

H.R. 1598 and H.R. 1732

LEGISLATIVE HEARING
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

May 22, 2003

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LEGISLATIVE HEARING ON H.R. 1598, TO AMEND THE RECLAMATION WASTEWATER AND GROUNDWATER STUDY AND FACILITIES ACT TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO PARTICIPATE IN PROJECTS WITHIN THE SAN DIEGO CREEK WATERSHED, CALIFORNIA, AND FOR OTHER PURPOSES; AND H.R. 1732, TO AMEND THE RECLAMATION WASTEWATER AND GROUNDWATER STUDY AND FACILITIES ACT TO AUTHORIZE THE SECRETARY OF THE INTERIOR TO PARTICIPATE IN THE WILLIAMSON COUNTY, TEXAS, WATER RECYCLING AND REUSE PROJECT, AND FOR OTHER PURPOSES.

**Thursday, May 22, 2003
U.S. House of Representatives
Subcommittee on Water and Power
Committee on Resources
Washington, DC**

The Subcommittee met, pursuant to notice, at 10:06 a.m., in room 1324, Longworth House Office Building, Hon. Ken Calvert [Chairman of the Subcommittee] presiding.

Present: Representatives Calvert, Osborne, Pearce, Nunes, Napolitano, Inslee, Grijalva and Cardoza.

Mr. CALVERT. The oversight hearing by the Subcommittee on Water and Power will come to order.

The Subcommittee is meeting today to hear testimony on H.R. 1598, a bill to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in projects within the San Diego Creek Watershed, California, and other purposes, and H.R. 1732, a bill to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of Interior to participate in the Williamson County, Texas, Water Reclamation and Reuse Project, and for other purposes.

Under Rule 4[g], the Chairman and the Ranking Minority Member may have an opening statement. I will start with mine.

**STATEMENT OF THE HON. KEN CALVERT, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. CALVERT. Recent drought conditions, critical water shortages, and increasing water competition are requiring communities to look beyond the traditional ways of developing and maintaining dependable and safe water supplies. The Subcommittee heard in previous testimony and hearings that water recycling is one option that communities have successfully utilized to become more “drought resistant” and less dependent on imported and traditional water sources.

This is certainly the case in Southern California which is faced with substantial Colorado River reductions and inefficient conveyance from Northern California. Even while some affected parties constantly try to move the goal post back in attempting to find a solution on Colorado River reductions, one thing remains clear: California communities will continue to examine ways to develop water from their own backyards.

Although water recycling has played a major role in developing and providing water security to California, communities throughout the West have enjoyed the benefits of water recycling. Today, we will focus on how two communities plan to meet their water needs through water recycling in water-deficient regions, such as South-Central Texas and Southern California. Recycled water technologies are being considered to a greater extent than ever before in response to increasing demands on limited, high-quality water supplies.

H.R. 1598 and H.R. 1732 would allow the Secretary of Interior to provide technical and Federal financial resources through the use of the Title XVI Program. Today, we have the privilege of hearing from several leaders who are very aware of how water supplies are being stressed and how important it is to look for innovative and nontraditional ways to meet our future water demands.

I thank the panel for being here today and certainly look forward to your testimony.

[The prepared statement of Mr. Calvert follows:]

**Statement of The Honorable Ken Calvert, Chairman,
Subcommittee on Water and Power**

Recent drought conditions, critical water shortages, and increasing water competition are requiring communities to look beyond the traditional ways of developing and maintaining dependable and safe water supplies. The Subcommittee heard in previous hearings that water recycling is one option that communities have successfully utilized to become more “drought resistant” and less dependent on imported and traditional water sources.

This is certainly the case in Southern California, which is faced with substantial Colorado River reductions and inefficient conveyance from northern California. Even while some affected parties constantly try to move the goal post back in attempting to find a solution on Colorado River reductions, one thing remains clear: California communities will continue to examine ways to develop water from their own backyards.

Although water recycling has played a major role in providing water security to California, communities throughout the west have also enjoyed the benefits of water recycling. Today, we will focus on how two communities plan to meet their water needs through water recycling. In water-deficient regions such as south-central Texas and southern California, recycled water technologies are being considered to

a greater extent than ever before in response to increasing demands on limited high quality water supplies.

H.R. 1598 and H.R. 1732 would allow the Secretary of the Interior to provide technical and Federal financial resources through the use of the Title 16 Program. Today, we have the privilege of hearing from several leaders who are very aware of how water supplies are being stressed and how important it is to look for innovative and non-traditional ways to meet future water demands. I thank the panel for being here today and look forward to your testimony.

Mr. CALVERT. I am happy now to recognize Ms. Napolitano, the Ranking Member, for any statements she may have.

STATEMENT OF THE HON. GRACE F. NAPOLITANO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

I join you this morning in welcoming the witnesses from Southern California, and from the great State of Texas, and also the Bureau of Reclamation, and our colleagues who are here in support of our projects.

Mr. Chairman, you and I very strongly support our communities in the West as they apply innovative technologies to their water supply problems, and it is very unfortunate that this administration finds it so difficult to support these projects. So I look forward to discussing these bills with our witnesses this morning, and I am particularly interested to learn more about how the Irvine Ranch projects are related to other recycling projects and groundwater projects that are planned to run the construction in the Santa Ana Watershed.

And we trust that our witnesses from Williamson County, Texas, and the Lower Colorado River Authority can provide details on how they can better use water through water recycling to help drought proof their service areas. Knowing that a lot of the border area is facing critical drought, we hope that we will continue to have those communities come to this Committee and request assistance in making sure that they become more drought proof in the future.

Mr. Chairman, I am grateful for your continued support in these critical issues and look forward to the testimony.

Thank you.

Mr. CALVERT. I thank the gentlelady.

I would like to recognize our first panel of witnesses, which includes our distinguished colleagues from Texas and our good friends: Representative John Carter, Texas, 31st District, and Representative Chet Edwards, Texas, 11th District, my old neighbor here in Washington, D.C. Glad you are both here, and we would like to recognize Mr. Carter first.

STATEMENT OF THE HON. JOHN CARTER, A REPRESENTATIVE IN CONGRESS FROM THE 31ST DISTRICT, STATE OF TEXAS

Mr. CARTER. Thank you, Mr. Chairman and Ranking Member. I wish good morning to you and all the members of the Committee. Unfortunately, this morning, time is a precious commodity in Congress, and I have got great things I have got to look after this morning, but I want to stop and personally thank this Committee for holding this hearing on H.R. 1732, the Williamson County

Water Recycling Act of 2003. It is important. I am proud to represent Williamson County, one of the fastest-growing counties in America, and I can assure you that we have two very fine gentlemen and good friends of mine who are appearing before you today to offer testimony about this gentleman.

Joe Beal, the general manager and chief executive officer of the Lower Colorado River Authority, has the responsibility of running an organization that provides electricity for over one million people and also provides water resources, resource management, flood protection, drought management, agricultural irrigation and water and wastewater utility services throughout 58 county service territories in Texas. Joe is an outstanding leader, and the great reputation of the LCRA that it enjoys throughout the State of Texas is, in no small part, part of his efforts.

I am also pleased to introduce to you a long-time friend of mine, Mike Heiligenstein. Mike has been active in Williamson County for over 20 years; first, as a Round Rock City Council member, as a member of numerous task forces and steering committees, and now as a Williamson County Commissioner. Mike has truly made a positive difference in the Williamson County community. He has been especially active in the areas of water resources and has been instrumental in regional water planning efforts.

Again, I want to apologize for not being able to stay for the remainder of this hearing, but I am in full support of this legislation and look forward to working with the members of this Committee to ensure this bill's success.

I thank you for your time and yield back my time.

Mr. CALVERT. I thank the gentleman.

Mr. Edwards?

STATEMENT OF THE HON. CHET EDWARDS, A REPRESENTATIVE IN CONGRESS FROM THE 11TH DISTRICT, STATE OF TEXAS

Mr. EDWARDS. Mr. Chairman, what oil and gas were to Texas in the 20th century, water will be to our State in the 21st century, and that is specifically why I want to thank you specifically for your leadership, in terms of water recycling, water conservation in this Congress. You have been a tremendous leader in that area, and that is going to have long-term positive impact on families all across our country, both in California, and Texas, and elsewhere.

Mrs. Napolitano, thank you for your leadership as Ranking Member of this Committee on these important issues of water conservation and water use.

I am primarily here to salute my colleague, Congressman John Carter, for his vision and leadership in putting together this legislation. He has been a distinguished selected official from Williamson County, which I now share with my representation of the county seat, but Mr. Carter is known as "Mr. Williamson County." He has lived in and represented that county ably for well over two decades.

As he said, this is one of the fastest-increasing population counties in the country, and we have not been sitting back idly waiting for Federal resources to come in. We have worked at the local, State, Federal level together in partnership building pipelines to

Stillhouse Hollow Lake in my congressional district, working on a study right now, through my Appropriations Subcommittee on Energy and Water in the House to figure out if at Lake Georgetown in Williamson County we can find a better way to conserve water and use water there.

This bill is simply asking for a Federal partnership in helping the local communities and Mr. Carter's leadership to provide water for Williamson County for many, many years to come.

I salute him, I salute Mr. Joe Beal, with the Lower Colorado River Authority, and Commissioner Mike Heiligenstein, who has been a leader on this issue for many, many years.

I understand that some of the folks from the Bureau of Reclamation take a standard policy of opposing these bills, saying we have got a lot of them backed up. Well, perhaps we need to work more closely with our Appropriations Committee. If we haven't done our job in funding these projects, Mr. Chairman, like you have done your job in authorizing them, then maybe we need to get to work.

I don't find in our Committee the Bureau of Reclamation suggesting a lot of new dams being built across the country, and it seems to me that recycling of water, so you are not pumping drinking water on the golf courses and parks for grass, would be a lot cheaper way to go than building dozens of new major lakes and dams across the country.

So I salute Congressman Carter for his leadership and vision on this bill, and I am just honored to be here to support him in that effort.

Thank you.

Mr. CALVERT. I thank you for your testimony, and I agree with both of you. We need to concentrate with our colleagues on making sure that we fund these reclamation projects throughout the United States, and especially the arid parts of the United States, such as Texas, California, New Mexico, and Nebraska, wherever we may have these problems because you are right, we are not going to be building a lot of dams in the country, and we need to look at new and innovative ways to meet our problems.

I don't have any questions for you because I know you have to run off, but I would be happy to recognize Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

Gentlemen, it is great that you are here on behalf of your constituency, and I look forward to working with both of you because these issues affect California and affect every other State in the Nation. And if we don't work together, if we don't shed some light and—how would I say it gently—get the Administration off their “duff” to fund it so we can have those projects moving forward, it is that important, and hopefully you will be able to get the message that they need to increase the budgeting in those areas that are critical to be able to fight the drought, to be able to have liberal communities again.

Thank you, sir.

Mr. CALVERT. Thank you.

The only thing I would add to that, that is not just the Administration, but the Appropriations Committees.

Mr. EDWARDS. Absolutely.

Mr. CALVERT. So we have a responsibility in the governance process, too.

So thank you gentlemen for coming out today. You are excused.

Mr. CALVERT. We will now hear testimony from our second panel, which includes testimony on H.R. 1598 and H.R. 1732. While the gentlemen are coming up, the author of 1598, Chris Cox, is unable to be with us today because there is a hearing on homeland security, which he chairs, and obviously he could not forfeit that responsibility, but we will submit his written testimony for the record, if there is no objection.

[No response.]

Mr. CALVERT. Hearing none, his testimony is submitted.

[The prepared statement of Mr. Cox follows:]

**Statement of The Honorable Christopher Cox, a Representative in
Congress from the State of California**

Mr. Chairman, thank you for the opportunity to speak today on H.R. 1598, the Irvine Basin Surface and Groundwater Improvement Act. I am proud to have sponsored this legislation as it will be tremendously beneficial for both water quality and water availability in Southern California, particularly in Orange County. I'd also like to thank Mr. Brian Brady, President of the Board of Directors for the Irvine Ranch Water District and Mr. Larry McKenney, Manager of Watershed and Coastal Resources for the County of Orange, for agreeing to testify today.

The U.S. Environmental Protection Agency has declared the San Diego Creek and the Upper Newport Bay to be "limited" in water quality, meaning that drinking or swimming in the water is hazardous. This designation is due to drainage from urban surfaces that flows unfiltered into the watershed.

Thankfully, Orange County is working successfully to combine the treatment of drinking water with the important goal of protecting the environment. The Natural Treatment System currently being developed by the County of Orange, City of Newport Beach, and the Irvine Ranch Water District will have a tremendous impact on the water quality of the Bay. The process will remove unwanted sediment, nutrients, and other contaminants which, if left untreated, will pollute and clog up the Upper Newport Bay. That is why this legislation is endorsed by local environmental groups like the Orange County Coastkeepers and the Newport Bay Naturalists and Friends.

As you are well aware, with the growing demands for water in Southern California, it is important that communities take steps to treat and conserve existing water resources. H.R. 1598 will authorize the Bureau of Reclamation to assist in the planning, development and design of a series of man-made wetlands that will help clean up polluted surface runoff within the San Diego Creek Watershed. Because the Bureau of Reclamation has extensive experience with such projects, its participation will be important in ensuring that the project moves forward as quickly and cost-effectively as possible.

The total cost of designing and constructing the Natural Treatment System will be \$41 million. A majority of these funds will come from the private sector, and the Irvine Ranch Water District, state, and local governments will contribute significant additional resources as well. To ensure strong local support for the project, I included language in H.R. 1598 limiting the Federal Government's involvement to no more than 25% of the project's total costs. Once construction is completed, annual operating funding will be provided entirely by local agencies.

Finally, there is the potential for significant cost savings for the Federal Government: by reducing silt runoff into Upper Newport Bay, the Natural Treatment System will reduce the need for the Corps of Engineers to regularly dredge the bay to remove the accumulation of silt and pollutants.

Mr. Chairman, thank you again for your support for this important legislation and for the opportunity to speak about it today.

**ORANGE COUNTY COASTKEEPER**

441 Old Newport Blvd. Suite 103 Newport Beach, California 92663
Office: (949) 723-5424 Fax: (949) 675-7091 Email: coastkeeper1@earthlink.net
<http://www.coastkeeper.org>

May 12, 2003

Honorable Christopher Cox
U.S. House of Representatives
2402 Rayburn House Office Building
Washington, DC 20515

Dear Representative Cox:

Thank you for your ongoing support of the Irvine Ranch Water District's San Diego Creek Natural Treatment System (NTS). We appreciate your personal efforts to secure a \$630,000 EPA grant in the Fiscal Year 2003 VA-HUD appropriations bill for the NTS project.

The purpose of this letter is to express our support for the NTS project and to encourage your further assistance. We respectfully request your help in securing an additional EPA grant of \$1 million in the Fiscal Year 04 VA-HUD appropriations bill.

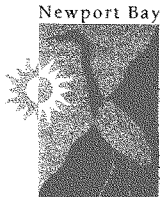
We are very encouraged by the progress of the NTS project. As you know, the San Diego Creek and the Upper Newport Bay have been declared "impaired" by the U.S. Environmental Protection Agency due to urban surface drainage that flows unfiltered into the watershed. The Natural Treatment System being developed by the Irvine Ranch Water District will have a tremendous impact on the water quality of the Bay. The process will remove unwanted sediment, nutrients, and other contaminants from the urban runoff. If left untreated, these pollutants would undoubtedly end up in the Bay. Another benefit to using natural ecosystems to treat the runoff is that the project allows additional neighborhood open space and wildlife habitat.

We especially appreciate your sponsorship of H.R. 1598, the Irvine Basin Surface and Groundwater Improvement Act of 2003. We are very supportive of this effort by the Irvine Ranch Water District to partner with the Bureau of Reclamation as this project enters the design and construction phases. The Bureau has extensive experience in the development of artificial wetlands much like the ones that IRWD is planning for the San Diego Creek Watershed. We believe that this partnership will help better serve the water users while protecting the environment.

Again, please accept our sincere thanks for your ongoing support of this important project. We are aware that your efforts on behalf of this project are essential to its success. Please do not hesitate to contact us should you have any questions.

Sincerely,


Garry Brown
Executive Director



May 21, 2003

Honorable Christopher Cox
U.S. House of Representatives
2402 Rayburn House Office Building
Washington, DC 20515

Dear Representative Cox:

The Newport Bay Naturalists and Friends is a 501(c)3 public benefit corporation organized to support educational, protection and restoration efforts at the Upper Newport Bay. Your ongoing support of two major projects is helping us towards meeting our mutual goal of removing the Bay from its EPA listing as an impaired water body. Both the ACOE/County of Orange's Upper Newport Bay Ecosystem Restoration Project and the Irvine Ranch Water District's San Diego Creek Natural Treatment System (NTS) Project will significantly help in achieving our goal.

We greatly appreciate your personal efforts in securing \$972,000 in construction funds in the FY 2003 Energy and Water Development Appropriation. We also appreciate your efforts in securing a \$630,000 EPA grant in the FY 2003 VA-HUD appropriations bill for the NTS project.


The purpose of this letter is to reiterate the need for both the Ecosystem Restoration and the NTS projects and to encourage your further assistance. We respectfully request your help in securing a construction appropriation of \$5.8 million in the FY 2004 Energy and Water Development bill and an additional EPA grant of \$1 million in the FY 2004 VA-HUD appropriations bill.

We are very encouraged by the progress of the Ecosystem Restoration and NTS projects. The community and government agency support to fund both projects is substantial. The combined projects will remove unwanted sediment, nutrients, and other contaminants from the urban runoff.

We also want to thank you for your leadership in sponsoring H.R. 1598, the Irvine Basin Surface and Groundwater Improvement Act of 2003. This partnership of the Irvine Ranch Water District and the Bureau of Reclamation will certainly enhance the success of NTS as this project enters the design and construction phases.

Again, please accept our sincere thanks for your ongoing support of these important projects. Please do not hesitate to contact us should you have any questions.

Sincerely,


Jack Keating
President

600 Shellmound
Newport Beach,
CA 92660
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Don Webb

May 9, 2003

Honorable Christopher Cox
U.S. House of Representatives
2402 Rayburn House Office Building
Washington, DC 20515

Dear Representative Cox:

Thank you for your ongoing support of the Irvine Ranch Water District's San Diego Creek Natural Treatment System (NTS). We appreciate your personal efforts to secure a \$630,000 EPA grant in the Fiscal Year Y 2003 VA-HUD appropriations bill for the NTS project.

The purpose of this letter is to express our support for the NTS project and to encourage your further assistance. We respectfully request your help in securing an additional EPA grant of \$1 million in the Fiscal Year 04 VA-HUD appropriations bill.

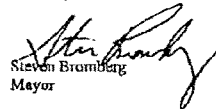
We are very encouraged by the progress of the NTS project. As you know, the San Diego Creek and the Upper Newport Bay have been declared "impaired" by the U.S. Environmental Protection Agency due to urban surface drainage that flows unfiltered into the watershed. The Natural Treatment System being developed by the Irvine Ranch Water District will have a tremendous impact on the water quality of the Bay. The process will remove unwanted sediment, nutrients, and other contaminants from the urban runoff. If left untreated, these pollutants would undoubtedly end up in the Bay. Another benefit to using natural ecosystems to treat the runoff is that the project allows additional neighborhood open space and wildlife habitat.

We especially appreciate your sponsorship of H.R. 1598, the Irvine Basin Surface and Groundwater Improvement Act of 2003. We are very supportive of this effort by the Irvine Ranch Water District to partner with the Bureau of Reclamation as this project enters the design and construction phases. The Bureau has extensive experience in the development of artificial wetlands much like the ones that IRWD is planning for the San Diego Creek

Watershed. We believe that this partnership will help better serve the water users while protecting the environment.

Again, please accept our sincere thanks for your ongoing support of this important project. We are aware that your efforts on behalf of this project are essential to its success. Please do not hesitate to contact us should you have any questions.

Sincerely,


Steven Brumberg
Mayor

Mr. CALVERT. And we are going to be receiving testimony from Mr. Mark Limbaugh, Director of External and Intergovernmental Affairs, U.S. Bureau of Reclamation.

I think we are first going to be hearing from Mr. Limbaugh who will testify on both bills. Be gentle, Mr. Limbaugh, and you are recognized.

**STATEMENT OF MARK LIMBAUGH, DIRECTOR OF EXTERNAL
AND INTERGOVERNMENTAL AFFAIRS, U.S. BUREAU OF
RECLAMATION**

Mr. LIMBAUGH. Thank you, Mr. Chairman, Mrs. Napolitano, members of the Committee. I would like to make some oral comments and submit my written statement, if you so desire.

Mr. CALVERT. Without objection.

Mr. LIMBAUGH. Thank you.

Again, my name is Mark Limbaugh. I am the Director of External and Intergovernmental Affairs for the Bureau of Reclamation here in Washington. I am pleased to be here to talk to you about the Department's views on H.R. 1598.

This Act would obviously amend the Reclamation Wastewater and Groundwater Study and Facilities Act, commonly known as Title XVI, to authorize the Secretary to participate in projects in the San Diego Creek Watershed in California and for other purposes.

Reclamation has had preliminary discussions with Irvine Ranch Water District on the proposed surface water treatment, groundwater treatment and brine disposal components of their project. However, we believe that because there is a lack of a feasibility study at this time, that this legislation is premature in authorizing the design and construction of a project.

Also, we have concerns about the burdens on our budget from additions to Title XVI projects, which already there is a large backlog of unconstructed and authorized projects, but we will continue to work with the district in California on this project to help get to the point of at least the feasibility level study. However, we cannot support this bill at this time, Mr. Chairman.

I am also pleased to be here to present the views of the Department on H.R. 1732, concerning the Williamson County Reclamation Project in the State of Texas. Again, this bill would amend the Reclamation Wastewater and Groundwater Study and Facilities Act, authorizing the Secretary to participate in the design, planning and construction of a reclamation project in Williamson County, Texas.

We have only recently met with local representatives of the Lower Colorado River Authority and have not had sufficient time to really discuss and review the merits of this project. So at this time we cannot support H.R. 1732, but we will continue to work with the Lower Colorado River Authority to investigate the merits of this project at this time.

Mr. Chairman, that concludes my comments on the two bills.

[The prepared statements of Mr. Limbaugh follow:]

Statement of Mark A. Limbaugh, Director, External and Intergovernmental Affairs, Bureau of Reclamation, U.S. Department of the Interior, on H.R. 1598

My name is Mark Limbaugh and I am the Director of External and Intergovernmental Affairs for the Bureau of Reclamation. I am pleased to appear before this Subcommittee to provide the Department's views on H.R. 1598.

H.R. 1598 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575), commonly called Title XVI, to authorize the Secretary of Interior to participate in projects within the San Diego Creek Watershed in California and for other purposes.

Reclamation has had some preliminary discussions with the Irvine Ranch Water District about proposed surface water treatment, groundwater treatment, and brine disposal components of their project. However, H.R. 1598 authorizes the design and construction of the project before Reclamation or the project sponsors have completed a feasibility study that meets the legal requirements of Title XVI. Reclamation requires that feasibility studies be completed first to determine whether these particular projects warrant Federal construction authorization. Therefore, the Department believes the legislation to be premature and cannot support H.R. 1598 at this time.

The Department also believes that this legislation would likely place an additional burden on Reclamation's already tight budget. With the tremendous backlog of existing Title XVI projects, we do not support the addition of new projects at this time.

Thank you for the opportunity to comment on H.R. 1598. That concludes my statement and I would be happy to answer any questions.

Statement of Mark A. Limbaugh, Director, External and Intergovernmental Affairs, Bureau of Reclamation, U.S. Department of the Interior, on H.R. 1732

My name is Mark Limbaugh and I am Director of External and Intergovernmental Affairs for the Bureau of Reclamation. I am pleased to present the views of the Department of the Interior on H.R. 1732, concerning the Williamson County water reclamation project in the State of Texas.

H.R. 1732 would amend the Reclamation Wastewater and Groundwater Study and Facilities Act (Public Law 102-575), authorizing the Secretary of the Interior to participate in the design, planning, and construction of a water reclamation project in Williamson County, Texas. The authority provided in H.R. 1732 is an amendment to limit the Federal share of project costs to 25 percent of the total project costs, caps the maximum Federal share of each project at \$20 million and restricts the Secretary from providing funding for the operation and maintenance.

Reclamation only recently met with representatives of the Lower Colorado River Authority and thus we have not had sufficient time to review the merits of the project. In that respect, until we have more information, we cannot comment on the merits of the project itself and therefore cannot support H.R. 1732.

The Department also believes enactment of this legislation authorizing new construction projects is likely to place an additional burden on Reclamation's already tight budget. With the tremendous backlog of Title XVI projects that already exist, we do not support the addition of new wastewater projects at this time.

For the record, Mr. Chairman, in 1992, the Reclamation Projects Authorization and Adjustment Act (Public Law 102-575) was enacted. Title XVI of this Act, the Reclamation Wastewater and Groundwater Study and Facilities Act, authorized construction of five water reclamation and reuse projects. The Secretary also was authorized to undertake a program to identify other water recycling opportunities throughout the 17 western United States and to conduct appraisal level and feasibility level studies to determine if those opportunities are worthy of implementation. In addition, the Secretary was authorized to conduct research and to construct, operate, and maintain demonstration projects. Reclamation has been administering a grant program to fund these Title XVI activities since fiscal year 1994.

In 1996, Public Law 104-266, the Reclamation Recycling and Water Conservation Act, was enacted. This Act amended Title XVI and authorized the Secretary to participate in the planning, design, and construction of 18 additional projects, including two desalination research and development projects. To date, Congress has provided funding to plan or construct 19 of 25 specifically authorized projects. Under the general authority of Title XVI, funding has been provided to identify and investigate, at the appraisal or feasibility level, eight potential water recycling projects, and to conduct three research and demonstration projects.

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

Thank you for the opportunity to comment on H.R. 1732. This concludes my statement and I would be happy to answer any questions.

Mr. CALVERT. Thank you, Mr. Limbaugh. I would only add, before we get to the testimony of the other gentlemen that are here to testify on behalf of H.R. 1598 to 1732, that I believe that you

are going to be, and I am going to be talking to others in the Administration, a considerable amount of support on both sides of the aisle, for reclamation projects, because if we don't start developing additional resources by reusing an existing resource, then I don't see how we can meet our water demands in the future. I understand the budget constraints that we are operating under, but we will need to deal with that.

With us today testifying on H.R. 1598 is Mr. Larry McKenney, the manager of the Watershed and Coastal Resources for Orange County, California, and Mr. Brian Brady, President of the Board of Directors, the Irvine Ranch Water District of California.

Testifying on H.R. 1732 is the Honorable Mr. Mike Heiligenstein, Commissioner, Williamson County, Texas, and Mr. Joe Beal, general manager of the Lower Colorado River Authority in Texas.

So, with that, we will start off with Mr. Larry McKenney. We are on a 5-minute rule, Mr. McKenney. As a matter of fact, there is a town of McKenney, right there in Denton County, Texas, where my dad was born, so it must be nearby.

So, with that, Mr. McKenney, you are recognized.

STATEMENT OF LARRY MCKENNEY, MANAGER, WATERSHED AND COASTAL RESOURCES FOR ORANGE COUNTY, CALIFORNIA

Mr. MCKENNEY. Good morning, Mr. Chairman, and other distinguished members of the Committee. I am Larry McKenney. I do manage the Watershed and Coastal Resources Division, which is part of the Public Facilities and Resources Department of the County of Orange. My task in that position includes the watershed management efforts for the 13 watersheds that comprise Orange County and also our Stormwater Compliance Program.

I appreciate the opportunity to testify before you today about the Irvine Ranch Water District Natural Treatment Systems Project and the water resources that that project would help to steward and protect.

My comments today can be epitomized by the idea that we should be using public funds as much as possible for multiple purposes and that that is really the essence of the watershed approach, an effort to manage water resources on the scale of the watershed as a physical system, where there are many competing and conflicting interests that can be resolved in efficient ways if we look at it on a systems basis.

The County of Orange obviously exists to provide for and protect the public health of its residents, and that includes protecting its water resources, including both the adequacy of the quantity of our drinking water and also the health of our ecosystems, and the water quality of our streams and beaches.

We are very fortunate in Orange County to have a number of special districts, like Irvine Ranch Water District, who bring great expertise to the water business and help us to protect these valuable resources. So even though the county itself is not a water supplier, we work very closely with special districts like RWD to manage our water supply and our other water resources.

Orange County has taken a particular interest in Upper Newport Bay, which is at the bottom end of the San Diego Creek Watershed, where the natural treatment systems project is proposed. Upper Newport Bay is an ecological jewel. It is a recreational and aesthetic amenity as well, and it has been severely threatened by development in the urbanized San Diego Creek Watershed from pollutants like sediment, nutrients, pathogens, and toxic metals.

The most efficient solutions to these problems are not to treat the water near the bottom of the watershed, but to try to address the pollution up in the watershed where the sources are and to use the territory that we have as effectively as we can.

By improving water quality further up in the watershed, the health of the stream channels all the way to the ocean will benefit. One interest that the county has is that we are the lead permittee under two separate stormwater permits. Under these permits, the county, all 34 cities, and the Orange County Flood Control District are co-permittees, and so we have the legal responsibility to reduce pollution in the streams and bays to the maximum extent practicable.

Our permits include provisions that strongly support our own impetus toward a watershed approach. And in implementing our stormwater program, we have created watershed groups that include all of our co-permittees that have territory within each watershed, and also special districts, property owners, business interests, environmental and recreational interest groups who are active in the watershed, and these groups help us to balance the often competing environmental concerns and to agree on priorities within that watershed.

One example of the conflicting interests that are typically found in an urban watershed is the need for flood protection, which then conflicts with the need to conserve rainfall for water supply and the need to maintain the health of ecosystems and rivers and streams.

In the San Diego Creek Watershed, the Orange County Flood Control District has been doing an admirable job of protecting the developed property in the watershed from damage from devastating floods. And to achieve this, the flood control district has improved miles of channel to carry peak flows reliably and quickly downstream and has constructed detention basins to hold water and dampen the peaks of flood flows downstream.

One view of the world is that this flood control infrastructure has been a tradeoff, a major public investment in flood protection necessarily at the expense of other natural features in the watershed. But the IRWD approach challenges that paradigm and sees these flood control facilities as an opportunity, where we can retrofit into that physical system water quality features.

Their proposal includes numerous sites throughout the San Diego Creek Watershed where wetlands could be constructed, often within flood control facilities, and then these wetlands will restore some of the lost functioning of the natural system, including filtering out water impurities, encouraging recharge of groundwater to improve water supply, and enhancing the habitat values of the region.

This approach capitalizes on the fact that the full flood-carrying capacity of the system is not necessary the vast majority of the time and that we can build a water quality improvement feature in the system and still have the flood-carrying capacity available when it is needed.

The project is important to the region's overall management of water supply as well. Orange County can't survive on the local natural supply that is available to it, and we have to use every other resource to ensure a reliable supply, including importation, of course, as well as conservation and recycling. It means also the use of groundwater and surface water conjunctively in a coordinated way to optimize supply.

Maximizing the use of recycled water will allow us to use every drop of water several times before it reaches the ocean. All of these techniques are being used in Orange County, and you can see that, like our emphasis on watersheds as the appropriate physical frame of reference, this is a systems approach, and it provides the most benefit when we are able to use water from various sources with as much flexibility as possible.

To be able to maximize recycled water use, to use imported water from different sources at will, to manipulate groundwater levels to optimize supply and at the same time maintain flood-carrying capacity in our improved channels and not endanger habitat values and overall water quality, to achieve all of those goals, natural systems within the channels need to be strong and healthy, robust enough to withstand the stresses of that kind of system management.

IRWD's projects are great examples of innovation and technical excellence. The Natural Treatment Systems Project is an innovative concept. It is one of those concepts that, once somebody has described it to you, it seems perfectly obvious, and yet it is innovative.

My division was created within the county to encourage collaboration between Government agencies that have activities that affect water, and I am very happy to be able now to move outside of the county and collaborate with special districts like IRWD. We are very hopeful that the Bureau of Reclamation will be authorized to collaborate with us as a partner as well and bring their expertise to bear in helping us solve our problems.

Thank you.

[The prepared statement of Mr. McKenney follows:]

**Statement of Larry McKenney, Manager, Watershed and Coastal Resources,
County of Orange, California**

Good morning, Mr. Chairman, Congressman Cox, and other distinguished Members of this Committee. My name is Larry McKenney, and I manage the Watershed and Coastal Resources Division of the Public Facilities and Resources Department in the County of Orange. I appreciate the opportunity to testify before you today on H.R. 1598 and to discuss the water resources that it would help to protect. I am grateful to Congressman Cox for introducing this bill, and also to Senator Feinstein for the related bill in the Senate.

The County of Orange exists to provide for and protect the health and welfare of its citizens. That includes water resources, both the adequacy of the supply of potable water, and the quality of water in our streams and on our beaches. In particular, our bays and beaches are very important because of their national ecological significance and because they are the beating heart of the Orange County economy.

We are fortunate in Orange County to have a number of special districts, like the Irvine Ranch Water District, that bring to bear great expertise in addressing the water and wastewater service needs in the County. These water resources issues are critically important in a densely urbanized region that cannot survive on the amount of local water that is naturally available. Several of our cities also have water and sewer departments. The County itself is not a water supplier, but has other water resources interests and has been a leader in the watershed approach that Mr. Brady mentioned. Our approach is to look at water resources holistically within the physical system of a watershed, or single drainage area.

Water resources issues have a very high profile in Southern California. If the adequacy of our water supplies comes into question, even if the question is not justified, the public perception of a problem is acute. Similarly, any threat, even a merely perceived threat, to the quality of our recreational waters has a negative effect on tourism, the economy, and the quality of life of the residents and visitors in Orange County.

Starting more than ten years ago, Orange County began to look at watersheds as the proper scale for the management of our water resources. The County has led this effort, serving in different roles—as committee chair, as facilitator, as technical expert—in the thirteen different watersheds the comprise the County. The earliest example was in the San Diego Creek and Newport Bay watershed. As that watershed developed and an urban infrastructure was constructed, the County and its municipal partners and other stakeholders have kept a close watch on sediment, nutrients, and other water quality problems.

Orange County has taken a special interest in Upper Newport Bay. It is an ecological jewel, and is also a valuable recreational and aesthetic amenity. It has also been severely threatened by the effects of development in the San Diego Creek watershed, particularly from sediment, nutrients, and toxic metals. The County and other local stakeholders have partnered with the Army Corps of Engineers to address sediment issues, which affect not only habitat, but also navigability in the upper and lower bays. Notably, the Army is starting an ecosystem restoration project that will restore and improve significant habitat areas in the Bay. The most efficient solutions to some of the other problems facing the Bay must be implemented throughout the watershed, and not just at the bottom of the system. Not only is this approach more efficient, but it is substantially more effective in achieving multiple goals. By improving water quality further up in the watershed, the health of the stream channels all the way to ocean will benefit, rather than simply cleaning the water near the end of the system. More subtle, but more important, is the effect this approach has on our overall ability to manage water resources.

One interest the County has is that we are the lead permittee under two areawide municipal stormwater permits. All 34 cities in the County, and the Orange County Flood Control District, are co-permittees. Special districts, like Irvine Ranch Water District, are not covered by those municipal permits. Our permits include provisions strongly supporting our own focus on the watershed approach. In implementing our stormwater program, we have created watershed groups that include the co-permittees with territory within the watershed, and also the special districts and property owners, business interests, and environmental and recreational interest groups who are active in the watershed. These groups do real work in helping the government agencies with responsibilities for resources to see their needs and interests in the context of the entire watershed, to balance often competing environmental concerns, and to agree on priorities.

An example of the conflicting interests typically found in an urban watershed is the need for flood protection, which conflicts with the need to conserve rainfall for water supply, and the need to maintain the health of ecosystems in rivers and streams. In the San Diego Creek watershed the Orange County Flood Control District is doing an excellent job of protecting developed property from damage from devastating floods. To achieve this, the Flood Control District has improved miles of channel to carry peak flows reliably and quickly, and has constructed detention basins to hold water and dampen the peaks of flood flows downstream.

One view of the world is that this flood control infrastructure has been a trade off, a major public investment in flood protection at the expense of the natural features and functions of our streams and waterways. The IRWD Natural Treatment Systems project changes the paradigm and sees these flood control facilities as an opportunity to retrofit water quality features into the flood control system. The proposal includes numerous sites throughout the area of the San Diego Creek watershed where wetlands would be created, often within flood control facilities. These wetlands will restore some of the lost functioning of the natural system, including filtering out water impurities, encouraging the recharge of groundwater, and enhancing the habitat values of the region. The approach capitalizes on the fact that

the full capacity of the flood control facilities is not needed the vast majority of the time, and it can be available to carry flood flows when major rains do come.

Since Orange County cannot survive on its own local, natural water supply, we have use every other source to ensure a reliable supply. This includes importation, of course, as well as water conservation. It also means use of groundwater and surface water in a coordinated way to optimize supply—an approach called conjunctive use. And it also includes maximizing the recycling of water so that it gets used several times before being discharged to the ocean. All of these techniques are being used in Orange County, and you can see that this is, like our emphasis on watersheds, a systems approach. It provides the most benefit when we are able to use water from various sources with as much flexibility as possible. To be able to maximize recycled water use, use imported water from different sources at will, and manipulate groundwater levels, all in order to optimize water supply, and maintain flood carrying capacity in our streams, but without endangering the habitat values and overall water quality in our streams and channels, the natural systems within the channels need to be strong and healthy, robust enough to withstand foreseeable stresses.

IRWD's projects are great examples of innovation and technical excellence. The Natural Treatment Systems Project is one of those innovative concepts that seem entirely obvious once someone has described it. It truly illustrates the watershed approach in an urbanized watershed. Each of Orange County's thirteen watersheds is a unique situation in terms of problems, opportunities, partners, and priorities. In the San Diego Creek watershed, the Natural Treatment Systems project is the right approach, and we have stakeholders who are willing to work on it. My division, the Watershed and Coastal Resources Division, was created within the County to encourage collaboration and innovation between other County programs that touch water quality, including the flood control, transportation infrastructure, parks, and development planning. It is especially exciting to be able to work in the same way with other stakeholders within the County like IRWD who share that vision. The County and the Flood Control District are proud to be partners with IRWD. We are hopeful that the Bureau of Reclamation will be authorized to participate with us as well so that we can benefit from their knowledge and expertise with regard to constructed wetlands, water quality, and the systems approach to water supply management. Mr. Chairman, thank you for the opportunity to testify before you today. I am very excited about the great work that the Irvine Ranch Water District has done in my community and we look forward to partnering with the Bureau of Reclamation to ensure the project's success.

Mr. CALVERT. I thank the gentleman.

Next, Mr. Brady, Brian Brady, the President of the Board of Directors, Irvine Ranch Water District. You are recognized.

STATEMENT OF BRIAN BRADY, PRESIDENT, BOARD OF DIRECTORS, IRVINE RANCH WATER DISTRICT, CALIFORNIA, ACCOMPANIED BY PAUL JONES, GENERAL MANAGER, IRVINE RANCH WATER DISTRICT

Mr. BRADY. Thank you, Mr. Chairman and members of the Committee. I am Brian Brady, the president of the board of Irvine Ranch Water District. We appreciate the opportunity to testify today on H.R. 1598, the Irvine Basin Groundwater and Surface Water Improvement Act of 2003.

I would like to thank Congressman Cox, especially, for introducing this bill and for Senator Feinstein for introducing an identical piece of legislation on the Senate side.

As you may know, the Irvine Ranch Water District provides domestic water service, wastewater collection and treatment, water reclamation and urban runoff treatment for the city of Irvine, and portions of four surrounding cities, as well as unincorporated areas of the County of Orange. In total, the district serves a resident population of over a quarter of a million people and a daytime population of about a half a million people.

I have with me today the General Manager of the Irvine Ranch Water District, Mr. Paul Jones, to help answer any technical questions that the Committee might have.

As background, as Mr. McKenney has mentioned, San Diego Creek Watershed encompasses over 120 square miles in Central Orange County. The watershed's boundary approximates that of the Irvine Ranch Water District and includes, as I mentioned before, the city of Irvine, also Lake Forest, Newport Beach, Orange and Tustin.

Surface drainage or urban runoff containing fertilizers, pesticides, sediments and pathogens flow through the San Diego Creek Watershed into the Upper Newport Bay, severely impacting the water quality of the watershed and the bay. As a result, the EPA has identified the San Diego Creek and the Upper Newport Bay as impaired water bodies.

In order to protect the water quality of the San Diego Watershed and the Upper Bay, and it is the largest marine estuary in Southern California, IRWD, in collaboration with the County of Orange, and the cities I have mentioned, is proposing to develop and maintain a system of manmade wetlands—31 in total—throughout the area that would utilize natural process to capture unwanted sediment, remove nutrients, pathogens and other contaminants from the runoff and ensure that dry weather flow and first flush from rains reaching the bay meet Federal clean water standards.

In addition to completing the San Diego Creek Water Shed Natural Treatment System or NTS, the proposed legislation would authorize the Bureau of Reclamation assistance in developing a related component of the project to treat and reuse impaired groundwater within the groundwater basin. This will be built in conjunction with the local groundwater management agency, the Orange County Water District, and with financial assistance from the Metropolitan Water District of Southern California.

This project, known as the Irvine Desalter, will consist of a well system and purification plant which will remove salts and nitrates caused by natural geology and past agricultural drainage. The project will employ reverse osmosis technology and create a new highly reliable local drinking water supply at a cost to Irvine Ranch Water District comparable to imported water supplies from the San Francisco Bay-Delta Estuary and the Colorado River. The project is consistent with the Bureau of Reclamation's objectives of reclaiming impaired water for beneficial uses.

The final component of this project will be a regional brine line. In Orange County, as well as throughout California, wastewater reclamation for reuse is a critical component of the region's current and future water supply portfolio. Our region enjoys one of the most advanced systems of wastewater treatment distribution and reuse in the world.

Currently, brines are disposed in the sewer from industrial sources and from groundwater treatment facilities. This method of disposal is problematic as it dramatically increases the cost of treatment and impairs water and wastewater agencies' ability to implement additional wastewater reclamation. To alleviate this problem, we propose to construct a regional brine line that consists

of separate systems of pipes to segregate the brine from sewage and dispose of it directly to the ocean.

Providing a new local water supply such as that created by the Irvine Desalter, and facilitating additional reclaimed water development through projects such as the regional brine line, are important strategies in reducing Southern California's reliance on imported water supplies from the San Francisco Bay-Delta Estuary and the Colorado River. In fact, both the CALFED program for the San Francisco Bay-Delta Estuary and the California 4.4 Plan for the Colorado River assume aggressive development and implementation of local water resource projects.

Under CALFED, the fundamental objective of the Water Management Program Element is to: "Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system," through a strategy to "increase the utility of available water supplies by making water more suitable for uses and reuses." As noted earlier, the Irvine Desalter makes unused water resources suitable for use, while the regional brine line promotes additional water reuse through reclamation.

Similarly, for California's consumers of Colorado River water to stay within the 4.4-million-acre-feet of entitlement, numerous new local water supply and reclamation projects will need to be implemented. A recent report completed by the Metropolitan Water District of Southern California, entitled, "Report on Metropolitan's Water Supplies: A Blueprint for Water Reliability," identifies a 32-percent increase in local water supply project yield by the year 2025, as a key component in reducing reliance on imported water from the Colorado River.

The total cost of the projects authorized by H.R. 1598 is slightly under \$80 million. As you know, the Bureau of Reclamation's Title XVI allows a 25-percent contribution or up to a limit of \$20 million. To date, the District, that is, IRWD, has spent over \$2 million toward completing comprehensive project development work, including feasibility analysis, master plan and project engineering report preparation, water quality and groundwater modeling, environmental documentation, cost estimates, design plans and specifications.

Mr. Chairman, members of the Committee, that completes my comments.

Thank you very much.

[The prepared statement of Mr. Brady follows:]

**Statement of Brian Brady, President of the Board of Directors,
Irvine Ranch Water District**

Good afternoon, Mr. Chairman, Congressman Cox, and the other distinguished Members of this Committee. My name is Brian Brady and I serve as President of the Board of Directors of the Irvine Ranch Water District. I appreciate the opportunity to testify before you today on H.R. 1598, the Irvine Basin Groundwater and Surface Water Improvement Act of 2003. First, let me express my sincere gratitude to Congressman Cox for introducing this legislation, and also thank Senator Diane Feinstein who has introduced an identical piece of legislation in the Senate.

If I may, I'd like to briefly describe the role that the Irvine Ranch Water District plays in our community and the context within which our project is proposed. The Irvine Ranch Water District provides domestic water service, wastewater collection and treatment, water reclamation, and urban runoff treatment for the city of Irvine and portions of four surrounding cities as well as the County of Orange. In total, the District serves a resident population of over 266,000 with a daytime population

of approximately 500,000. We employ approximately 275 well-qualified employees who are committed to the mission of providing a safe, reliable water supply to our customers without sacrificing the environment. In fact, because of our outstanding staff, the District has been recognized with numerous regional, statewide and national awards for our leadership in developing innovative ways to provide water while protecting the environment. The District's General Manager, Paul Jones, is with me here today to assist in answering any technical questions that the Members of the Committee may have about the projects that would be authorized by this legislation.

We are extremely excited about this legislation, as it will allow the Irvine Ranch Water District to even better serve the community and the environment. The Irvine Basin Surface and Groundwater Improvement Act would authorize the Bureau of Reclamation to participate in the design and construction of projects that will enhance the environment of a large portion of Orange County. This partnership would be a tremendous help to the District as we work to develop new groundwater supply projects and to protect the San Diego Creek watershed and Upper Newport Bay.

Before I talk about the specifics of our proposed project, it is important to discuss the regional context and approach used by water and wastewater agencies in San Bernardino, Riverside, and Orange Counties to address water resource and urban runoff issues. Contemporary surface and groundwater resource management relies heavily on addressing issues on a "watershed-wide" basis. The Southern California coastal plain and its watersheds extend from the mountains to the ocean. One watershed, that of the Santa Ana River, extends 96 miles from the San Bernardino Mountains to the Pacific, between Huntington and Newport Beaches. In terms of management, the Santa Ana Watershed Project Authority, or SAWPA as it is known, provides watershed-wide coordination of water resource management projects through a joint powers agreement among five regional agencies. These agencies have worked to develop numerous water reclamation, brackish desalting and water quality wetland projects in the three-county region.

In the lower portion of the Santa Ana River system in Orange County, Orange County Water District, one of the five SAWPA members, manages the groundwater basin, and as discussed later, is a key partner in the groundwater component of the proposed project.

With respect to coordination of surface drainage, or "urban runoff" issues, the County of Orange, in collaboration with the cities and agencies within the County, are developing new, innovative methods to treat contaminated surface runoff, including another component of this proposed project referred to as the Natural Treatment System. Larry Mc Kenney of the County of Orange is here today and will be providing testimony regarding the County's watershed management efforts, and the role the proposed Natural Treatment System component of the proposed project plays in those efforts.

All these aforementioned partnerships provide the basis for, and examples of, collaborative water resource management using a comprehensive "watershed-wide" approach.

This brings us to the San Diego Creek watershed, which encompasses over 120 square miles in central Orange County. The San Diego Creek watershed's boundary is approximately the same as Irvine Ranch Water District's and includes the City of Irvine and portions of the Cities of Lake Forest, Newport Beach, Orange, and Tustin, as well as unincorporated areas of the County. Surface drainage or urban runoff containing fertilizers, pesticides, sediment, and pathogens, flows through the San Diego Creek watershed and into the Upper Newport Bay, severely impacting the water quality of the watershed and the Bay. As a result of these water quality concerns, EPA has identified San Diego Creek and the Upper Newport Bay as "impaired water bodies."

In order to protect the water quality of the San Diego Creek watershed and Upper Newport Bay, the largest marine estuary in Southern California, Irvine Ranch Water District, in collaboration with the County of Orange and the aforementioned cities, is proposing to develop and maintain a system of man-made wetlands throughout the area that will utilize natural processes to capture unwanted sediment and remove nutrients, pathogens and other contaminants from the runoff, thus helping to ensure that the dry weather and "first flush" flows and reaching the Bay meet Federal clean water standards. The Natural Treatment System portion of the project will provide a cost effective method to help the community protect the water quality and beneficial uses in San Diego Creek and the Upper Newport Bay, and will also provide additional neighborhood open space and wildlife habitat.

In addition to completing the San Diego Creek Watershed Natural Treatment System, the proposed legislation would authorize Bureau of Reclamation assistance in developing a related component of the project to treat and reuse impaired ground-

water within the groundwater basin. This will be built in conjunction with the local groundwater management agency, the Orange County Water District, and with financial assistance from of the Metropolitan Water District of Southern California.

This portion of the project, known as the Irvine Desalter, will consist of a well system and water purification plant that will remove salts and nitrates caused by natural geology and past agricultural drainage from a portion of the groundwater basin underlying the San Diego Creek watershed. The project will employ reverse osmosis technology to create a new, highly reliable local drinking water supply at a cost to Irvine Ranch Water District comparable to imported water supplies from the San Francisco Bay-Delta Estuary and the Colorado River. The project is consistent with the Bureau of Reclamation's objectives of reclaiming impaired water for beneficial uses.

The final component of this project will be a regional brine line. In Orange County, just as it is throughout California, wastewater reclamation for reuse is a critical component of the region's current and future water supply portfolio. Our region enjoys one of the most advanced systems of wastewater treatment, distribution and reuse in the world. Currently, brines are disposed in the sewer from industrial sources and existing or proposed impaired groundwater treatment facilities. This method of disposal is problematic as it dramatically increases the costs of treatment and impairs local water and wastewater agencies' ability to implement additional wastewater reclamation. To alleviate this problem, Irvine Ranch Water proposes to construct a Regional Brine Line that consists of a separate system of pipes to segregate brine from sewage and dispose of the brine directly into the ocean where salinity is not a concern.

Providing new, local water supplies such as those created by the Irvine Desalter, and facilitating additional reclaimed water development through projects such as the regional brine line, are important strategies in reducing Southern California's reliance on imported water supplies from the San Francisco Bay-Delta Estuary and the Colorado River. In fact, both the CALFED program for the San Francisco Bay-Delta Estuary and the California 4.4 Plan for the Colorado River assume aggressive development and implementation of local water resource projects. Under the CALFED program, the fundamental objective of the Water Management Program Element is to: "Reduce the mismatch between Bay Delta water supplies and current and projected beneficial uses dependent on the Bay Delta system" through a strategy to "Increase the utility of available water supplies and by making water more suitable for uses and reuses." As noted earlier, the Irvine Desalter portion of the proposed project makes unused water resources suitable for use, while the regional brine line promotes additional water reuse through reclamation.

Similarly, for California's consumers of Colorado River water to stay within the state's 4.4 million acre feet of entitlement, numerous new local water supply and reclamation projects will need to be implemented in urban southern California. A report recently completed by the Metropolitan Water District of Southern California entitled: "Report on Metropolitan's Water Supplies: A Blueprint for Water Reliability," identifies a 32% increase in local supply project yield, from 2.2 million acre feet 2005, to 2.9 million acre feet in 2025, as a key component in reducing reliance on imported water from the Colorado River. As such, the proposed project is consistent with these local supply development strategies and will incrementally help southern California meet its water supply management goals on the Colorado River.

The total cost of the projects to be authorized in H.R.1598 is slightly under \$80 million. As you know, the Bureau of Reclamation's Title XVI program allows the Bureau to contribute to 25% of the costs of planning, designing, and constructing projects like the ones that would be authorized by H.R. 1598 up to a limit of \$20 million. To date, the District has spent over \$2 million toward completing comprehensive project development work including feasibility analyses, master plan and project engineering report preparation, water quality and groundwater modeling, environmental documentation, cost estimates, design plans and specifications. In total, our District and other local sponsors are committed to providing over \$60 million toward the construction of these important projects.

Mr. Chairman, Congressman, thank you again for allowing me the opportunity to share my testimony with you. The Irvine Ranch Water District is committed to serving its customers in the most efficient, cost-effective and environmentally responsible manner. I am proud to serve as President of the Board for such an outstanding public agency. We are looking forward to working with the Bureau of Reclamation to make this project a success. Again, thank you for your time and consideration of my testimony. I will be glad to answer any questions you may have at this time.

[NOTE: A document entitled "Irvine Basin Groundwater and Surface Water Improvement Projects" by Paul D. Jones II, P.E., submitted for the record has been retained in the Committee's official files.]

Mr. CALVERT. I thank the gentleman.

Next, testifying on H.R. 1732, Commissioner Mike, you are recognized.

[Laughter.]

**STATEMENT OF THE HONORABLE MIKE HEILIGENSTEIN,
COMMISSIONER, WILLIAMSON COUNTY, TEXAS**

Mr. HEILIGENSTEIN. Thank you, Mr. Chairman.

My name is Mike Heiligenstein, and I might say that the Village of Heiligenstein is on the border of France and Germany. And I used to be able to claim one or the other, depending upon whose policies I agreed with. Right now I am having a really hard time because I don't agree with either one.

[Laughter.]

Mr. HEILIGENSTEIN. I have also chaired for the National Association of Counties, and I am sure you hear from your county commissioners all the time, I also chair for them, I have chaired Water Quality, and I currently chair Air Quality for the National Association. This year, the Western Interstate Conference is in Tahoe, so I am sure water resources will be a huge factor in their conference at the end of May.

I am here to testify on H.R. 1732 for Williamson County and the Williamson County Recycling Act of 2003. I also want to thank Congressman Carter and Congressman Edwards for their support.

As a county commissioner in Texas, I and my fellow Commissioners Court members, are the overall governing and management body of the county. The Commissioners Court is responsible, of course, for all budgetary decisions and setting the tax rate.

Commissioners Courts in Texas are also charged by our legislature to establish a courthouse and jail, build roads, bridges and provide law enforcement through a county sheriff. Williamson County's general fund is in excess of \$66.5 million, and the road and bridge is in excess of \$10.7 million.

While the county has been given recent authority to provide water and wastewater services through the legislature, it has neither the budget nor the technical expertise to provide those services. We do, however, consult frequently with the Lower Colorado River Authority to be sure that the residents are getting the best water and wastewater service.

Since 1990, Williams County has experienced phenomenal growth, and Williams County is located just north of Austin. We are the home of Dell Computer, Westinghouse and Motorola. According to the 1990 census, there were 139,000 residents in Williamson County. In just 10 years, we added over 100,000 new residents to the county. For that decade, we became the second fastest growing county in the State and the 19th fastest in the country. Population projections show that in the year 2025, we should be approaching 750,000 people. In fact, the city of Austin will be the largest governmental entity in my particular precinct.

The Texas Water Development Board has required all retail providers to develop water conservation and drought contingency plans. All of the water providers in Williamson County have completed, and implemented, very restrictive water conservation lands. Even so, the current water supplies of Williamson County will meet the demand in the year 2017. As our population has grown, we have struggled to keep up with the demand for water. But because it is such a scarce and precious resource, we are constantly looking for ways to conserve what resources we do have and plan for the development of additional.

There have been two major studies completed recently regarding the supply of water to Williamson County. In 1997, the Texas State Legislature determined the need to facilitate long-term water planning throughout the State and approved what was called Senate Bill 1. This statewide effort resulted in 15 water plans throughout the entire State. One of those, Region G, included detailed evaluations of the 50-year plan for Williamson County.

As I said before, a significant conclusion of that report is that the existing sources of water will be fully utilized by 2017. Possible alternatives to meet the long-term needs of the county included, one, the construction of a nominal earnings reservoir; two, the development of groundwater; three, the inter-basin transfer of additional water from the Colorado River to the Brazos River.

The second study was the Williamson County Water Supply Facilities Plan that was prepared by the LCRA and the BRA. It looked at how best to meet the 50-year needs of the cities and other retail providers in 10-year increments. Both reports placed significant emphasis on reuse. However, so far only three cities in the county have begun reuse projects and with only limited success. This is, in part, due to the fragmented approach now being taken, as well as the high initial cost to implement the reuse in Williamson County. The county believes that a significant reuse program can both reduce and postpone the need for the development of one or more of these new water supplies. This will have a direct impact on every water customer in the county.

There has been a long-term relationship between the LCRA and Williamson County because LCRA has been a major power provider for nearly 75 years for much of the county. And during the last 10 years, the LCRA has been instrumental in bringing a regional approach to water and wastewater needs in the county.

It is my understanding that the LCRA also has a long history with the Bureau. We believe that these two organizations can bring a truly regional approach to reuse in Williamson County. The initial infusion of Federal funds from the Bureau can jump start this important program. The LCRA's leadership and expertise in project management and delivery will ensure its long-term success.

Since the county has no experience with major water and wastewater projects, we look to the LCRA and the BRA to provide their expertise to such a project. County Governments throughout the United States, as you probably know, are looking more and more toward regional approaches to solving problems that we have, including water.

The county recently acquired 800 acres for a regional park, and we have constructed the first phase of that park. We use 200,000

gallons per day of drinking water, and that contract with the city of Round Rock will expire in just 3 years. Until a better, more reliable, source of water can be developed, the county will be limited in its development of the remaining portion of that park. The proposed reuse project will provide that new source of irrigation.

On behalf of the Commissioners Court of Williamson County and the citizens, I would like to thank the Committee for considering this bill. I can also assure you that the cities within Williamson County are aware of this important legislation and wanted me to acknowledge their support.

Mr. Chairman, thank you for allowing me to appear, and I would be glad to answer any questions.

Thank you.

[The prepared statement of Mr. Heiligenstein follows:]

**Statement of Mike Heiligenstein, County Commissioner,
Williamson County, Texas**

Good afternoon, Mr. Chairman and Members of the Committee. I am Mike Heiligenstein and I serve as a County Commissioner in Williamson County, Texas. Thank you for the opportunity to testify today on H.R. 1732, the Williamson County Water Recycling Act of 2003. I also want to thank Congressman John Carter for introducing this legislation and Congressman Chet Edwards for cosponsoring. I am proud to have them representing my county in Washington, D.C.

As a County Commissioner in Texas, I and my fellow Commissioners Court members, are the overall governing and management body of the County. The Commissioners Court is responsible for all budgetary decisions and setting the tax rate each year. Commissioners Courts in Texas are also charged by the Legislature to establish a courthouse and jail, build roads and bridges and provide law enforcement through the County Sheriff. Williamson County's general fund budget is in excess of \$66.5 million dollars and the road and bridge fund is in excess of \$10.7 million dollars. While the county has recently been given legislative authority to provide water and wastewater services, it has neither the budget nor technical expertise to effectively provide such services. We do, however, consult frequently with LCRA to be sure that the residents are getting the best water and wastewater service.

Since 1990, Williamson County has experienced phenomenal growth. Williamson County is located just north of Austin and is the home to Dell Computer. According to the 1990 census, there were 139,551 residents in Williamson County. By 2000, that number had grown to 249,967. For that decade, Williamson County was the second fastest growing county in Texas and the 19th fastest growing county in the country. Although the growth has slowed recently, population projections still estimate we will have over 750,000 residents by 2025.

The Texas Water Development Board has required all retail water providers to develop Water Conservation and Drought Contingency Plans. All of the water providers in Williamson County have completed and implemented very restrictive water conservation plans. Even so, the current water supplies in Williamson County will be exhausted in 2017. As our population has grown, we have struggled to keep up with the demand for water. Because it is such a scarce and precious resource, we are constantly looking for ways to conserve what sources we have and to plan for the development of additional sources before they are needed.

There have been two major studies completed recently regarding the supply of water to Williamson County. In 1997, the Texas State Legislature determined the need to facilitate long-term water planning throughout the state and approved Senate Bill 1. This statewide effort resulted in fifteen regional water plans being developed. One of those plans, the Region G plan, included detailed evaluations of the 50-year water demands and supplies for Williamson County. This study was partially funded by the Texas Water Development. As I said before, a significant conclusion of that report is that the existing sources of water will be fully utilized in 2017. Possible alternatives to meet the long term water needs of the county include (1) the construction of a new reservoir on the Little River, (2) the development of ground water in an area 50-75 miles east of the county or (3) the inter-basin transfer of additional surface water from the Colorado River to the Brazos River basin. The second study was the Williamson County Water Supply Facilities Plan that was prepared by the Lower Colorado River Authority and the Brazos River Authority. It looked at how best to meet the 50-year needs of the cities and other retail pro-

viders in ten-year increments. Both reports placed significant emphasis on reuse in their water supply calculations. However, so far only three cities in the county have begun reuse projects and with only limited success. This is in part due to the fragmented approach now being taken as well as the high initial cost to implement reuse in Williamson County. The county believes that a significant reuse program can both reduce and postpone the need for development of one or more of these new water supplies. This will have a direct impact on every water customer in the county.

There has been a long-term relationship between LCRA and Williamson County because LCRA has been a major power provider for nearly 75 years for much of the county. During the last 10 years, LCRA has also been instrumental in bringing a regional approach to the water and wastewater needs in the county. It is my understanding that LCRA also has a long history of working with the Bureau of Reclamation. We believe that these two organizations can bring a truly regional approach to reuse in Williamson County. The initial infusion of Federal funds from the Bureau of Reclamation can jump-start this important program. LCRA's leadership and experience in project management and delivery will insure its long-term success. Since the county has no experience with major water and wastewater projects, we look to LCRA and the Brazos River Authority to provide their expertise to such a project.

The County recently acquired 800 acres for a regional park and has completed the construction of the first phase of its long-term plan for the park. Further development is now limited by the availability of irrigation water. The county now purchases 200,000 gallons per day of drinking water from the City of Round Rock. This contract will expire in 2006. Until a better, more reliable source of water can be developed, the county will be limited in its development of the remainder of the park. The proposed reuse project will provide that new source of irrigation water.

On behalf of the Commissioners Court of Williamson County, I would like to thank the Committee for considering this bill. I can also assure you that the cities within Williamson County are aware of this important legislation and wanted me to acknowledge their support. Mr. Chairman, thank you for allowing me to appear before your Committee today. I would be glad to answer any questions at this time.

Mr. CALVERT. I thank the gentleman for his testimony.

Mr. Joe Beal, the General Manager of the Lower Colorado River Authority, Texas.

**STATEMENT OF JOE BEAL, GENERAL MANAGER,
LOWER COLORADO RIVER AUTHORITY, TEXAS**

Mr. BEAL. Good morning, Mr. Chairman and other distinguished members of the Committee. My name is Joe Beal, and I am general manager of the Lower Colorado River Authority, headquartered in Austin, Texas.

Thank you for the opportunity to testify on H.R. 1732, the Williamson County Recycling Act of 2003. I also want to express my sincere gratitude to Congressman John Carter for introducing this legislation and to Congressman Chet Edwards for co-sponsoring this measure. Both Congressman Carter and Congressman Edwards have been very supportive of LCRA and Central Texas, and I appreciate their work on this legislation.

Mr. Chairman, I would like to briefly describe to the Committee the mission and role of LCRA in communities throughout Central Texas. LCRA was created in 1934 by the Texas Legislature as a regional conservation and reclamation district in Central Texas. The Federal Government and LCRA have had a close and beneficial relationship since our creation, when LCRA received Federal loans and grants to build six reservoirs that form the Highland Lakes, and those loans have been repaid.

These lakes have protected communities from destructive floods, provided a reliable water supply for one of the fastest-growing re-

gions in the United States, produces renewable hydroelectric energy and created opportunities for parks and water recreation.

Today, our energy and water service areas cover all or part of 58 counties in Central Texas. Thanks to the original Federal investment, LCRA generates wholesale electric power for more than one million people. We also manage a 600-mile stretch of the Texas Colorado River from West Texas to the Gulf of Mexico, and we provide raw water to cities, farmers, and industries in the Lower Colorado River Basin. Of course, this is not to be confused with the other Colorado River a little bit further west.

The LCRA owns or operates 35 water and wastewater systems that serve more than 112,000 residents in 11 counties. The soul of LCRA is in our water services. We are a leader in Texas in promoting long-term water supply management planning and conservation practices. That is why I am here today to talk to you about water reuse for Williamson County.

In 1997, the Texas Legislature divided the State into 15 regions, as Mike has said, and mandated that each region develop a 50-year water plan. Through this planning process, water recycling in Williamson County was identified as an alternative water supply that would have three positive outcomes:

First, it would reduce or postpone the need to develop more surface water.

Second, it would delay and reduce the need for costly imports of groundwater from as far away as 75 miles east of the county.

Third, it would postpone the need for interbasin transfers of water from the Colorado River to the Brazos River Basin.

Studies conducted under the State planning process show that current water supplies will only meet Williamson County's needs through the year 2017. That is just 14 years from now. Water reuse, water sharing, and the development of new water sources are necessary to meet the county's long-term water needs.

Mr. Chairman, we strongly support H.R. 1732, and we have committed significant funding to support this project because we believe it will have a major impact on the water supply in Williamson County.

Currently, parks, schools, and other recreational areas in the county are literally dumping drinking water on the ground. This obviously does not make sense. We welcome the opportunity to partner with the Bureau to design, plan and construct a consolidated system to improve the efficient use of water resources in the county.

There is regional support for the use of recycled water in Williamson County, and from a number of entities, including the Cities of Round Rock and Leander, Williamson County and the Round Rock Independent School District. The project will be part of an alliance between LCRA and the Brazos River Authority and will be completed in two phases.

Construction of Phase I would begin as early as 2005, will take 1 year and will accomplish two goals:

First, two golf courses in the county use about 600,000 gallons of raw and drinking water a day for irrigation. This project would transport effluent from an existing wastewater treatment plant to the golf courses, freeing up drinking water for thousands of homes.

Second, two large regional parks that also used drinking water for irrigation would begin to use transported recycled water. This will end a wasteful use of the city's critical water drinking supply and will cost city and county Governments and ratepayers far less.

Phase II could begin construction in 2006 and will take 1 year. It would expand delivery of recycled water to meet irrigation needs of several middle schools and high schools, other city and county parks and at least one more golf course.

The use of recycled water is the most reliable source of irrigation for parks, school athletic fields and golf courses. We estimate that this project annually will save about 5,000 acre feet or 1.6 billion gallons of raw and treated drinking water.

The total cost of the project authorized in H.R. 1732 is \$29 million. The Bureau's Title XVI Program allows the Bureau to contribute up to 25 percent of the cost, with a limit of \$20 million. So that means that the Federal part would be about \$7.5 million, and LCRA is prepared to put up the balance of \$21.5 million.

We are very excited about this project and the opportunity to work with the Bureau to ensure its success.

Mr. Chairman, members of this Committee, thank you for allowing me to appear before you today, and I am happy to answer any questions that you might have for me.

[The prepared statement of Mr. Beal follows:]

**Statement of Joseph J. Beal, P.E., General Manager,
Lower Colorado River Authority**

Good afternoon, Mr. Chairman and other distinguished Members of the Committee. My name is Joe Beal and I am General Manager of the Lower Colorado River Authority, headquartered in Austin, Texas.

Thank you for the opportunity to testify on H.R. 1732, the Williamson County Water Recycling Act of 2003. I also want to express my sincere gratitude to Congressman John Carter for introducing this legislation and to Congressman Chet Edwards for cosponsoring this measure. Both Congressman Carter and Congressman Edwards have been very supportive of LCRA and Central Texas, and I appreciate their work on this legislation.

Mr. Chairman, I would like to briefly describe to the Committee the mission and role of LCRA in communities throughout Central Texas. LCRA was created in 1934 by the Texas Legislature as a regional conservation and reclamation district in Central Texas. The Federal Government and LCRA have had a close and beneficial relationship since our creation, when LCRA received Federal loans and grants to build six reservoirs that form the Highland Lakes.

These lakes have protected communities from destructive floods, provided a reliable water supply for one of the fastest-growing regions in the United States, produced renewable hydroelectric energy, and created opportunities for parks and water recreation. The Federal Government's investment has paid a huge dividend to Central Texas and, by the way, LCRA repaid all the loans years ago.

Today our energy and water service areas cover all or part of 58 counties. LCRA generates wholesale electric power for more than 1 million people. LCRA also manages a 600-mile stretch of the Texas Colorado River from West Texas to the Gulf of Mexico, and provides raw water to cities, farmers and industries in the lower Colorado River basin.

LCRA owns or operates 35 water/wastewater systems that serve more than 112,000 residents in 11 counties.

LCRA also provides community services such as parks and recreation, water quality protection, and economic and community development.

But the soul of LCRA is in our water services. We are a leader in Texas in promoting long-term water supply management planning and conservation practices. That is why I am here today to talk to you about water reuse for Williamson County.

In 1997 the Texas Legislature divided the state into 15 regions and mandated that each region develop a 50-year water plan. Through this planning process, water

recycling in Williamson County was identified as an alternative water supply that would have three positive outcomes:

- First, it would reduce or postpone the need to develop more surface water.
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Studies conducted under the state planning process show that current water supplies will only meet Williamson County's needs through the year 2017. Water reuse, water sharing, and the development of new water sources are necessary to meet the county's long-term water needs.

Mr. Chairman, we strongly support H.R. 1732, and we have committed significant funding to support this project because we believe it will have a major impact on water supply in Williamson County.

Currently, parks, schools and other recreational areas in the county are literally dumping drinking water on the ground. This obviously does not make sense. 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 the county.

There is regional support for the use of recycled water in Williamson County from a number of entities including the cities of Round Rock and Leander, Williamson County and the Round Rock Independent School District. The project will be part of an alliance between LCRA and the Brazos River Authority and will be completed in two phases.

Construction of Phase 1 could begin as early as 2005, will take one year, and will accomplish two goals:

- First, two golf courses in the county use about 600,000 gallons of raw and drinking water a day for irrigation. This project would transport effluent from an existing wastewater treatment plant to the golf courses, freeing up drinking water for thousands of homes.
- Second, two large regional parks that also use drinking water for irrigation would begin using transported, recycled water. This will end a wasteful use of the county's critical drinking water supply, and will cost city and county governments and ratepayers far less.

Phase II could begin construction in 2006 and will take one year. It would expand delivery of recycled water to meet irrigation needs of several middle schools and high schools, other city and county parks, and at least one more golf course.

The use of recycled water is the most reliable source of irrigation for parks, school athletic fields, and golf courses. We estimate that this project annually will save about 5,000 acre-feet, or 1.6 billion gallons, of raw and treated drinking water.

The total cost of the project authorized in H.R. 1732 is \$29 million. The Bureau of Reclamation's Title XVI program allows the Bureau to contribute up to 25 percent of the cost, with a limit of \$20 million, for planning, designing, and constructing projects like the ones that would be authorized by H.R. 1732. LCRA is ready and able to provide the local cost share of \$21.5 million.

LCRA is very excited about this project and the opportunity to work with the Bureau of Reclamation to ensure its success. We have met with the Bureau to discuss the need for developing a water recycling program in Williamson County.

Mr. Chairman, Members of this Committee, thank you for allowing me to appear before you today. I am happy to answer any questions you may have at this time.

Mr. CALVERT. I thank the gentleman for his testimony.

First, I wanted to ask a question of Mr. Limbaugh as far as if you know the answer to this question. If not, maybe you can get back to me. Since we are pretty much ending the rainy season, except here in Washington, D.C., obviously, but in the West, the Colorado River, where are we at as far as the snow pack and the Colorado River flows this year? Do you have any insight into that?

Mr. LIMBAUGH. Mr. Chairman, I am not familiar with today's forecast and will certainly get that information to you, but I do know that on the drought map, the Colorado River Basin is almost a bull's eye in terms of a drought this year. So those reservoirs are working and doing their job.

Mr. CALVERT. Right. Lake Mead, Lake Powell are at historic low levels; is that correct?

Mr. LIMBAUGH. Yes, sir, Mr. Chairman. That is correct.

Mr. CALVERT. The reason I bring that up, and obviously there are other places in the country, rather than just the Upper and Lower Basin States in the West that are experiencing drought right now, the Bureau has a number of programs to enhance water supplies. Could you explain, for the record, the role of Title XVI water recycling programs and how they play in developing water supplies?

Mr. LIMBAUGH. Yes, Mr. Chairman. It is my understanding that the act, as we call Title XVI, did authorize the Secretary to enter into some specific projects for planning, designing, and constructing originally and also gave us authority to work to identify pilot projects, and demonstration projects, and bring those to feasibility study level in terms of planning, in that light.

We believe that the Act was successful in its original intent, and we certainly have been involved in those projects in the past. We, however, are again dealing with limited dollars and very real demands on those dollars, in terms of our existing facilities that we have to operate and maintain, along with security, and so we have tried to put as much as we could into these programs, and we certainly have worked with the local folks to try to get them to the place where they can at least get to the merits of their individual projects on a case-by-case basis.

Mr. CALVERT. Mr. Limbaugh, could you explain the role of water recycling in your 2025 program?

Mr. LIMBAUGH. You are referring to Water 2025, the secretarial initiative. We have four tools that we are outlining in that program, and one of which—well, I can just go through those real quick, Mr. Chairman.

The first one is conservation and improved water management; the second one is collaborative efforts to deal with water crises and conflict; and the third one is research into desalination and advanced water treatment technologies to bring the cost down; and the fourth one is better interagency working relationships, cooperation and use of existing infrastructure in a more efficient and effective manner.

Mr. Chairman, the third one is the one that I think would relate to this because in Water 2025, we are trying to take a global view of what would benefit all projects, in terms of an initial investment in research and bringing the cost of water desalination down, and especially in light of not only the technology, but also the brine disposal because we believe that water desalination is something that is up and coming in terms of advancing future water supplies, not only from the ocean, but from brackish or untreated, unusable groundwater.

So we believe that that initiative would look at focusing funds in that direction to benefit all of these types of projects.

Mr. CALVERT. The reason I bring that up, isn't it true, though, that you don't mention water recycling, even though you probably should under 2025's Improved Technology section? There is no mention of water recycling in the program; isn't that correct?

Mr. LIMBAUGH. I would have to look at the document again, but I would take your word for it, yes.

Mr. CALVERT. And the reason I bring this up, and I am sure we will have time here, is California, Texas, throughout the country, we are experiencing problems as far as water is concerned, and as Mr. Edwards had mentioned in his initial testimony, that water is almost more precious than oil in many parts of the country right now. Obviously, reuse of water, recycling water is extremely important in these arid regions, and certainly we would like to get the participation of the Department of Reclamation. And you are right, we have responsibility here in the Congress to help you along in that process, and I assure you of my continued support to do exactly that.

With that, Mrs. Napolitano?

Mrs. NAPOLITANO. Thank you, Mr. Chairman. I would like to follow on your line of questioning to Mr. Limbaugh because in our conversations, even in the budget, the recycled water budget has gone from, what, \$32.5- to was it \$10-? There are very few projects that are going to be able to be funded this year with that amount of money.

And I think that our colleagues need to understand that it is not that this Committee has not looked at water recycling, it is just that the funding is being diminished, and in the Water 2025, it is not even mentioned, which means it is being phased out. Whether somebody wants to admit it or not, this is a reality.

And we are urging—I have talked to Commissioner Keys—and we are urging that it be reconsidered because it is not just desal, and conservation, and storage that is going to get the rest of the United States to be able to deal with these water issues; it also includes recycled water. Because as we have pockets of water that have been contaminated and treated that are being dumped in the ocean, we should be having—our communities benefit from the reuse of that water, and I certainly want to convey the message very strongly. I have mentioned this many times.

To you, Mr. Limbaugh, or to Mr. McKenney, the three projects that are included in the Bureau of Reclamation's Southern California Comprehensive Water Reclamation and Reuse Study, the three projects that you mentioned, are they included in that study? And I must say, Mr. Limbaugh, for the record, that I am again requesting a copy for this Committee of the Bureau of Reclamation's Southern California Comprehensive Water Reclamation Reuse Study. Someday we may get it.

But have you any idea whether they are, Mr. McKenney or Mr. Brady, included in that study?

Mr. MCKENNEY. Well, as you know, Congresswoman, that study hasn't been released, but based upon discussions with USBR's staff, we understand that the desalter portion of the project is included in the study or will be included in the study and that the study does discuss brine impacts on reclamation and the potential for brine disposal facilities.

Now, the third part of our project, the Natural Treatment System, we understand is not in there. That is our best information.

Mrs. NAPOLITANO. Mr. Limbaugh?

Mr. LIMBAUGH. Mr. Chairman and Mrs. Napolitano, we will take your comments back, and I will check on the status of that study and get back to you on that.

Mrs. NAPOLITANO. I would appreciate it very much.

Mr. McKENNEY, are these projects part of the plan proposed by the Santa Ana Watershed Project Authority?

Mr. JONES. I am going to respectfully defer to Mr. Brady on that question. He has been more directly involved in all of those discussions with SAWPA about the water supply projects.

Mr. MCKENNEY. And, once again, Congresswoman, the three projects have been discussed at a staff level with SAWPA. As well, Orange County Water District, which is a member agency of SAWPA, is one of our partners in a portion of the—in the desalter project, and SAWPA has indicated a strong interest in perhaps partnering on the brine line, at least going up into the Santa Ana River Watershed, as a partner with us.

Mrs. NAPOLITANO. And the other two projects are not considered in the context of the regional solutions?

Mr. MCKENNEY. Yes, they are. In terms of regional contexts, all three projects are in regional planning. Yes, ma'am.

Mrs. NAPOLITANO. Do you anticipate any State assistance?

Mr. MCKENNEY. We are hopeful. As many agencies are doing, Proposition 13 and Proposition 50 funding, it is a competitive process. If we were to receive everything that we have requested, it would be perhaps as much as half of what we are requesting under this Federal—

Mrs. NAPOLITANO. Good luck.

Mr. MCKENNEY. Thank you.

Mrs. NAPOLITANO. Could you tell me how, if either you or Orange County, have prepared the engineering environmental studies on these projects and how much money has been spent to date?

Mr. MCKENNEY. Oh, certainly.

Mrs. NAPOLITANO. Ballpark—I don't need exact figures.

Mr. MCKENNEY. Well, ballpark, the short answer is about \$2 million on feasibility and engineering studies, and in terms of having the base data for feasibility studies, as mentioned by the Bureau, we believe that all of the data is available, it is a matter of formatting into another agency's requirements.

Mrs. NAPOLITANO. Thank you, Mr. Chair.

Mr. CALVERT. Thank the gentlelady.

Mr. Osborne?

Mr. OSBORNE. Thank you, Mr. Chairman, and I thank the members of the panel for being here today. I really am somewhat removed from your area of jurisdiction.

I do have one question, though. I am interested in your comments on desalinization and also reuse of water. Are there any plans or any projects that you have which would be for additional water storage? I realize there is a reluctance to build new water storage facilities, dams, those types of things, and I didn't know if this was part of the project or if you see any future in that type of movement. And that is addressed to any of you who would care to answer.

Mr. MCKENNEY. Congressman, we have additional storage projects planned, but they are groundwater storage projects, not

conventional reservoirs. And, as well, we are a retail agency serving a large part of Orange County, California, but the Metropolitan Water District of Southern California being the overall importer of water and developer of large projects like the Diamond Valley Reservoir is involved with many potential storage projects. But for Irvine Ranch Water District, in terms of storage, it would be groundwater storage within our basin.

Mr. OSBORNE. Please say some more, would you about groundwater storage, exactly how you are going to accomplish that. I understand the concept, but I am not exactly sure how that plays out in practical terms.

Mr. MCKENNEY. Well, I guess the basics of it in Orange County is we have the Orange County Groundwater Basin that is fed primarily by the Santa Ana River Watershed. That provides a good deal of recharge. There are recharge basins. And in addition to that, the Orange County Water District has a separate agency that is charged with replenishing the groundwater, buys both imported water and other seasonal water to recharge.

In addition to that, the Orange County Sanitation District and the Orange County Water District have embarked on a very large what is called groundwater replenishment system, taking tertiary treated water from the Orange County Sanitation District Waste Treatment Plants and pumping that back up into the higher reaches and elevation of the Orange County Groundwater Basin for additional recharge. That is a large project. I don't have the exact size of the project, but it is certainly the largest to date in the United States.

Mr. OSBORNE. So some of it would be putting more water in the Santa Ana River; is that right? Some of this would be accomplished that way?

Mr. MCKENNEY. In Orange County, we take out of the Santa Ana River to recharge, and the groundwater replenishment system pipes that water for recharge up into large settling basins.

Mr. OSBORNE. One more question, and this really relates more to problems that we face in a different part of the country, and that is the interrelation between surface water and groundwater. And you hear terms like the alluvium, you know, the distance that you can drill a well from a river without really draining a river. And I wonder if you have developed models out there regarding the interrelationship between the surface and groundwater; in other words, exactly what impacts what and have you developed some theoretical models that would pretty well illustrate the interrelationship?

Mr. MCKENNEY. That work is being done. However, that's being done by the Orange County Water District, not by Irvine Ranch. We are a participant with them, and there is extensive modeling being done at the groundwater, and its relationship to the Santa Ana River, primarily, but we can, as Irvine Ranch Water District, we can request more information for you to submit to the Committee.

Mr. OSBORNE. Thank you.

I yield back, Mr. Chairman.

Mr. CALVERT. Thank the gentleman.

Does the gentleman have any questions for the panel?

Mr. GRIJALVA. No. Thank you, Mr. Chairman. No questions at this time.

Mr. CALVERT. Mr. Nunes?

Mr. NUNES. No questions.

Mr. CALVERT. Mrs. Napolitano, and then I will take it next. How is that?

Mrs. NAPOLITANO. Thank you.

Your desal project, Mr. Brady, will treat groundwater contaminants by salts and nitrates caused by natural geology, and of course, as you mentioned, past agricultural damage. Have other contaminants, such as perchlorates or the VOCs been found in your groundwater?

Mr. MCKENNEY. Yes, Congresswoman. We have, at the former El Toro Marine Air Base, they have found VOCs in the groundwater, as part of a separate project in conjunction with the Department of Defense, the Navy, Irvine Ranch Water District. That water will be extracted and cleaned up. That water will go into the reclaimed water system. It will not go into a potable water system.

The desalter operation is at a distance from that contamination, and what we are treating there, as you have said, is total dissolved solids and nitrates, and that water, once treated, will go into a potable water system, so we will be able to use that for drinking water.

Mrs. NAPOLITANO. In your testimony and in your booklet that you have handed out, you indicated that you have the funding request for the treatment of stormwater, which is now being used or the Federal mandate is that all cities charged with the water that is going into the ocean through the stormwater systems, is that part of what Title XVI is charged with? And, Mr. Limbaugh, that is a question for you, too.

Mr. JONES. Well, perhaps I will go first, Congresswoman. The short answer is, yes, Title XVI includes provisions that say that the money in Title XVI can be used to clean up impaired waterways, and I guess another significant perspective on it for me is that the Irvine Ranch project is a good example of taking money that can be used for one purpose and having it accomplish multiple purposes. To me, that is what the watershed approach is all about.

And so the county, with the legal responsibility to comply with the stormwater permits, is very excited about working with a project that IRWD is pursuing because of the water supply aspects of it, and it achieves multiple purposes.

Mrs. NAPOLITANO. Well, I totally agree with you. I just hope that we and the Administration are able to have cities have enough funding to be able to help get where you are going.

Mr. Limbaugh?

Mr. LIMBAUGH. I would agree with the witness on the applicability of Title XVI to the treatment of that source of water.

Mrs. NAPOLITANO. Is there a possibility then that the Administration and the Bureau of Reclamation might include that provision in year 2025?

Mr. LIMBAUGH. Mr. Chairman and Mrs. Napolitano, we are accepting comments on that, and we would certainly take your comments and your advice back, and take it under advisement as we look forward to working with Congress and working with the stake-

holders out in the West on this vision for water management in the 21st century, yes.

Mrs. NAPOLITANO. I would be very pleased to see what the results of the dialogue will be, but I would also hope that you would include EPA, since they are the ones who are mandating it on all cities.

Thank you, Mr. Chairman.

Mr. CALVERT. I thank the gentlelady.

A couple of quick questions here, and I am going to take off on Mrs. Napolitano on the issue of point discharge, and I am getting these questions throughout the West. I don't know so much in Texas, but certainly in the coastal regions of, and you may have the same problem in the coastal regions in Texas, too, but on the issues of point discharge the EPA standards, which are mandated, are Federally mandated, to meet, and it is an expensive mandate.

And so it is another way of selling Federal participation to meet standards that are being forced upon local communities, which need to meet those standards, but are having a hard time paying for those things and the types of projects that the Irvine Company—I shouldn't say the Irvine Company—the Irvine Water District is developing helps meet those standards.

By the way, I was going to ask the question, if this project is built, do you have the flexibility in that where the State that is apparently operating or is involved in the technicalities of meeting these standards, are they continually going to take a look at every opening, of flood control opening, or can you focus in more of a larger view here in what you are trying to do here? Will that satisfy the regulators?

Mr. JONES. Sir, I don't think that the regulators will ever be completely satisfied. The stormwater standard that we meet is maximum extent practicable, which is a flexible standard. So the more we learn, the more we will probably be required to do. I think that is the reality.

We do have some specific objective standards in the San Diego Creek Watershed that have resulted in the listing of the water body as impaired for several constituents, including sediment, nutrients, pathogens and toxicity, and this project certainly contributes significantly to meeting the TNVL goals, especially in the near term.

I think one other comment I would like to make in response to what you were saying is that it is important to note that when the Clean Water Act first came into existence, the Federal Government provided very substantial economic support to the industries and sewage treatment plants that were being brought under point source permits, and now that the regulations are being applied in a new way to municipal stormwater systems, it is not always, that kind of economic assistance is not always made available as readily. So we are really looking to be more creative in finding these opportunities to collaborate with Federal agencies.

Mr. CALVERT. Commissioner and Mr. Beal, regarding Texas and recycling, how much recycling is being done statewide in Texas? Are you seeing a substantial increase? I know the city of Austin has been here on a number of occasions talking about recycling. Do you see it moving around throughout Texas?

Mr. BEAL. Yes, Mr. Chairman. As the population continues to increase in Texas, and as our water supplies continue to be stressed, we are seeing more and more recycling around the State. El Paso has a program of recycling wastewater into drinking water. The city of Austin has a very good program. The city of San Antonio, also, with their short supplies, has instituted a significant recycling program.

Mr. CALVERT. I know sometimes with an education process on recycling, are the people in Texas accepting the utilization of recycled water for parks and recreation areas? Is there any political fallout for this?

Mr. BEAL. I will let Commissioner Heiligenstein talk about the political part of it, but the fact is that the people of Texas, with most of the State having been in drought for a number of years, and with the focus of the legislature on future water supplies, the people of Texas are becoming used to recycling water, and it is very much an acceptable practice today.

Mr. CALVERT. Commissioner, anything to add to that?

Mr. HEILIGENSTEIN. Just that, yes, in the county I think even in the school districts and the public facilities it has become acceptable. I was telling Congressman Carter earlier today that even at what we call Dell Diamond or Double A Ball Club we do use recycled water for that facility, and all you have to do is mix that smell up with the popcorn, and the peanuts, and the hot dogs, and you are just fine.

[Laughter.]

Mr. CALVERT. I guess that is why we call it "integrated water" supply.

Mr. HEILIGENSTEIN. Yes.

[Laughter.]

Mr. CALVERT. That is a good answer.

Are there any other questions of this panel, Mrs. Napolitano?

Mrs. NAPOLITANO. One more question, and I happened to read some of the testimony, and it is an interesting terminology that is used, and that is effluent reuse and, to me, I don't know whether you are talking about recycled water, is it secondary treated? Is it tertiary treatment?

Mr. BEAL. When we say effluent reuse, what we mean is the recycling of the water. In Texas, the State Health Department has standards about how recycled wastewater can be used. If there is general access to the area that is being irrigated with that wastewater, the treatment levels are tertiary treatment. If there is very limited access, it is secondary treatment, 10-15, and usually with phosphorous removal.

Mrs. NAPOLITANO. Is it treated for infectious, communicable?

Mr. BEAL. Yes, ma'am, but there are also signs posted announcing to the public that is recycled. There are precautions, but the water is treated and generally filtered before it is ever reused.

Mrs. NAPOLITANO. I guess that is about most of the questions that I have. I am hoping that we will be able to be more successful in educating the general public throughout the United States about the value of recycled water, and as we move forward in other new treatments that we may be able to make a difference.

And I have made the statement before that we are drinking water that was around eons ago. It is just being recycled by Mother Earth, and refiltered and reused. So we are really reusing the re-used water.

So thank you very much, Mr. Chair.

Mr. CALVERT. I thank the gentlelady.

Mr. Cardoza, do you have any questions of this panel?

Mr. CARDOZA. No.

Mr. CALVERT. I want to thank this panel for coming out. I think both H.R. 1732 and H.R. 1598 are part of the solution to the problem we have in this country, and certainly I, as Mrs. Napolitano and many of us, support water recycling. I think the Department of Reclamation does also. I understand the budget constraints the Department is under, and hopefully we can help out here. But in order for us to meet the requirements that a growing population needs, we are going to require the utilization of recycling and additional supply of water to make sure that we maintain a productive economy.

With that, I want to thank you, and hopefully we can move these fine pieces of legislation forward and find the money to do it.

Have a great day. We are adjourned.

[Whereupon, at 11:18 a.m., the Subcommittee was adjourned.]

[Mr. Limbaugh's response to questions submitted for the record follows:]

JUNE 10, 2003

Honorable Ken Calvert
Chairman
Subcommittee on Water and Power
Committee on Resources
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to the follow-up question from the May 22, 2003 hearing before the House Subcommittee on Water and Power on H.R. 1598 and H.R. 1732.

Enclosed is Reclamation's response to your question. I would appreciate your assistance in inserting it into the hearing record. If you have further questions or concerns, please do not hesitate to contact me.

SINCERELY,

MARK A. LIMBAUGH, DIRECTOR, EXTERNAL AND INTERGOVERNMENTAL AFFAIRS

RESPONSE TO CHAIRMAN CALVERT S QUESTION

1) Question: Does Federal funding of these Title XVI projects imply ownership of water rights in these projects by Federal agencies, specifically by the Bureau of Reclamation? If not, would you be willing to have an amendment placed in the bills specifying there is no ownership of water rights by the Bureau of Reclamation to the projects they participate in?

Answer: Title XVI projects that are funded by the Bureau of Reclamation are owned and operated by the non-Federal project sponsor. Reclamation has no responsibility in the project once the project has received its legislated full share of Federal funds. Ownership of water that is reclaimed and available to be reused resides with the local water agency and is not subject to Federal control or responsibility. Reclamation would not be opposed to an amendment to Title XVI that clarifies this, although it is not considered to be necessary.

