

**Testimony of Tim Smith
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**Before the
Subcommittee on Water and Power
Committee on Natural Resources**

United States House of Representatives

Regarding HR 236, the North Bay Water Reuse Bill of 2007

May 17, 2007

Good morning Chairwoman Napolitano and Members of the Subcommittee. My name is Tim Smith and I am a Supervisor of Sonoma County, California. I am here today to represent interests in Sonoma, Napa and Marin Counties. I am honored to be here and grateful that Congressman Mike Thompson has introduced the North Bay Water Reuse bill of 2007. The North Bay Water Reuse Program addresses not only the problems of agricultural water supply and wastewater discharge requirements facing the North Bay region, but also aids in the restoration of aquatic and wetland ecosystems. Furthermore, it also is a model for innovative water efficiency management approaches that are particularly well suited for application in California and much of the arid west.

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

Regional Water Challenges

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

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

Meanwhile, Agricultural producers in the North Bay region have experienced, and will continue to encounter, major water shortages. One recent drought was so severe that some growers resorted to trucking water to their vineyards to irrigate their grapes. As the

population grows in California so will the strain on water supplies in a region already struggling with a severe groundwater overdraft and dwindling streams and rivers.

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

Urban, Agricultural and Environmental Benefits

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

By building either of the two basic projects, we can provide 21,000 to 29,000 acre-feet of recycled water to meet all of the irrigation water needs of down-valley vineyards, thereby leaving water for instream beneficial uses and reducing groundwater overdraft. These amounts would also be sufficient to supply cities in the region with supplies to meet all of their recycled water needs.

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

By providing growers with an alternative source of water, the North Bay Water Reuse Program would make it possible to maintain enough water in the streams to restore shrimp population in several places where they have ceased to exist. In addition, the population of salmon and steelhead could be increased from a few dozen individuals to several hundred in streams that have historically supported these fish.

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

With infusions of freshwater, the ponds will eventually be used again by bird populations, especially during late fall, winter and early spring as migration along the Pacific Flyway occurs. The population numbers of various species wintering in the region run into the tens and sometime hundreds of thousands of birds. Shorebird counts in recent years range up to one million wintering individuals. They use all available

productive wetlands, traveling from site to site to feed on invertebrates. Waterfowl use also is high, with populations of various species in the tens of thousands, ranging up to about 100,000 individuals within each species. The Department of Fish and Game reports that there was much higher waterfowl use of the site before they were converted to salt ponds. If restored to tidal action, the site also can support estuary fish such as Delta smelt and other species.

Summary of Legislation

H.R. 236 would authorize the Secretary of the Interior to participate in the North Bay Water Reuse Program through the Bureau of Reclamation, which is at the forefront of the larger Bay-Delta restoration effort. The bill authorizes the Secretary to provide technical and financial assistance for a phased implementation of the North Bay Water Reuse Program. The Feasibility Study and Environmental Documents are expected to be complete by the end of 2008. Implementation of the Program could begin the following year. HR 236 would provide federal financial assistance for planning, design and construction of regional and sub-regional water treatment and distribution system is limited to the lesser of 25 percent of the total cost or \$25 million.

Proven Benefits and Safety of Recycled Water

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

Recycled water is an excellent solution to our agricultural water shortages in California. Recent reports from the State Water Resources Control Board estimate that 48% of the total volume of California's reclaimed water is used for agricultural irrigation.

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

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

Conclusion

In summary, the North Bay Water Reuse Program is a model for the future. It is a win-win project that will protect the environment as well as meet the future water needs of urban and agricultural water users in the North Bay region of California. It will require

vision and broad collaboration to make the Program a success. Our federal partners are critical to the success of this collaboration.

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