the Federal funds don't come in the short term?

Mr. DARLING. Two of the projects, as I mentioned, have gone to construction with the idea that the local agencies are fronting the Federal cost share, so we're here trying our darndest to get through the process, and secure that Federal cost share.

I believe the others may not happen at all. I think that, that that—for example, on the Antioch Project, that Federal cost share is $2.25 million, and simply is not available in the City funding in order to move forward. So, I believe that would be a lost opportunity.

I can't speak for the other three project in the Bay Area, but in talking with the staff, it's a similar situation that the State and Federal partnerships are the tipping point. Without them, the projects won't go forward.

Senator TESTER. OK.

Mr. Long, if—you stated the feasibility study for the environmental work for the North Bay Program is not expected to be completed for a year and a half in your testimony, is that correct?

Mr. LONG. That's correct, yes, the end of 2008.

Senator TESTER. OK, has the North Bay Authority identified specific projects that are to be constructed under the program?

Mr. LONG. Yes, they have.

Senator TESTER. How many do you expect to construct, and what is the expected cost of these projects?

Mr. LONG. The first Phase includes six or seven projects with a total cost of just over $100 million.

Senator TESTER. OK. Has the financing been put in place for those projects?

Mr. LONG. No, our goal——

Senator TESTER. Local financing, I'm talking about.

Mr. LONG. Excuse me?

Senator TESTER. Is, is—I'm sorry, let me clarify that. Has the financing been put in place to pay, to pay by the local communities?

Mr. LONG. The goal is similar to the statement by Mr. Darling. Our target is 50 percent local, 25 percent from the State, from State bond money which is available, and more becoming available, and 25 percent from Federal source.

Senator TESTER. Is that financing in place for those?

Mr. LONG. Not yet. These projects are all in the design stage at this point.

Senator TESTER. OK, all right. Thank you very much.

Mr. Record, right? Good. What do you grow?

Mr. RECORD. I used to grow alfalfa, field corn, wheat, barley and then the vegetable side was potatoes, carrots, onions, bell peppers. Presently we still have citrus, and probably going to start into some wine grape production, but that won't be in this service area.

Senator TESTER. Got ya. I appreciate what you do for a living. We have a common connection, there.

Mr. RECORD. Same here.

Senator TESTER. You state that recycled water provide by your project will cost about $110 an acre foot, which is far less than what it costs to import the water—five times that amount, over five times that amount. Will the recycled water reduce the demand for imported water? Or is it simply needed to keep up with new demand in your service area?

Mr. RECORD. It's both. If we're going to continue to meet the demand, we've got to make use of every source that we have.

But there are other uses that are available now, that we can supply with reclaimed water to free up the potable water. So, it's, it's not only for the growth that's coming, but it's for existing things that are going on in the area at the moment that we can use the water for.

Senator TESTER. It will reduce your demand for imported water, of course.

Mr. RECORD. Absolutely.

Senator TESTER. Do you agree with Reclamation's assessment that all necessary studies to determine the project's feasibility have not been completed?

Mr. RECORD. I agree with that. Let me just say that we're in that process. That we will continue this process, and we will continue and do as many of these project as we can, regardless of what happens here.

Senator TESTER. Gotcha.

Mr. RECORD. They're that important. But, we won't be able to do it to the degree that we would like to, and we won't be able to do all of the projects that we'd like to do.

Senator TESTER. I would assume that the feasibility is important?

Mr. RECORD. Absolutely.

Senator TESTER. Do have an expectation of when those studies will be complete?

Mr. RECORD. Yes, we think in about 6 months. I mean, we think that the initial environmental impact report is about a year away from being completed.

Senator TESTER. OK, I—that's good. I think you've already answered this, but I'll ask it anyway. If the Federal funding is not available in the short term, will you still proceed with the Project?

Mr. RECORD. Yes, definitely.

Senator TESTER. OK, thank you much. I appreciate it.

Larry, earlier, this year, you had sent a letter to Chairman Bingaman, indicating that the communities in Central Texas has already engaged in permitting activities for the project, and made financial arrangements for construction and long-term O&M. Is the Project ready to go, from a State and local perspective? Including the permits and financial arrangements?

Mr. GROTH. Yes, sir. The permits are still in the process, so we don't have full approval yet from the State, but we anticipate getting that pretty quickly.

From a financial standpoint, all of the cities have put enough money up to at least do the Project, shy of the Reclamation part. If this funding is not approved, we'll have to make a decision on how to fund the Reclamation portion, or delete it from the Project.

Senator TESTER. OK, I'll ask you the same question I've asked just about everybody else—is the Federal funds necessary for you to move forward?

Mr. GROTH. Absolutely.

Senator TESTER. OK. Do you agree with Reclamation's assessment that the Project is not yet proved to be feasible?

Mr. GROTH. That's correct. At this point, we've only supplied an overview report to them, and some limited feasibility information. We still need to do a feasibility study.

Senator TESTER. OK. I assume you're moving forward with that, ASAP, if you need the money to get the Project going?

Mr. GROTH. Yes, sir.

Senator TESTER. I'll just, quickly, in closing, thank everybody for being here today. I don't have any more questions. I appreciate your willingness to travel. You know, I come—just as a sidebar—I'll tell you, I come out of State government, where we have State funds, much as many of your States deal with where we help supplement local—and, but the Federal dollars are critically important.

I'll just tell you, I think that the work that the people at the local level is doing is good, I think that you need to jump through the hoops that's necessary for the feasibility studies and other things like that, to make sure that it's well-planned, so that the money is spent in the way it needs to be spent, and I think that you guys are—some are there, some are well on their way.

But, I cannot tell you—especially with the—you guys are talking about no snow pack, same thing where I live. You're talking about—I mean, we've got rivers that are drying up, we've got fish that are dying, we've got all sorts of things that are happening because of low water, hot water, and it's a bad deal.

You guys are doubly impacted, because we've got 930,000 people in our State, you've probably got 930,000 people in a county. So, your problems are impacted.

But, I will tell you from a Federal level, I agree with the gentleman, I think it was Mr. Atwater, or Mr. Darling, one of you two that said that if you increase it, where it should be, at 5 percent, at the Federal level, it can have tremendous impacts at the local level. I think that, from my perspective, that would be good business. The overall scheme in the Federal dollars that we deal with, it's less than a rounding error.

So, it's important.

I want to go back, without preaching, thank every one of you folks for being here today.

Mr. Todd, I want to thank you very much, also, for being on the first panel. If Chairman Edwards was here, I would thank him, too. You can pass that along to him, Mr. Groth.

Thank you very much, the meeting is adjourned.

[Whereupon, at 3:42 p.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

DEPARTMENT OF THE INTERIOR,
OFFICE OF CONGRESSIONAL AND LEGISLATIVE AFFAIRS,
Washington, DC, October 22, 2007.

Hon. TIM JOHNSON,
Chairman, Subcommittee on Water and Power, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: I am pleased to provide the responses prepared by the Bureau of Reclamation to the questions submitted by the Subcommittee on Water and Power of the Senate Committee on Energy and Natural Resources following the Wednesday, August 1, 2007, hearing on Water Project hills: S. 1054 and H.R. 122 (Feinstein), A bill to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Inland Empire regional recycling project and in the Cucamonga Valley Water District recycling project; S. 1472 (Feinstein), A bill to authorize the Secretary of the Interior to create a Bureau of Reclamation partnership with the North Bay Water Reuse Authority and other regional partners to achieve objectives relating to water supply, water quality, and environmental restoration; S. 1475 (Feinstein), A bill to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Bay Area Regional Water Recycling Program, and for other purposes; H.R. 30 (Issa), To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Eastern Municipal Water District Recycled Water System Pressurization and Expansion Project; H.R. 609 (Edwards), To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Central Texas Water Recycling and Reuse Project, and for other purposes; and H.R. 1175 (Sanchez), To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to increase the ceiling on the Federal share of the costs of phase I of the Orange County, California, Regional Water Reclamation Project.

Thank you for the opportunity to provide this material to the Subcommittee.

Sincerely,

JANE M. LYDER,
Legislative Counsel.

[Enclosure.]

RESPONSES TO QUESTIONS FROM SENATOR BINGAMAN ON S. 1472

Question 1. S. 1472 (North Bay). As I understand it, there are several ongoing initiatives in California to develop strategies to restore the health of the Sacramento-San Joaquin Bay Delta. Is Reclamation involved in those initiatives and, if so, will the North Bay Water Reuse Program contribute to the larger restoration effort?

Answer. Reclamation is involved with the implementation of the CALFED Record of Decision, the Bay-Delta Conservation Program, the Delta Vision program, the Pelagic Organism Decline studies, and many more. It is possible the North Bay Water Reuse Program could contribute to the Bay-Delta restoration efforts by reducing discharges of tertiary treated effluent into San Pablo Bay. However, further environmental analyses would need to be completed in order to confirm the environmental benefits.

Question 2. S. 1472 (North Bay). Testimony by the North Bay Water Reuse Authority indicates that the feasibility study and environmental documents for the program will be complete by the end of 2008. Do you agree with the timeframe and will Reclamation have completed its review of those documents in a similar timeframe?

Answer. If the intent is to authorize the North Bay Water Reuse Program as a Title XVI project, then the feasibility study and environmental documentation could he completed by the end of 2008. As stated in Deputy Commissioner Larry Todd's testimony on August 1, 2007. it is unclear if the intent of S. 1472 is to authorize the North Bay Water Reuse Program as a Title XVI project pursuant to the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575).

However, if the intent of S. 1472 is to authorize the North Bay Water Reuse Program as something other than a Title XVI project, then Reclamation would not have authority to conduct a feasibility study. Such a feasibility study would need to be specifically authorized by Congress and would need to meet the requirements of the "Economic and Environmental Principles and Guidelines for Water and Related Resources Implementation Studies, "also known as the P&Gs. S. 1472, as currently written, would not provide that feasibility study authority: therefore, a feasibility study following the P&Gs would not be completed by the end of 2008.

Question 3a. S. 1475 (Bay Area). With respect to the Bay Area Regional Program, your testimony states that 4 of the projects within the bill are not yet considered feasible by Reclamation. Two of these projects—the South Santa Clara Project and the Antioch Project—need completion of a review of the feasibility reports and environmental documents. When do you expect for a review of those feasibility reports to be completed? Is this something that can be done expeditiously?

Answer. Significant progress has occurred in the review of the Antioch Project feasibility report and environmental documents. Reclamation provided comments on the feasibility report to Delta Diablo Sanitation District (DDSD) and DDSD very quickly incorporated the comments and re-submitted the feasibility report.

Reclamation is setting up a review team and is trying to complete the review by the end of October 2007. Reclamation has completed the National Environmental Policy Act compliance and related endangered species and cultural resources activities.

Reclamation has completed a preliminary review of the South Santa Clara Project feasibility report and environmental documentation and has identified to the Santa Clara Valley Water District (SCVWD) areas that require additional documentation. The length of time to complete the review and approval of the feasibility report and environmental documentation will depend on the timelines and adequacy of the supplemental information provided by the SCVWD.

Question 3b. Have you received any reports for the other projects?

Answer. On February 15, 2006, Reclamation completed the "Findings of the CAI FED/Title XVI Review" (Report), for projects identified in the Southern California Comprehensive Water Reclamation and Reuse Study and the San Francisco Bay Area Regional Water Recycling Program. The Report concluded that the feasibility reports and environmental documents for the North Coast County Water District Recycled Water Project and the Redwood City Recycled Water Project were not sufficient for Reclamation to determine if those projects are feasible. Since that time, we have not received any additional information from the City of Pacifica or the City of Redwood City.

Question 4. H.R. 1175 (Orange County). It sounds like the Administration does not support the Orange County bill because of the precedent it might set in increasing the federal contribution ceiling to an amount greater than $20 million. Have there been any other individual Title XVI projects that have received a federal contribution in excess of $20 million? Is the Orange County program one project or a number of different projects?

Answer. Concerns about this bill extend beyond the precedent set by increasing cost ceiling above $20 million. Given Reclamation's budgetary constraints, anyincrease in cost ceiling competes with other already authorized projects, the needs of aging water infrastructure, and environmental restoration projects. At this time the Administration does not support new authorizations or increasing the ceilings for Federal cost sharing of water recycling projects.

Four of the five construction projects that were authorized when Title XVI (P.L. 102-575) was enacted in 1992 (San Jose, San Diego, Los Angeles, and San Gabriel Basin, all located in California) have exceeded federal contributions of $20 million. Section 1631(d)(2) established the ceilings for these projects based on the estimated federal share included in Reclamation's FY 1997 budget request. In addition, P.L. 108-418 increased the ceiling for the San Gabriel Basin project. The specific projects,

ceilings, and funds provided (including all appropriations, rescissions, underfinancing, and fund transfers) through FY 2007 are listed below.

Project	Ceiling	Funding thru FY 2007
San Jose Area	$109,959,000	$27,600,000.
San Diego Area	$172,590,000	$83,905,500.
Los Angeles Area	$ 69,970,000	$69,970,000 (completed).
San Gabriel Basin	$ 44,590,000	$31,678,000.

The Orange County Regional Water Reclamation Project, which is authorized by Section 1624, is a single project now called the Groundwater Replenishment system, sponsored by the Orange County Water District and the Orange County Sanitation District.

Question 5. General. The following reclamation water recycling bills have been passed by the House: H.R. 786 (LA County); H.R. 1139 (Riverside-Corona); H.R. 1140 (San Juan-Capistrano); H.R. 1737 (GREAT Project); H.R. 1503 (Avra/Black Wash); H.R. 1725 (Rancho California); and H.R. 716 (Santa Rosa). Please provide a brief summary on the status for assessing the feasibility of the projects contemplated by each of those bills.

Answer. H.R. 716 (Santa Rosa Water Reuse Plan).—The City of Santa Rosa provided feasibility reports and environmental documentation to Reclamation on June 25, 2007. The City's transmittal letter indicated their desire for Reclamation to delay its review until H.R. 716 is enacted into law. On July 20, 2007, Reclamation sent a letter to the City that identified options by which Reclamation could initiate its review sooner, if requested by the City. Reclamation has not received a response to that letter.

H.R. 786 (Los Angeles County Water Supply Augmentation Project).—Reclamation has been involved in the planning of this project for several years. No formal feasibility study has been completed to date.

H.R. 1139 (Riverside-Corona Feeder Project).—This project is not a Title XVI project. If enacted, this legislation would authorize construction of the project without any requirements to assess its feasibility using funds provided in FY 2006. Reclamation has been working with the Western Municipal Water District to complete compliance with the National Environmental Policy Act (NEPA), for the project.

H.R. 1140 (South Orange County Recycled Water projects).—This bill would authorize the San Juan Capistrano Recycled Water System and the San Clemente Reclaimed Water Project. Reclamation has met with the City of San Juan Capistrano concerning their project, and has provided guidance towards meeting feasibility requirements and NEPA compliance. Reclamation has not been involved in the San Clemente project to date.

H.R. 1737 (City of Oxnard GREAT Project).—Reclamation has had meetings with the City of Oxnard, and has provided the City with advice concerning NEPA compliance. No documentation of feasibility has been submitted to date.

H.R. 1503 (Avra/Black Wash).—Reclamation has been working with Pima County to review the technical, regulatory and contractual issues involved in the project but discussions have been preliminary. To date, the technical studies of the project are not complete and a feasibility report that meets the requirements for feasibility of Title XVI projects has not been submitted.

H.R. 1725 (Rancho California Water District Recycled Water project).—The Rancho California Water District has submitted a feasibility study for Reclamation's review and approval. The study was received on July 18, 2007 and reviewed. Reclamation notified the District that the study lacked needed financial information. The additional information was promptly submitted by the District and Reclamation plans to complete its review by early November.

RESPONSES OF RICHARD W. ATWATER TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. (S. 1054/H.R. 122—Inland/Cucamonga). You note that it is imperative for Reclamation to increase funding through Title XVI to assist in meeting critical water supply problems facing the arid southwest. What are the implications of Reclamation not increasing support for Title XVI projects?

Answer. The key federal water policy issues that are impacted by the Bureau of Reclamation not adequately funding the Title XVI Program are clearly the potential for having an increase in significant water conflicts and economic impacts from

water supply shortages throughout the western States. Water recycling, reuse and reclamation is widely recognized by national experts on water policy as the key "new water supply for many regions of the US and worldwide" (USGS Circular 1279, EPA Guidelines on Water Reuse (2006), Dept. of the Interior Water 2025 Program (2002), CalFed Bay Delta Program EIR/EIS (2001), and the Colorado River Basin States augmentation studies). The era of new dams and large importation aqueducts from one river basin to another river basin are over. Title XVI represents the future solutions to our complex water problems in the West. As documented by the Council on Environmental Quality and the Congressional Research Service reports to Congress last year on the Title XVI program at the Subcommittee's hearing in April of 2006, the USBR Title XVI Program is the only federal program that is focused on developing new technology to reuse, recycle and reclaim impaired water sources for beneficial uses (including use of desalination technologies like reverse osmosis membranes). By comparison USEPA in its Clean Water and Safe Drinking Programs annually budgets between $700 million and $1 billion for development of new technologies and funding of local infrastructure projects. The current $10 to $12 million in USBR budgeting for Title XVI represents about 1 percent of the total USBR annual appropriations. I am recommending that the historic funding levels at the 5 percent level should be supported by Congress to ensure the adequate development of water recycling and desalination technologies.

The implication of business as usual from USBR would result in a historic failure of the Federal "partnership" role with States and local governments to address the critical water needs throughout the western arid states and to fund research and applied technology to advance the development of implementing innovative solutions to complex regional and multi-state water problems. USBR has historically been a leader for many decades on advancing technology to more efficiently use water to enhance the economic and environmental sustainability of regions throughout the western US. I urge Congress to reinvigorate that "leadership" vision at the Bureau of Reclamation.

Question 2. What are the federal responsibilities/interests involved in Title XVI?

Answer. Congress in 1992 with the passage of Title XVI of PL 102-575, the Reclamation, Wastewater and Groundwater Study and Facilities Act, and then in the expanded authorization in 1996 with the Reclamation, Recycling and Conservation Act (PL 104-266) clearly authorized and encouraged the Bureau of Reclamation to work in partnership with the States and local governments to develop recycling and desalination technologies to address the critical water problems facing the western US. It has been well documented that most of the major river basins in the western US are facing critical water shortages (US Department of the Interior Water 2025 Report in 2002) and severe competition for water resources has caused multiple problems: including endangered species impacts, clean water act violations, public lands, tribal issues, water rights problems (e.g., Interstate Compacts and treaty issues), and other significant federal policy implications. For example, addressing watershed ecosystem needs and the recreational demands to preserve instream flows in many river basins requires an effective strategy of making every gallon of water be efficiently used and reused again and again!

Title XVI Program cost sharing at no more than $20 million per project and with only a 25 percent federal share of the total capital costs without any operation and maintenance responsibilities is by far the most cost effective Federal water resources program. Therefore, I would suggest without providing herein further documentation in greater detail that the federal nexus for adequately funding the Title XVI clearly has been provided in the hearing record to the Committee. Since Secretary Manuel Lujan initiated the program in 1991 and then with the original authorization of Title XVI in 1992 lead by the Committee on Energy and Natural Resources has had extensive testimony on the national benefits and relative cost effectiveness of this unique federal partnership to develop new water recycling, reuse and desalination supplies that solve complex water problems.

Question 3. If federal support is not immediately forthcoming due to the backlog of projects, will the Inland Empire and Cucamonga projects still be constructed given that the planned federal contribution represents only 10% of the overall cost?

Answer. The Inland Empire Utilities Agency has collaborated closely with the Bureau of Reclamation on the development the Chino Groundwater Basin watershed plan since 1992 in coordination with the State of California, the Metropolitan Water District and the Santa Ana River Watershed Project Authority (SAWPA) as referenced in my written testimony submitted to the Committee on August 1, 2007. IEUA has received funding from all of these other partners and IEUA probably would proceed with implementation without the Bureau of Reclamation's 10 percent cost share ($20 million cap) but it would cause delays in implementing the recycled water projects because of a shortfall in funding during the next few years. The fed-

eral government through the modest increase in funding of Title XVI projects can cost-effectively assist in addressing the current severe drought shortages facing the Colorado River Basin States and the CALFED Bay Delta Program "crisis" being litigated in State and Federal courts this summer. All efforts to efficiently reuse and recycle water should be encouraged by the Bureau of Reclamation.

My suggestion to Congress is that if the Bureau of Reclamation would increase its funding of the Title XVI from the current 1 percent of its total budget to 5 percent of its total budget then the issue of backlog is addressed. Secondly the national economic benefit of that Title XVI "5 percent" investment in solving water problems throughout the western US would be greater than the benefits of new supplies resulting from the remaining 95 percent of the Bureau of Reclamation's budget because it would develop about 1 million acre-feet of new supplies throughout the western US.

RESPONSES OF GARY W. DARLING TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. (S. 1475/H.R. 1526—Bay Area Water Recycling). Reclamation indicates that 4 of the projects in the Bay Area Program have not yet met the feasibility criteria under its guidelines. Can you describe where those four projects (Antioch; North Coast County; Redwood City; and South Santa Clara County) are in the process, and how long you think it will take to meet the feasibility criteria? Has any feasibility analysis been completed for the Redwood City and North Coast County projects?

Answer. Antioch Recycled Water Project.—The Antioch Project has met all feasibility requirements, with the exception of final clarifying responses to USBR's Engineering Review and final signoff/concurrence from Reclamation's Office of Program and Policy Services. NEPA has been completed for the Antioch Project. Final concurrence that the project has met all of the feasibility criteria is expected in September 2007.

Pacifica Recycled Water Project.—The North Coast County Water District's Pacifica Recycled Water Project was reviewed by USBR in 2004, and found to be missing 2 of the 9 feasibility requirements. NEPA compliance has not yet be initiated, and the plan provided fell short of meeting financial capability requirements. At the time, NCCWD did not yet have a firm financial commitment from the SWRCB, the city, and NCCWD documented. The project has received state grants totaling $2.1M, and NCCWD/SFPUC has been approved for an SRF loan for the remainder of the local share. The SFPUC is funding 78% of the local share for the project, and NCCWD is committed to funding 22% of the local share. NCCWD has not yet initiated NEPA review for the project, but it is anticipated that a FONSI can be signed within 3 months of the initiation of the NEPA work with Reclamation.

Redwood City Recycled Water Project.—The Redwood City project was reviewed by USBR in 2004, and found to be missing 2 of the 9 feasibility requirements—financial capability and NEPA compliance. Since that review, Redwood City has provided additional documentation regarding financial capability. Redwood City has also approached Reclamation about completing NEPA, and the City is currently evaluating timing for NEPA compliance. In their current form, the USBR Title XVI Draft Directives do not require NEPA compliance prior to a positive feasibility determination. Redwood City's adopted Mitigated Negative Declaration provides compliance with CEQA, so it is anticipated that a FONSI can be signed within 3 months of initiation of the NEPA work with Reclamation.

South Santa Clara County (Gilroy) Recycled Water Project.—The Santa Clara Valley Water District (SCVWD) submitted the South County Regional Wastewater Authority (SCRWA)/SCVWD joint South County Recycled Water Plan to Reclamation in February 2005, and in July 2005 SCVWD began preparing CEQA/NEPA documentation for the proposed project. In October 2005, SCVWD began discussions with USBR regarding sponsorship for NEPA compliance on the project. In USBR's December 2005 review of all feasibility documentation provided, Reclamation noted that the project met most of the Title XVI feasibility criteria, but SCVWD would need to complete NEPA and provide more detail on the engineering cost estimates in order to meet all of the feasibility requirements.

Since then, Reclamation has reviewed SCVWD's draft technical studies for the project's EIR/EIS and has provided review comments. SCVWD and USBR have prepared a draft contributed funds agreement to complete NEPA and have USBR provide detailed engineering costs estimates in order to meet all feasibility requirements. The draft agreement has been routed for Reclamation's management approval.

Because the South County/Gilroy project required preparation of an EIR, it may take up to 6 months to complete NEPA for the project once the agreement is formally initiated. SCVWD and USBR anticipate that a FONSI will provide NEPA compliance for the project.

Question 2. Have the necessary funding arrangements been made by all the participating communities to cover the local share of the $110 million in estimated costs? What are the implications if federal funding is not available in the short-term?

Answer. Each of the projects included in the Bill must show Reclamation proof of their capability to provide the full local share of the $110M in local costs prior to a positive feasibility determination. To date, the Antioch Recycled Water Project, Palo Alto/Mountain View Project, Pittsburg Recycled Water Project, and the Redwood City Recycled Water Project have all provided satisfactory evidence to USBR documenting the funding arrangements made to cover the local share.

Some projects (including Pacifica and Palo Alto/Mountain View) will be utilizing State Revolving Fund loans in order to get their projects into construction in time to take advantage of State Grant commitments with the State mandated timelines established in their grant agreements. This loan will have to be repaid, and the Cities are depending on a federal partnership to help do so. The Delta Diablo Sanitation District Board has agreed to "front" the federal cost share for the Antioch and Pittsburg Projects, allowing for future reimbursement of the federal cost share. Each of the sponsoring agencies have determined that the projects must move immediately because of anticipated drought conditions, and have taken out loans or made alternative funding arrangements to get the projects into construction.

Still, the unavailability of Federal funding in the short term has the potential to "make or break" a project that depends on City Capital Improvement Program and State Grant commitments. The projects simply cannot be postponed for years, especially when significant local commitments (which are constantly in competition with education, transportation, housing, and other local priorities) and State commitments (with strict deadlines) have already been made.

RESPONSES OF LARRY GROTH TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. (H.R. 609—Central Texas). Earlier this year you sent a letter to Chairman Bingaman indicating that the communities in Central Texas had already engaged in permitting activities for the Project and made financial arrangements for construction and long-term O&M. Is the Project ready to go from a state and local perspective, including the necessary permits and financing arrangements? Is federal funding necessary to move forward?

Answer. The project is ready to go from a local perspective; all necessary State permits are either in the application preparation or regulatory agency review stage.

The necessary financing and legal arrangements have been completed. Engineering studies are also complete. The seven cities comprising the regional wastewater system have approved an inter-local agreement to move forward with the implementation and operation of the project. Each member city has made arrangements to finance its pro rata share of the project. Permit application with the Texas Commission on Environmental Quality is underway for one satellite location and preparatory work completed for the other location.

Without federal funding, the project will have to be modified to remove the conservation and water reuse components. Only the treatment and discharge components will move forward without federal funds.

Question 2. Do you agree with Reclamation's assessment that the Project has not yet proved to be feasible? When do you plan on submitting all available information to Reclamation? How will Reclamation's assessment of the project's feasibility affect the decision to go forward from the local perspective?

Answer. Yes, in the sense that a formal Feasibility Study has not been completed in accordance with Bureau of Reclamation guidelines. However, an Overview Report of the project that addresses in summary fashion the major requirements listed in the Reclamation guidelines for a Feasibility Study has been submitted to the Area Office in Austin, Texas and reviewed by the Reclamation staff. This report confirms the need for and the feasibility of the reuse and recycling project. Preliminary engineering studies have confirmed the technical feasibility; and, the executed inter-local agreements have confirmed the legal and financial foundation for the project to proceed.

We anticipate providing the formal Feasibility Study as soon as financing can be arranged for the Study. The report should be done during the next fiscal year.

The Reclamation decision on the project feasibility will be an important consideration to the regional system in determining whether or not to proceed with any aspects of the project that Reclamation should determine not to be feasible.

RESPONSE OF BILL LONG TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. (S.1472—North Bay Water Reuse). You state that the feasibility study and environmental work for the North Bay program are not expected to be completed for almost a year and a half. Has the North Bay Authority identified specific projects that are to be constructed under the Program? If so, how many do you expect to construct, and what is the expected cost of those projects? Please identify by specific project.

Question 2. Has the financing already been put in place to pay for the local communities' expected 75% share of the projects? If not, what is the process to be followed to ensure local funding is available, and how long will the process take?

Answer. We have 9 projects to be constructed under Phase 1 and they provide benefits to four implementing agencies: Las Gallinas Valley Sanitary District, Novato Sanitary District; Sonoma Valley County Sanitation District and Napa Sanitation District. If you would please refer to the attached table entitled "North Bay Water Reuse Program Summary of Phase 1 Local Projects",* you will also find a breakout of the federal, state and local costs associated with each project and a Program total of $98,378,000.

The federal authorization for feasibility, environmental and construction cost-share funding is a cornerstone in the financial success of this project and will greatly facilitate our ability to secure and leverage state and local funds in a timely manner.

The state cost share for these projects will likely come from Proposition 84 that was passed in 2006. Specifically this bond measure has $1.5 billion in funding for water quality projects and $580 million for projects that support sustainable communities. It is anticipated that the program guidelines and first round of grant funds will be available sometime in 2008.

The local cost share will be specific to each of the projects. As several of them have regional benefits, the members may partner with each other and or their respective county's to implement them. As the agencies are all public entities they have diverse assessment capabilities and several financing options available to them.

All financial tools, including but not limited to connection fees, local revenue or general obligation bonds and benefit assessment districts are under consideration and included in the economic and financial analysis being conducted in the final stages of the study. The financing strategy is scheduled to be completed with the other planning documents in a year and a half.

RESPONSES OF RANDY A. RECORD TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. (H.R. 30—Eastern Municipal). You state that the recycled water provided by your project will cost $110/acre-foot—approximately 20% of the cost of imported water (estimated at $574/acre-foot).

Answer. Eastern Municipal Water District's (EMWD) operation and maintenance cost for recycled water is $110 per acre-foot, which is 20 percent of the current price of $574 an acre-foot for imported water. If federal funding is granted, the capital costs for H.R. 30 recycled water amounts to $165 an acre-foot over the life expectancy of the project. If the federal government does not contribute any funding for this project, the capital costs are an additional $55 an acre-foot, or $220 an acre-foot.

Question 2. Will the recycled water reduce the demand for imported water, or is it simply needed to keep up with new demands in your service area?

Answer. The recycled water provided by H.R. 30 will reduce the imported water needs for existing and new demands. Recycled water is an important element for the water supply reliability in the semi-arid regions of the nation. Recycled water reduces the demand for imported water by providing affordable water for irrigation, increasing the longevity of agricultural industry in these regions. By using non-potable supplies, such as recycled water, EMWD has been able to reduce demand on potable and non-potable imported water supply.

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*Table has been retained in subcommittee files.

Managing new demands is a major concern not just for EMWD but for the entire State of California. To effectively provide reliable water supply, water purveyors in California document the adequacy of their water supply by preparing a Water Supply Assessment Report as required by Water Code Section 10910 et seq. and Government Code section 66473.7. Riverside County is one of the fastest growing areas in Southern California and EMWD provides an assessment of how it can meet projected water demands associated with its growth. The recycled water generated as a result of future growth is anticipated to play an important role in the water supply reliability of EMWD's service area.

Question 3. Do you agree with Reclamation's assessment that all necessary studies to determine the project's feasibility have not been completed? Is so, when do you expect to complete those studies?

Answer. The final feasibility report was submitted on July 25 and the Bureau has 90 days to review the report. However, Bureau staff anticipates completing their review in shorter time than the prescribed 90 days. The feasibility study for the recycled water project was prepared with the guidance and assistance of Bureau of Reclamation staff. A draft feasibility report was submitted in early July for preliminary review and Bureau staff indicated that there was adequate information within the study report to meet Reclamations Guidelines.

Question 4. If federal funding assistance is not available in the short-term, will Eastern Municipal still proceed with the Project?

Answer. If federal funding is not available, some, but not all, the projects will be completed when they become necessary to provide service, and water is available during the peak months. Obviously it would be more cost effective to accomplish these projects on a large scale basis, rather than one or two components each year as funding becomes available.

EMWD has identified over one billion dollars for new infrastructure needed during the next five years. We have already reduced these requirements by several hundred million dollars, but the one billion dollars of needs still may not be able to be financed in it's entirety. With the enormous growth EMWD has experienced in the past five years, our immediate priorities are to provide service to new developments which often leaves little funding available to accomplish long term water management projects.

The endorsement of the project by the Federal Government through the Bureau of Reclamation and Congressional appropriation process provides an important validation of the project which may assist the District in obtaining funds from other sources.

APPENDIX II

Additional Material Submitted for the Record

CUCAMONGA VALLEY WATER DISTRICT,
Rancho Cucamonga, CA, August 1, 2007.

Hon. JEFF BINGAMAN,
Chair, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.
Subject: Letter of Support for S. 1054 & H.R. 122

DEAR SENATOR BINGAMAN: Cucamonga Valley Water District is a retail water and sewer agency, located in the western portion of San Bernardino County within the greater Santa Ana River Watershed, and provides water and wastewater services to more than 185,000 people in a 47 square mile area. Our region and is one of the fastest growing regions in the State of California if not in most of the nation. Over the past five years our agency has averaged over one thousand new connected water and sewer customers. By the year 2020 our population is expected to reach approximately 230,000 people.

Our agency receives approximately 50% of its water supply from the Inland Empire Utilities Agency a member of the Metropolitan Water District of Southern California. Approximately 40% of our locally developed water supply comes from groundwater produced from within the Chino and Cucamonga Basins. The remaining 10% of our supply is surface water collected from our local San Gabriel Mountains. Our present average daily water demand is 50 million gallons per day (MGD), with wastewater flows averaging 11.5 million gallons per day. By the year 2020 our agency will need an additional 20,000 acre feet of new water supply to meet our growing demand.

CVWD is a member of the Chino Basin Regional Wastewater Treatment Program managed and administered by the Inland Empire Utilities Agency. Within the geographic boundaries of our service area there will be over 26,000 acre feet of treated or recycled water at ultimate build-out available for secondary reuse such as landscape and industrial use as well as for future use as groundwater replenishment.

One of the ways in which we will meet this growing demand is through the utilization of recycled water. With the rapid amount of growth throughout the region and a thriving economy in the Inland Empire, recycled water is critical to ensure an adequate water supply for our customers now, and in the future. Far beyond the local factors that necessitate our agency developing the appropriate recycled water infrastructure we face a greater risk from factors outside of our region. A major breech in the Sacramento-San Joaquin Delta levee system would have disastrous effects paramount to those witnessed during Hurricane Katrina. The economic engine of the Inland Empire, an area known as one of the fastest growing regions of the nation, would come to a screeching halt for issues that we have no control over.

Environmental issues also increase the vulnerability of our water supply. Most recently a number of court cases have placed into question the ability of the State of California Department of Water Resources authority to operate one of its pumping facilities due to environmental concerns over the Delta Smelt. The court cases were followed by DWR's proactive action to shut down the Banks Pumping Plant after sighting of the Smelt near and around the pumps which is critical for importing water to areas of Southern California, and to many other Northern California communities.

In addition to the water infrastructure issues that confront California, climate change and the impact it will have across the southwest is a rapidly emerging concern. A number of reports have been published about the impacts of climate change and the corresponding impacts to our water supply. According to the 2006 summary report from the California Climate Change Center, California's temperatures are expected to rise 4.7 to 10.5 degrees by the end of the century. These temperature increases would have wide spread consequences including substantial loss of snow

pack, increased risk of large wildfires, reductions in the quality and quaintly of certain agricultural products, and one of the worst droughts this region has seen in decades.

Our philosophy of making sure that "every drop counts" recognizes the value of efficient water use. Recycled water is a critical and extremely valuable component of our future and as a preface to our planning process we have established four resource management objectives: Maximize the beneficial use of recycled water, decrease our reliance and dependence on imported water from the State Water Project, provide maximum flexibility of all supply opportunities, and, develop energy efficient delivery systems. An ancillary benefit of using recycled water is the energy savings in comparison to drinking water. It is well known fact that nearly 20% of California's energy consumption is from moving water in and about the State. Recycled water uses substantially less energy which is good for our local community but also good for all of California.

Another impact of the development and use of recycled water is the reduction in greenhouse gas emissions. With full implementation of the projects proposed by Cucamonga as well as within the Inland Empire Region, it is estimated that 100,000 tons of greenhouse gas emissions will be eliminated. with only a small percentage of the total recycled water available being used in California (roughly 10%) there is a huge potential for additional savings and greenhouse gas reductions from addressing development of recycled water supplies.

Our agency relies on the Inland Empire Utilities Agency to treat and deliver recycled water to where we can deliver it to our customers. However, much of our jurisdiction is built on the alluvial fan of the San Gabriel Mountains requiring extensive pumping and energy cost to move water up the foothills to where much of our need exists. Additionally the water conveyance facilities required to transport the treated water to the area of need are non-existent requiring extensive infrastructure investment and as a consequence increase costs to our ratepayers. Given the condition of the State's electricity situation this becomes a major obstacle to reuse of recycled water.

Our innovative strategy calls for the sighting of small, localized satellite treatment plants adjacent to where the demand exists. This strategy will allow us to use the existing regional system to meet the peak demands of the gravity flow areas. A unique feature of our satellite wastewater treatment plant program is that they will be sized according to the immediate needs of anywhere between 0.5 mgd and 2 mgd. Utilizing this strategy we will be able to develop over 5,000 acre feet of new recycled water supply by 2010. A variety of new customers have been identified and support for this initiative is very high.

The immediate benefits are obvious. The challenge of serving areas in the higher elevations would require lifting the water 1,500 feet, which would require an enormous amount of energy use. Locating the satellite plants where the need exists allows us to avoid energy use associated with pumping as well as avoid the use of imported water previously required to meet the demands of the existing area. Construction of new or expansion of existing regional wastewater treatment facilities is deferred saving valuable resources. The innovative technology incorporated into the treatment process is itself extremely energy efficient and creates additional cost savings for additional community facilities. The energy savings attributed to development and use of recycled water is approximately 3,000 kWh per acre-foot, which is equivalent to 34 MW per year. During times of drought we will now have complete reliability and dry-year availability which is a critical element of "drought-proofing" our region.

The implementation of our unique wastewater management strategy expands our existing water supplies and is consistent with all regional, State and Federal programs. From the Federal perspective it meets the goals of the CALFED program through development of a new resource opportunity. Our project is consistent with the Bureau of Reclamation's Southern California Water Reclamation and Reuse Feasibility Study which concluded that water recycling projects in Southern California could produce almost 450,000 of new recycled water by 2010. Our project coupled with those proposed by the Inland Empire Utilities Agency will produce approximately 100,000 acre-feet annual over the next decade.

Our project, S. 1054/H.R. 122 has fully complied with the U.S. Bureau of Reclamation's guidelines for Title XVI projects and the feasibility study was formally approved in October 2006 by the U.S. Bureau of Reclamation. Our project is included within the Inland Empire Utility Agency's Regional Water Recycling Feasibility Study, and has obtained all environmental and regulatory approval, including the California environmental Quality Act (CEQA) and NEPA.

The State of California's Water Recycling Task Force identified the need for 1.5 million acre feet of new recycled water by the year 2030. Regionally, our project re-

alizes multiple benefits such as conformance with the Metropolitan Water District of Southern California's Integrated Resource Plan, the Santa Ana Watershed Project Authority's watershed program the Chino Basin Watermaster's Optimum Basin Management Plan and the goals of the Inland Empire Utilities Agency Regional Recycled Water program.

As previous indicated, our watershed is one of the fastest urbanizing watersheds in the Nation. We do not expect to receive more water from the State Water Project, and may well get less that originally thought. Nevertheless, we can expand our existing water supplies through development of local supplies to "drought-proof" our water district.

The S. 1054 & H.R. 122 bills authorize the Secretary of the Interior to participate in the Inland Empire Regional Recycling Project and in the Cucamonga Valley Water District recycling project. The Federal investment represents an approximate 10% cost share which will provide valuable funding assistance which will be leveraged with State and local funding of approximately $30.0 million of new capital investment in innovative technology to develop new water supplies.

Sincerely,

ROBERT A. DELOACH,
General Manager/CEO.

ORANGE COUNTY WATER DISTRICT,
Fountain Valley, CA, July 31, 2007.

Hon. JEFF BINGAMAN,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

Re: H.R. 1175

DEAR MR. CHAIRMAN: On behalf of the Orange County Water District, I respectfully request the following statement be entered into the formal record of the Subcommittee on Water and Power's August 1, 2007 hearing on H.R. 1175, a bill to authorize funding for the Orange County Water District's Groundwater Replenishment (GWR) System under Title XVI. We thank the subcommittee for the opportunity to provide this testimony in support of the project. We hope that the subcommittee will act swiftly and approve H.R. 1175.

As a matter of background, OCWD was formed in 1933 and today is responsible for managing and protecting the vast groundwater basin under north and central Orange County. The groundwater basin provides over two-thirds of the water supply for 2.3 million people in our region which includes the cities of Anaheim, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Newport Beach, Irvine, La Palma, Los Alamitos, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda. Without the careful management of this basin, the hardships we are enduring because of the ongoing drought that is gripping the western United States would be exacerbated beyond belief. Our dramatic accomplishments in conservation and other structural changes our communities have adopted have made it possible to lessen the hardships. However, it is not enough to address the future demand for water when you consider population growth coupled with loss of water supplies due to the twin challenges of drought and environmental contamination. We believe that only through bold and creative partnerships can we develop an effective response.

The U.S. Bureau of Reclamation Title XVI program represents a key element of any partnership. It is important to highlight the fact that this is the only federal program dedicated to the development of water recycling projects. It offers communities like OCWD's service area the opportunity to plan, design and construct projects that will protect the federal investment in the west and ensure a stable and sustainable economy while preserving our natural resources. I would note that our project, the GWR System has the ability to provide more than 133,000 acre feet of reclaimed water when fully operational. As California and especially Southern California seek solutions to ensure compliance with the QSA, HR. 1175 plays a central role in providing a means to provide a reliable and safe water supply.

It is important, in Southern California, that we realize the future of water reliability lies in the ability to supplement our imported water supplies with local water supply development such as recycled water. It is important to note that this priority involves multiple uses such as irrigation, industrial and indirect potable reuse. The Title XVI program is important to achieve this goal.

From my humble perspective as one of the pioneers of implementing the original law, and an ardent supporter of recycled water, let me assure the subcommittee that the Title XVI Program works. It provides value. And, it creates new water. Given

the economic vitality of the West (California alone is the 5th largest economy in the world; makes up 13% of the nation's GDP; and generates $1.4 trillion in gross state product) and the federal mandates that state and local communities must meet to assure a clean and safe water supply, a legitimate federal role does exist. Let's be clear on one important point; the federal assistance that is provided through Title XVI delivers benefits by reducing borrowing costs, enhancing public acceptance of a project, and providing a platform for the speedy transfer of innovative technologies that can be used elsewhere in the nation.

Orange County Water District is currently completing the first stage of construction of the Groundwater Replenishment System. This visionary indirect potable reuse project's first stage will be operational in the November 2007 and will produce 72,000 acre-feet per year (enough water to meet the annual needs of over 140,000 families) of new water for the 2.3 million residents of north and central Orange County. The Project uses state-of-the-art treatment, monitoring and groundwater replenishment technology. This technology is used to insure high quality water is produced from the project. All aspects of the project are monitored to insure quality objectives are met and maintained. The product water will be recharged into the Orange County Groundwater Basin increasing the sustainable yield from the basin. The Project not only provides direct benefits to the rate payers within our service area but it provides regional benefits as well. Recycled water is a drought proof supply that is available even in the driest years. Having recycled water available enables OCWD to make conserved and imported water available to other Southern California water agencies that are not as fortunate in their water supply portfolio during dry years. In addition, to the extent local water supply can be created than it relieves the pressure to import water from the Colorado River into the Southern California Region.

H.R. 1175 will enable the District to achieve its vision of providing more than 130,000 acre feet annually of recycled water. H.R. 1175 would provide a federal cost share of less than 10.8% of the total project's costs. It is important to note that unlike most Title XVI project requests, the GWR System represents a collaborative and regional approach. With our partner, the Orange County Sanitation District, we are addressing the needs of more than 3 million citizens in more than 20 communities throughout the Orange County region. No less important, this project will accomplish multiple tasks. While we note the primary purpose of water supply, the GWR System will allow us to address saltwater intrusion into the aquifer and minimize ocean discharge of treated effluents.

The GWR System project is notable also for the fact that it responds to an immediate need. Unlike many projects that are designed for future demand, the GWR System is responding to immediate needs. When operational, every gallon of produced water will be utilized.

The total capital cost for the GWR System project is $480.9 million. H.R. 1175 would authorize a grant of $51.8 million which in turn will help to leverage $72 million in State funds and $388 million in local rate payer dollars. The federal cost share is critical as it provides a mechanism to solicit State grant funds and importantly provided a level of political acceptability and project legitimization that enable our local decision makers to move forward with the project. I would point out that H.R. 1175 would only provide 10.8% of the project's total cost.

What would happen to the GWR System project without federal support? We would not have broad based community and political support for the project as we currently enjoy. As we engage in outreach about the project we start with the projects supporters; the federal government—they provide money and technology transfer; the state of California—they provide money and regulatory oversight; local government—they provide the majority of the money and the local will to implement the project. All six of Orange County's congressional leaders support the GWR System project. California's two United States Senators support the GWR System project. That support is backed up by federal dollars. This is the foundation upon which we have built community, environmental and business support for the GWR System project. Unlike some recycled water projects which unfortunately were built and then not operated due to lack of community support. I have 100% confidence that the GWR System project will be successfully producing recycled water this Fall and the cornerstone of that confidence starts with a small federal investment.

I noted earlier, that H.R. 1175 is critical for several reasons. In California we have a mandate to reduce our use of Colorado River water. In Arizona and Nevada there is a similar mandate to responsibly use Colorado River supplies. In Texas, the Ogallala Aquifer and watershed supply shortages are creating the need for recycled water supply development. In Florida, there is a critical groundwater supply shortage. In New Mexico, water supplies are extremely limited from the Rio Grande River and other local watersheds. The common theme is that regional water sup-

plies with direct federal involvement must be augmented and enhanced through local water supply development of recycled water. H.R. 1175 addresses this demand. In fact, we suggest that H.R. 1175 is more than local project. It represents an important element in ensuring inter-regional cooperation in meeting the mandates of reducing reliance on the Colorado River.

The federal government has established significant mandates for ecosystem maintenance and restoration. Fisheries, in-stream flows, and habitat development all take water. Water that is typically being redirected from urban uses. At the same time, our water demands are not decreasing and neither are our future water supply projections. New water supplies that are environmentally sustainable must be developed if we are to meet our ecosystem mandates. Recycled water is one such supply. If the federal government is instrumental in establishing these ecosystem mandates, it has a responsibility to support local efforts to meet these mandates. H.R. 1175 does this by providing the necessary funds to implement alternative water supply development.

H.R. 1175 is also important for the role it supports in technology transfer. The GWR System will be a national model on how to develop and implement a project that uses state of the art membrane technologies to produce high quality water. Large results can be gained at the local and regional levels with relatively small investments from the federal government. No single local water agency has the financial resources or expertise to research and investigate membrane processes, brine concentration technologies, the health risks of pharmaceuticals or alternative power technologies to name a few areas of interest. However, the federal government has the capability to bring disparate agencies together in cost sharing arrangements to jointly work on technology improvements that will make recycled water development even more cost effective and reliable. Again, a small federal investment leverages local dollars and technical talent for significant water resources gains. By supporting this project, H.R. 1175 will make it possible for the lessons learned at GWR System to be transferred to other western states.

In closing I would like to express the Orange County Water District's appreciation for the subcommittee's willingness to consider H.R. 1175. We hope that upon completion of the hearing, markup of H.R. 1175 will be scheduled expeditiously to permit timely enactment. The GWR System is a very valuable program that will, when fully implemented, meet the needs of multiple regions. The GWR System, a Title XVI project, will not only help to drought proof Orange County by creating a new water supply, but it will also reduce pressure on Colorado River supplies, it will facilitate technology improvements, it enhances the science of groundwater monitoring and it provides opportunities for technology transfer and research.

Again, it is an honor to submit this testimony to the subcommittee. If you other members of the subcommittee have any questions on H.R. 1175 or the GWR System, please let us know. We would be happy to provide any clarifications for the record.

Sincerely yours,

MICHAEL P. WEHNER,
Acting General Manager.

STATEMENT OF THE SANTA CLARA VALLEY WATER DISTRICT, ON S. 1475

Mr. Chairman and Members of the Subcommittee and staff, the Santa Clara Valley Water District (District) thanks you for the opportunity to provide written testimony on this very important water supply issue.

We thank you for holding the hearing on S. 1475 on August 1, 2007 on the Bay Area Regional Water Recycling Program Authorization Act of 2007 to fund regional recycled water projects in the San Francisco Bay Region in California.

We also want to thank and express our District's appreciation to Senator Feinstein for introducing this critical water legislation which will help the San Francisco Bay Area region. Our District also thanks Senator Boxer, for being an original cosponsor of this bill. This regional approach taken by the Bay Area agencies ensures that potential projects with the greatest regional and statewide benefits get implemented.

The Santa Clara Valley Water District is the comprehensive water resources management agency for Santa Clara County. The District was originally created in 1929 to respond to water supply problems. Because agriculture was a booming industry, the Santa Clara Valley was nicknamed the "valley of heart's delight." But the downside of the booming agricultural industry was that groundwater resources were depleted and causing land subsidence—the ground was literally sinking. In response to the region's water supply problems, the District was formed to conserve water in reservoirs during the wet season for later release into groundwater basins or for

use as surface water when it was needed. Since that time, our District's portfolio of responsibilities has grown and the District has been tasked with adding flood protection and stream stewardship to its mission.

However, our District's core business is still to provide a reliable water supply to over 1.8 million residents and protect them from flooding dangers that are present in our region. This vital water-supply mission includes managing Santa Clara County's significant groundwater basins in what is now known world-wide, especially in the high-tech industry as "Silicon Valley." Last year, about 380,000 acre feet (124,000,000 gallons) of water was used in Santa Clara County alone. This use includes the fact that we have in place a very aggressive water conservation program saving more than 40,000 acre-feet of water last year.

We are currently experiencing dry weather conditions in California and global climate change is impacting our water supply. The Sierra Nevada snowpack—which provides about 50-percent of the Valley's water needs—is dismally low this year. In addition, the effects of global climate change are expected to have greater impacts in the future, dramatically changing the precipitation and types of precipitation we receive each year. These current and future challenges mean we are in dire need of water projects that are immune to droughts or climate changes. Since the supply of water is limited, we believe recycled water is a resource that will continue to become more important in the future. We can only depend on local water supplies for about 50% of our water needs in a given year. The remainder we import from the Sierra Nevada through the Sacramento/San Joaquin Delta. The District receives both California Water Project and Federal Central Valley Project contract water. Bay-Delta environmental issues are influencing how much water our region can import from the Delta. Recycled water projects are important for us as well as for the rest of California and the Western States, because they provide a sustainable source of water and are the best alternatives to meet future demand. Without federal partnership in place, these recycled water projects are under funded and may not proceed.

You heard oral testimony from the Bay Area Water Recycling Coalition representative, Mr. Gary Darling, General Manager of the Delta Diablo Sanitation District, at the Subcommittee hearing on August 1, 2007. Mr. Darling testified on the need for the seven critical regional projects in this bill. The Santa Clara Valley Water District was one of 17 agencies that participated in the Bay Area Regional Water Recycling Program in the late 1990s and completed a Bay Area Recycled Water Master Plan in 1999. Since then, a number of recycled water projects have been built. In this package of seven projects for the Bay Area in S. 1475, two projects are within areas served by the District. Our District will now provide you testimony emphasizing these two regional projects.

South Santa Clara County Recycled Water Project.—This project is sponsored by the District and the South County Regional Wastewater Authority which serves the Cities of Gilroy and Morgan Hill in southern Santa Clara County. This project will result in a yield of approximately 1,800 acre-feet of recycled water short term and 2,440 acre-feet of recycled water long-term. It includes building 7.6 miles of recycled water distribution pipes, a 3 million gallon recycled water storage tank, and a 6 million-gallon-per day pump station. The customers for this project have already been identified and would be irrigation users such as parks, and industrial users for uses like cooling towers. Using recycled water will take these customers off groundwater wells, and leave the groundwater for drinking purposes. Currently, groundwater is the sole source of drinking water in south Santa Clara County. Having recycled water in this region will diversify our District's water supply management portfolio and also increase the reliability of our supplies.

South Bay Advanced Recycled Water Treatment Facility Project—.This is a joint project with the District and the City of San Jose. This project involves constructing a treatment plant that will purify approximately 6 to 8 million gallons of wastewater per day. The plant will use state of the art technology which includes: microfiltration, reverse osmosis, and ultraviolet light disinfection. The end product will be very high quality recycled water. This project will allow for 2 to 5 billion gallons of high quality water to be used for many existing water uses in the Cities of San Jose, Santa Clara, and Milpitas, and for potential future environmental uses like augmenting stream flows. It is important to note that expanding recycled water uses here will allow the community to save drinking water.

Mr. Chairman, our region needs water supply solutions now. The District has continued partnerships with other regional agencies and cities to locally implement many recycled water projects. However, we are now in critical need for additional support in order to make these new projects a reality. We welcome the expansion of our regional partnership with the Federal Government to implement these projects.

S. 1475 is critical in that it will enable us to augment our limited freshwater supplies. The vitality of our region is pulsing at its still furious beat, and we do not want the lack of water supplies to bring this vital, nation-wide economic engine to a standstill.

The Santa Clara Valley Water District takes its role as water supply manager for Santa Clara County very seriously. The District, the Cities, and the local community, are all looking for water supply and water supply reliability solutions. Recycled water is just that solution. S. 1475 can be the tool that enables us to achieve this water supply and we very strongly urge your support for this legislation.

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