

Testimony

The Bureau of Reclamation's Reuse and Recycling Program And The American Recovery and Reinvestment Act of 2009

Submitted to:

Honorable Grace F. Napolitano Chairwoman Subcommittee on Water & Power Committee on Natural Resources United States House of Representatives

**Presented by:** 

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#### Introduction

Madam Chairwoman, Ranking Member McMorris-Rodgers, and members of the Subcommittee, the WateReuse Association is pleased to appear before you and have the opportunity to present our testimony on the status of the Title XVI program and the value the American Recovery and Reinvestment Act (ARRA) has given this program through the injection of \$135 million in assistance. At the outset, the Association wishes to thank you publicly, Madame Chairwoman, for the leadership you have provided over the years to ensure that Title XVI's objectives are realized. Throughout the West your leadership has provided the vision that recycling and reusing water is the most significant new water supply available today to address our serious water shortage problems!

Aside from the record commitment of leadership provided in the ARRA, because of your efforts and others on the Subcommittee, including Representative George Miller, the fiscal year 2009 budget contains a record level of resources for this program. Your efforts mean that not only can we create jobs, but can also develop environmentally protective water supply projects to help the West ameliorate the deleterious effects of the ongoing drought. I also want to express our sincere appreciation for your support of the recent passage of the Omnibus Public Lands Management Act that included a number of vital water project authorizations that set the stage for increased water supply production facilities in the years to come.

I appear before the subcommittee in my capacity as President of the WateReuse Association. I am also Chief Executive Officer of Inland Empire Utilities Agency (IEUA), located in Chino, California. By implementing aggressive conservation programs, including expanding our innovative recycling and desalting technologies to reuse our water supplies, we have reduced our potable water demand by 20% over the past five years. IEUA is a municipal water district that distributes imported water from the Metropolitan Water District of Southern California and provides municipal/industrial wastewater collection and treatment services to more than 850,000 people within a 242 square mile area in the western portion of San Bernardino County. The Inland Empire region is the "economic engine" of California and among the top 10 job creating regions in the US.

As a way of introduction, the WateReuse Association (WateReuse) is a non-profit organization comprised of more than 175 public agencies (plus an additional 200 associate members) that provide water supply, wastewater treatment, and water management services to communities throughout the nation. WateReuse's mission is to advance the beneficial and efficient use of water resources through education, sound science, and technology using reclamation, recycling, reuse, and desalination for the benefit of our members, the public, and the environment. Across the United States and the world, communities are facing water supply challenges due to increasing demand, drought, and dependence on a single source of supply. WateReuse addresses these challenges by working with local agencies to implement water reuse and desalination projects that resolve water resource issues and create value for communities. The vision of WateReuse is to be the leading voice for reclamation, recycling, reuse, and desalination in the development and utilization of new sources of high quality water in an environmentally sustainable manner consistent with the nation's priority to reduce energy consumption.

Today, I will address a number of matters on which the Subcommittee asked WateReuse to provide input. I believe the issues can best be summarized by stating that water recycling and Title XVI offer a proven means to meet the challenges of drought plagued regions of the West while simultaneously reducing demand on energy consumption that would otherwise be required to deliver water supplies over hundreds of miles to meet municipal and industrial needs.

# The Bureau of Reclamation's Title XVI Reuse and Recycling Program and the Economic Simulative Effect

Today, the West faces two simultaneous daunting challenges. The first is drought and the impacts of continued climate gyrations – wild swings in previously established weather patterns. The second is the unprecedented growth throughout the western states. Population continues to not just grow, but accelerate throughout the West! The Title XVI Water Recycling Program enables water users in the West to stretch existing supplies through the application of reclamation, reuse, recycling and desalination technologies within watersheds that do not have any other available new water supply. Title XVI was initially authorized in 1992, following a severe multi-year drought in California and other western states. A drought of equal severity reduced the mighty Colorado River to record lows only a few years ago. We must find ways to expand the nation's water supplies and stretching those supplies is a significant part of the solution. The Title XVI program provides the authority and framework to accomplish these water resource development objectives to meet the needs of our cities and urban areas, our farms and ranches, and our diverse environment.

President Obama signed the American Recovery and Reinvestment Act (ARRA) into law on February 17, 2009. With this action, Title XVI was catapulted forward into the mainstream of efforts to revitalize the nation's economy. Within ARRA, a minimum of \$126 million was allocated to Title XVI. We are grateful for the recent announcement from Secretary of the Interior Salazar that the Department will provide \$135 million to support water recycling projects construction. This decision means that drought starved communities and regions and where the recession has been particularly devastating to local economies are now in a position to address two problems at once. When Congress was debating ARRA, organizations such as WateReuse highlighted the value that infrastructure assistance can lend to the economic recovery. In fact, there is only one true way to reverse economic decline and create an immediate multiplier effect from the federal assistance. This is building public works. In the case of water recycling and reuse projects, the benefits are more than just the immediate jobs creation effect of ARRA. Water, as we all appreciate, is the building block of life and economic activity. If oil becomes too expensive, we can shift our energy demands to other sources. But if reliable water supplies dry up, our industries, ranging from agriculture to manufacturing to retail, cannot sustain their business operations. This is why water recycling is the last untapped river in America. When communities construct these facilities, they are creating water supplies that are reliable and safe. They are using this last untapped river to support a strong and vibrant economic base irrespective of the unreliability of Mother Nature.

Therefore, water recycling and reuse project construction assistance is one of the best ways to address the current economic downturn. The assistance will help local communities generate jobs immediately and those jobs will create projects that sustain long-term economic activity. I also highlight the fact that water reuse is "green" and "eco-friendly." Water reuse is the process of converting a waste product into a resource that is highly beneficial. Moreover, water reuse projects have the additional benefit of offsetting demands on limited potable water supplies. Energy costs related to pumping, conveyance and storage are dramatically reduced because of the local nature of the project, thereby enhancing the economics of recycling and reuse. And last, by reducing demands on potable supplies, we are helping to make scarce water supplies available to support ecosystem needs such as the California Bay-Delta Watershed.

The law clearly states that projects that are ready to go are those that can use assistance within the next two years. We consider that a project that is ready to go or "shovel ready" is one that has its regulatory approvals in place to allow for actual design and construction to proceed. Because Title XVI is a program that depends on specific project authorizations, the selection and award of stimulus assistance should be straightforward and expeditious. Any attempt to establish a mechanism or process to determine which projects should receive funding is unnecessary given the Bureau's recently revised "Directives and Standards."

We believe that the best use of the assistance is through funding projects without delay. Today, the nation is in an economic recession that has few historical precedents. Construction costs have declined significantly from just a few years ago when costs were escalating at rates of 10 to 15% because of high demand for infrastructure around the globe. Today, we can move forward on construction projects and deliver cost savings to our ratepayers. This savings is tantamount to an additional grant to the project. Because the stimulus funding will only begin to address project backlog, the assistance should target completion of ongoing authorized and appropriated Title XVI projects. Assistance that remains should be equitably targeted to yet to be initiated "new starts" that have not been funded yet to ensure that construction cost savings can accrue to these projects also.

We consider ARRA as a means to an end. We are hopeful that ARRA combined with the fiscal year 2009 budget that committed a record funding level to the Title XVI program signals that Congress and the Administration will maintain and increase support for this worthwhile program in the future. This commitment is needed. When ARRA was under debate, WateReuse provided Congress with a survey of its memberships needs. We found that more than \$5 billion in "ready to go" to construction projects exist. This level along with the \$655 million backlog of authorized projects within the Title XVI program illustrates that we must build on the foundation ARRA created. If we do grow this commitment, we will continue to generate jobs, green jobs, and ensure that one of the most effective weapons to battle drought impacts, climate change impacts, and ecosystem needs is readily available.

As we discuss the importance of federal assistance to develop locally developed water supplies, we inevitably encounter questions over whether water recycling and reuse is a U.S. Bureau of Reclamation (USBR) mission. Over the years, this subcommittee has heard concerns over how USBR considers Title XVI to fit within the agency's overall mission. From a parochial view, WateReuse has had a productive and sound working relationship with the agency through the WateReuse Foundation, which carries out cutting edge applied research to support the advancement of water recycling, reuse, and desalination. At the same time, federal budgets have over the past several years been lacking in the commitment to programs like Title XVI. The documented effects of climate change upon water supplies and the imperative to find environmentally sustainable responses, suggests to us that the debate about what level of priority water recycling should hold for USBR is over. The law and the climatological challenges to our society are clear. This must be a top tier priority for USBR in carrying out its mission. This is not just the opinion of the WateReuse Association. The Congress codified water reuse and desalination into the Bureau's mission when it enacted P.L. 102-575 in 1992 and reaffirmed it with the specific cost sharing provisions in the 1996 re-authorization.

### Experiences with the Title XVI Program and Program Benefits

The Title XVI program has benefited many communities in the West by providing grant funds that made these projects either affordable or more affordable. The Federal cost share – although a relatively small portion of the overall project cost – often makes the

difference in determining whether a project qualifies for financing. In addition, the Federal funding and the imprimatur of the United States government typically results in a reduced cost of capital.

The Association believes, first and foremost, that the Title XVI program serves a Federal interest as discussed below. Although the level of funding, until this year, that the program has received over the past decade has been limited, it is still an unqualified success. Simply stated, this is one program that represents a sound investment by the Federal government in the future of the West. It delivers multiple benefits to stakeholders throughout the West, ranging from municipal and industrial to agricultural needs. The Federal investment of Title XVI assistance has been leveraged by a factor of approximately 5:1. According to a 2004 Council on Environmental Quality study the non-Federal investment amounted to \$1.085 billion. We do not know of any other federal water program that delivers such a significant investment by local communities. This is clearly an "economic" stimulus program that represents a cost-effective return for the Federal investment in solving the nation's water problems!

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

- Environmental benefits realized through the conversion of treated wastewater into a valuable new water supply and the "green jobs" from building new water infrastructure;
- Reduction of the quantity of treated wastewater discharged to sensitive or impaired surface waters;
- Alleviating the need to develop new costly water supply development projects unless they are a last resort (e.g., new dams and other expensive importation aqueducts);
- Reduced dependence on the Colorado River and on the CALFED Bay-Delta System, especially during drought years when demands on both of these water systems are particularly intense;
- Creation of a dependable and controllable local source of supply for cities in arid and semi-arid climates such as El Paso, Phoenix, and Las Vegas;
- Reduced demand on existing potable supplies; and

Energy benefits, including reduced energy demand and transmission line constraints during peak use periods, realized by the replacement of more energyintensive water supplies such as pumped imported water with less energy-intensive water sources such as recycled water (recycled water use at a park in San Diego in lieu of imported water from MWD uses about one-fifth the electrical energy).

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

Clearly, in an era that will be measured by what we do to deliver services that meet local needs in an environmentally sustainable manner, water recycling and reuse are an integral component of any response. For example, in Florida, communities are beginning to grapple with the impacts of a new state law that will effectively eliminate wastewater discharges. This means that water recycling will serve to support compliance with the mandate. In California, the budget crisis that has proven to be unrelenting places new pressures on finding cost-effective approaches to developing water supplies. While there may be questions on where or how to site surface storage facilities and how to pay for such facilities, no debate exists on recycling and reuse projects. Because these are locally developed and supported projects, they are implemented without the acrimony that accompanies other approaches. This means that a safe and reliable water supply that can be developed for use in irrigation, recreational, ecosystem or groundwater recharge purposes without delay.

### General Comments and Recommendations for an Enhanced Title XVI Program

Earlier, I highlighted the significant funding Title XVI received under ARRA and the fiscal year 2009 budget. It is critical that this budgetary support be more than a one-time infusion of Federal support. For more than 10 years, WateReuse has called upon Congress to increase funding for this program. Today, we have a new baseline to measure this support. ARRA and fiscal year 2009 funding together provide approximately \$175 million. This is a good start, but only a start. We are grateful for it. However, we have a \$500 million backlog and it is growing every year as new projects are authorized for Title XVI

assistance. To address the backlog, the Congress should appropriate at least \$100 million on an annual basis for the next five years.

This level of funding will clear the backlog of need and allow for an enhanced program to be developed and implemented in the intervening time. On this matter, I would like to turn attention to ways in which we could enhance the existing program and ensure that we address the challenges of climate change and overall drought induced water scarcity. These recommendations are made with an understanding that Congress is in the midst of developing climate change policy. We hope that this subcommittee and the full Committee on Natural Resources will work to ensure that these recommendations are incorporated into any final climate change legislation.

- Any climate change offset program should provide that public agencies that are investing in locally developed water supply projects are eligible to participate in the program.
- Title XVI program funding levels should be set at a level to eliminate program backlog within five years. This funding level should be \$100 million per year.
- Incentives should be created to promote the use of recycled and reused water supplies. These incentives should include: 1) a 30% investment tax credit to support industrial transition to recycled and reused water supplies, 2) federal guidelines to procure recycled and reused water supplies, and 3) federal guidelines to ensure that green retrofits of federal buildings provide for installation of appropriate water recycling and reuse technology and piping.
- The Department of the Interior should provide a Report to Congress, on an annual basis, on its progress in promoting water recycling and reuse and recommendations to improve the program objectives in alleviating water shortages, reducing energy use and implementing comprehensive watershed wide solutions.

## ARRA Impact on Water Recycling and Reuse

As stated earlier, we deeply appreciate the support of projects through ARRA. The ability to construct long-delayed projects is an obvious benefit of the economic recovery assistance law. While it is too early to conclude whether the actual assistance will reach projects in a timely manner and consistent with ARRA's deadlines, the indications are promising. The Secretary's confirmation of the funding level gives us hope that actual funding will soon flow to project sponsors.

ARRA's impact can be seen on a broader perspective. Congress and the Administration agreed that water recycling and reuse projects are important enough to our economy to highlight the Title XVI program as deserving a minimum level of ARRA funding within

USBR. There can be no dispute from this point forward that this program is critical to the nation's long-term economic health. For this reason, we believe that ARRA has a dramatic effect on the program's importance. We have reached a point where consensus exists that this program can no longer be an after-thought. This bodes well for our shared interest in developing sustainable, locally developed water projects.

On the matter of ARRA implementation, we do have a concern with the law's "Buy American" mandate. Under the law and subsequent Office of Management and Budget guidance, it appears that unless a project sponsor can certify one of three waiver conditions, a project must be built with American iron and steel and manufactured goods. Many of these projects rely on highly specialized equipment like pumps and membranes manufactured outside the United States. In cases where iron and steel and manufactured goods are available in this country, their availability may be limited. In the West, much of the iron and steel is purchased from Pacific Rim countries. Even with the ability to seek a waiver from the law's mandate, we are concerned that such waiver requests will be subject to unreasonable delays. We believe and request that the Subcommittee consider seeking assurances from USBR and the Department of the Interior that national waivers will be established to avoid project-by-project waiver requests. A national waiver, for example for membranes, would allow communities to proceed with a project without incurring additional project costs attributable to delays.

## Conclusion

Historically, the Bureau of Reclamation has always supported Title XVI proactively by initiating planning studies and comprehensive strategies to solve complex water problems in the West with recycled water and desalination development. Examples include:

- 1. Resolution of water conflicts in the original Newslands Project (first authorized Reclamation Act project in 1911), which includes maximum use of recycled water from Reno, Carson City and Sparks wastewater facilities;
- 2. Arizona v. California provided for "return flow credits" to Las Vegas for all wastewater recycled in Lake Mead;
- 3. Secretary Lujan and Commissioner Dennis Underwood initiated the Southern California Comprehensive Water Reclamation and Reuse Study in 1990 in advance of Congressional authorization in Title XVI in 1992.

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

water in the future for the entire country. I would be pleased to respond to any questions the Subcommittee may have.