

**TESTIMONY OF JIM REYNOLDS
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ON BEHALF OF THE
U.S. DESALINATION COALITION
BEFORE THE COMMITTEE ON ENERGY & NATURAL RESOURCES
UNITED STATES SENATE
OCTOBER 20, 2005**

Chairman Domenici and Members of the Committee, my name is Jim Reynolds. I am the Executive Director of Florida Keys Aqueduct Authority and I serve on the Board of Directors of the U.S. Desalination Coalition. I very much appreciate having the opportunity to testify today in support of S. 1016, the Desalination Water Supply Shortage Prevention Act of 2005.

The Florida Keys Aqueduct Authority is the sole provider of potable water for all the residents of the Florida Keys and presently serves over 44,000 customers in Monroe County. Like water resource managers throughout the United States, we are struggling to address the long-term challenges posed by drought, increasing population, and competing demands from business, agriculture, and the environment. These challenges led us to join together with water agencies and utilities from other States including California, Texas, Hawaii, and New Mexico to form the U. S. Desalination Coalition, a group dedicated to advocating an increased Federal role in advancing desalination. Seawater and brackish water are virtually inexhaustible resources that can be tapped as a viable long term tool for meeting our Nation's growing water supply needs.

Drought, increasing population, and competing demands from business, agriculture and the environment for limited water supplies has taken us to the brink. The reservation of fresh water for the natural systems to maintain a sustainable environment and protection against drought are concerns throughout the Country. The economic, social, and environmental consequences of a water supply crisis are not local or regional in nature. It is a national problem and I believe that it demands the attention of Congress.

The ultimate goal of the U.S. Desalination Coalition is to encourage the Federal government to create a new program to provide financial assistance to water agencies and utilities that successfully develop desalination projects that treat both seawater and brackish water for municipal and industrial use. The Desalination Drought Prevention Act of 2005, introduced by Senator Martinez, will achieve this goal in a fiscally responsible way. Similar legislation has been introduced in the House of Representatives by Representatives Jim Davis of Florida and Jim Gibbons of Nevada and now has approximately 30 cosponsors. I am delighted to be here today in support of this legislation and tell you how it will positively affect the Florida Keys Aqueduct Authority and the State of Florida.

Despite the tremendous advances in desalination technology that have reduced the costs of desalinating water, energy costs remain quite high and are responsible for more than 30% of the overall cost of desalinated water. S. 1016 directs the Secretary of Energy to provide incentive payments to water agencies and utilities that successfully develop desalination projects. This would be a competitive, performance-based program that will help to offset the costs of treating seawater and brackish water. Under the proposed program, qualified desalination facilities would be eligible to receive payments of \$0.62 for every 14 kW of electricity used for the initial ten years of a project's operation. The legislation would also insure that there is a balance in the amount of money going to seawater and brackish water projects in any one year.

The rationale for this approach is that while the cost of desalinating water has dropped dramatically over the last decade, the energy costs associated with desalination are still quite high. Most experts believe that these costs will continue to come down over time and that desalination will eventually be widespread. But waiting for this to occur is a luxury that, in my opinion, we cannot afford. A modest investment to jump-start the development of these projects and stimulate advances in desalination technology today is the smart thing to do.

It is true that the approach suggested in S. 1016 to encourage the development of seawater and brackish groundwater desalination projects is different from the traditional approach of providing construction grant funds. That difference is by design. While the availability of energy assistance grants will encourage the development of desalination projects, these grants will be performance based. In other words, the Federal government will bear none of the risk of project permitting and construction as it does under the construction grant approach. Only those projects that are technically, environmentally and economically sound, and have actually been constructed will be eligible to apply for the grants.

I am proud that the Florida Keys has historically been a leader in the development and use of desalination technology. In fact, the very first seawater desalination plant ever built in the United States was constructed in the 1840s to provide water to Fort Zachary Taylor in Key West. Today, the FCAA maintains desalination plants on Stock Island and in Marathon for use in case of emergencies or a disruption in service of our main pipeline that is 130 miles long and crosses 42 overseas bridges. These facilities produce freshwater from seawater, as a limited emergency source of potable water for the Lower and Middle Keys.

Passage of S. 1016 is of vital importance to the future of the Keys. The Aqueduct Authority currently obtains its water from the fresh groundwater Biscayne aquifer in Dade County. However, because of skyrocketing growth in south Florida and the needs of Everglades National Park, the South Florida Water Management District is setting limits on the amount of water our agency can withdraw from the aquifer. As a result, we are moving forward with a plan to supplement our water supplies by building a new, brackish water desalination facility in south Dade County that will produce 7 million gallons per day of fresh drinking water. S. 1016 will allow us to meet the needs of the

environment without subjecting our customers to a massive increase in water rates that would otherwise result. I hope that you agree that potable water is not a luxury and that it is a necessity that must remain affordable especially too many of our citizens who are on low or fixed incomes.

Mr. Chairman, the U.S. Desalination Coalition also supports the enactment of S. 1860, the Energy – Water Efficiency Technology Research, Development, and Transfer Program Act of 2005. We support increased research in this area and believe that the goals of Senator Domenici’s legislation are consistent with and complementary to the goals of S. 1016. As important as enhanced research of desalination technology may be, however, we do not believe that additional research should come in lieu of a federal investment of the development of actual projects that will provide clean and reliable water to families and businesses. In fact, a strong case can be made that we will learn a great deal about how to improve the efficiency of desalination technology through the development and operation of large-scale seawater and brackish groundwater desalination facilities.

We are very supportive of the program grants that would be authorized under S. 1860. We would hope that a significant portion of the grant funds to be made available under this program would be directed to water agencies and utilities developing desalination demonstration projects. These projects are often a precursor to the development of full scale desalination projects. The information derived from such projects can be very helpful in the continuing improvement of membrane technology, energy recovery systems, and pre-treatment techniques.

In conclusion, thank you again for holding today’s hearing on these important pieces of legislation. We very much appreciate your leadership on this important issue and hope that the Committee will move promptly to pass both S. 1016 and S. 1860.