



City of Oxnard Water GREAT Program



TESTIMONY

H.R. 2334

**To amend the Reclamation Wastewater and
Groundwater Study and Facilities Act**

Submitted to:

George Radanovich, Chairman
Subcommittee on Water and Power
Committee on Resources
U.S. House of Representatives

Presented by:

Andres Herrera, Oxnard City Councilmember
On behalf of the City of Oxnard

December 7, 2005

Introduction

Chairman Radanovich, Members of the Subcommittee... I am Andres Herrera, a member of the Oxnard City Council. I am pleased to appear before you this morning to address a bill to amend the "Reclamation Wastewater and Groundwater Study and Facilities Act," better known as the "City of Oxnard Water Recycling and Desalination Act of 2005."

On behalf of the City of Oxnard, we would like to thank you for this opportunity. We also wish to publicly recognize Congresswoman Lois Capps for reintroducing this legislation as well as her continued support for regional water supply solutions in her district.

Background Information

Known as "The City That Cares," Oxnard is a beautiful community to call home. It is enriched by a culturally diverse people, strong economy and breezy weather. Located 62 miles northwest of downtown Los Angeles and 35 miles south of Santa Barbara, Oxnard enjoys its rich agricultural land and sandy beaches.

Oxnard's current water supplies consist of groundwater from the coastal aquifers underlying the Oxnard Plain and imported state water purchased from the Calleguas Municipal Water District. These sources are blended in proportions necessary to balance water quality and water supply cost. The groundwater supplies utilized by Oxnard are either pumped from a groundwater recharge area and delivered to the city through a local water management agency or pumped through extraction facilities owned and operated by the City of Oxnard.

However, like other cities in California, Oxnard is faced with several water resource challenges.

- First, Oxnard is a growing community with a population of nearly 200,000. The City of Oxnard is engaged in a general plan update, as we speak. According to the California Department of Finance, Demographic Research Unit, Oxnard is now the largest city in Ventura County and the 20th largest city out of 475 cities statewide. A U.S. Census Bureau projection predicts that the U.S. population will double by 2100 using moderate assumptions. California's population is growing at a rate of 700,000 per year, which means the state's population will reach 50 million by 2020. It is a given – Oxnard will continue to grow and so will demands on our water resources.
- Second, to help restore overdraft conditions, the city's groundwater allocation has been reduced by 20 percent over the past five years through the efforts of the local groundwater management agency. An additional five-percent reduction is planned for 2010, for a total 25 percent reduction.
- Third, imported state water is becoming increasingly more costly and less reliable as the demand on California's water supplies continue to increase with the population.

The GREAT Program and its Regional Benefits

The solution to Oxnard's water resource challenges? The Groundwater Recovery Enhancement And Treatment Program – The GREAT Program.

The GREAT Program is a water resources project that combines wastewater purification and reuse, groundwater injection, storage and recovery, and groundwater desalination. Implementation of this program will provide significant regional benefits:

- Improved reliability of high-quality water deliveries to the Oxnard Plain.
- Sufficient water supplies to meet Oxnard's water resource needs.
- Enhanced local water supply stewardship through recycling and reuse of a substantial portion of the region's wastewater by upgrading the Oxnard Wastewater Treatment Plant. The plant is currently a secondary treatment facility, with effluent being discharged to the ocean. Under the GREAT Program, the plant will be converted to a tertiary and advanced treatment facility. The discharge will then be used for agricultural irrigation, non-potable municipal and industrial uses, and groundwater recharge. Recapturing this lost resource will be made possible through a new Advanced Water Purification Facility.
- Reduced demand on imported water by pumping local groundwater that is no longer pumped by agricultural interests.
- Elimination of costly water delivery system improvements by more efficiently using local water resources and reducing our reliance on imported state water.
- Reduced cost of wastewater reclamation due to a new brine line for the Regional Groundwater Desalination Facility. We believe desalination, one method of reusing water by removing salts or salinity to meet purification standards, has enormous potential.
- Membrane concentrate from the new Groundwater Desalter and Advanced Water Purification Facility will be utilized for local, coastal wetlands restoration. This is a valuable water resource that would otherwise be a waste product and disposed of in the Oxnard Wastewater Treatment Plant's ocean outfall.

Components of the GREAT Program

There are several components to the GREAT Program.

The **Groundwater Desalter** is currently under construction. It will utilize reverse osmosis treatment technology to produce high-quality potable water that will be blended with Oxnard's local groundwater sources. The Desalter will be capable of producing 7.5 million gallons of water per day with an ultimate capacity of 15 million gallons per day. This facility should be complete in early 2007.

Construction should begin on the **Advanced Water Purification Facility** in the next 24 to 36 months. This project includes tertiary treatment facilities to meet the State Department of Health Services criteria for unrestricted reuse and advanced treatment using reverse osmosis. Both treatment facilities, the Desalter and Advanced Water Purification Facility, are based on desalination technology.

The Advanced Water Purification Facility is also responsible for producing a new water source. Referred to as **GREAT "Purified" Water**, this resource will be utilized for various non-potable purposes and will be of higher quality than existing local groundwater. The facility will also help relieve overdrafting of the local groundwater basin, which has led to seawater intrusion. However, even more beneficial, the GREAT Program will create a seawater injection barrier to prevent the ocean from mixing with and contaminating underground water supplies.

Finally, a silver lining of the GREAT Program is a component study entitled the **Membrane Concentrate Pilot Wetlands Project**. This element was created to demonstrate the environmentally safe use of membrane concentrate to restore coastal wetland ecosystems. Positive results successfully demonstrated the viability of wetland-based concentrate reuse. As home to one of the few remaining wetland restoration sites in Southern California, this is very encouraging news. This means that membrane concentrate, which is similar to brackish water found within these estuaries, may be a suitable water source to help restore the Ormond Beach wetlands.

Public Awareness and Education

The GREAT Program has presented the City of Oxnard with a tremendous opportunity to inform and educate residents, and the surrounding region, on critical water resource issues such as conservation, preservation of our wetlands and the facts surrounding purified water. Experience has shown us that an effective public awareness effort can help foster widespread understanding.

Our public outreach effort actually started months before the GREAT Program was launched in 2001. The campaign has been well received and widely reported in regional news and industry publications. It includes media relations, an interactive website, informational brochures, educational videos, presentations, public tours and numerous special events. (We have included many of these materials in your folders.)

Award-winning Program

The GREAT Program is a state and federal award-winning program. Over the past few years it has garnered statewide and national attention for its innovation. It was the recipient of the prestigious League of California Cities Helen Putnam Award and a finalist for the Association of California Water Agencies 2004 Clair A. Hill Award for Excellence. It also received recognition from the Consulting Engineers and Land Surveyors of California.

Conclusion

The City of Oxnard's GREAT Program will provide measurable enhancements for Oxnard residents and its surrounding communities. While municipalities across the state face many challenges, the GREAT Program is an example of how challenges can be transformed into opportunities to better serve residents, seek innovative technological means to generate solutions, facilitate partnerships, build public awareness and enhance public confidence. Yes...we believe that we have made significant progress.

However, with your support of H.R. 2334, the "City of Oxnard Water Recycling and Desalination Act of 2005," we believe can work cooperatively to make this essential project a reality. More importantly, we will ensure a reliable and affordable source of high-quality water for Oxnard residents.

Mr. Chairman, members of the Subcommittee... Once again, the City of Oxnard would like to thank you for convening this hearing. We are extremely supportive of your efforts to ensure adequate and safe water supplies for the entire country.

With me today is Oxnard's City Manager, Edmund Sotelo, and our Director of Public Works, Ken Ortega. We would be pleased to answer any questions you may have.