

**Statement  
of  
Patricia Mulroy, General Manager  
Southern Nevada Water Authority  
before the  
House Energy and Commerce  
Subcommittee on Energy and the Environment  
on  
Implications of Climate Change for Water Utilities:  
Developing and Enacting Adaptation Strategies  
April 24, 2009**

**Introduction**

Good afternoon. My name is Patricia Mulroy, and I am the General Manager of the Southern Nevada Water Authority, a regional agency that manages water resources for 2 million residents and nearly 40 million annual visitors. I am here today on behalf of water utilities throughout the United States. In addition to my role with the Water Authority, I serve on the Board of Directors for the Association of Metropolitan Water Agencies and the Water Research Foundation. I am also an active member of the American Water Works Association and a founding member of the Water Utility Climate Alliance.

Water utilities are on the front line of climate change for us it's happening now. Water utilities must learn to adapt to this reality if we are going to provide a safe, reliable water supply for our nation. Ours is not an abstract discussion of future impacts from melting ice caps.

My experience reflects the challenges facing the American Southwest where the flows of the Colorado River support nearly 30 million people and irrigate 15 percent of the nation's crops. During this decade, the seven states that share the Colorado have witnessed cumulative flows drop 11.8 trillion gallons below average. Other regions are also seeing effects. These changes manifest in different ways—for instance, the Midwest can anticipate increased flooding and associated water quality issues, while groundwater aquifers in coastal areas will likely see salt-water intrusion due to rising sea levels. The Southeast is experiencing drought.

### **Research and Adaptation**

We have to learn how to adapt. My agency has adopted one of the nation's most aggressive water conservation programs, having paid our customers \$110 million to remove grass and replace it with desert vegetation. This has resulted in reducing our use by 22 billion gallons over

the same time period our population swelled by 400,000 inhabitants. Additionally, we are racing to build a new intake that goes deeper within Lake Mead and to develop a water supply that is hydrologically independent of the Colorado River. In California, officials are grappling not only with worsening Colorado River conditions, but a drought in the Sierra Nevada and restricted use of in-state supplies. My purpose today is not to induce alarm, but rather to convey the magnitude of this situation and offer a water industry perspective on adaptation strategies.

First, I would like to express my appreciation for the foresight of Representatives Waxman and Markey in drafting the American Clean Energy and Security Act of 2009. The principles encompassed in this legislation represent pragmatic solutions to a complex problem. While the primary focus of this bill is energy, water and energy are inextricably linked and must be considered together. The Department of Energy estimates that 4 percent of our country's energy is consumed by the treatment, transmission and delivery of water while conversely the generation of energy consumes significant water resources.

One of our most immediate needs is research—not just more research, but more focused, applied research. There are nearly two dozen climate change models, but none of them can predict effects on a watershed-specific scale. The development of adaptation strategies requires actionable research that explores the full range of impacts to water utilities. To that end, we recommend the federal government partner with the Water Research Foundation to optimize the value of research investments. To this end I encourage you to incorporate into your legislation the Climate Change Drinking Water Adaptation Research Act sponsored by Representative Diana DeGette and Senate Majority Leader Harry Reid, which provides funding for climate change related research from a small percentage of cap-and-trade proceeds. This applied research will help provide information that water managers need to make sound policy decisions. This legislation was included in S. 3036, the Lieberman-Warner Climate Security Act of 2008, during last year’s Senate consideration of this issue.

**Blue Bank**

Even the best studied strategies won't work if they cannot be implemented. Climate change adaptation also means new water infrastructure. Our new Lake Mead intake, which cost almost \$1 billion, is only one project in one community. Considering all of the water agencies that will likely be affected, the financial implications are staggering. To help communities capitalize the necessary investments, we propose your legislation also include a concept similar to the proposed "Green Bank" for energy investments. A "Blue Bank" for water infrastructure would provide municipal water agencies the necessary capital to enact adaptation strategies, utilizing a portion of the proceeds from a cap-and-trade system. A similar funding structure, the Transportation Infrastructure Bank, has already been proposed in the Obama Administration's FY 2010 Budget. Providing access to low-cost loans for climate change qualified projects would enable water utilities to proactively adapt while creating significant job growth. To be clear, I feel strongly that water agencies should be financially self-sufficient. These funds would be subject to repayment by municipal water agencies, which historically are among the country's most secure borrowers.

Americans have a remarkable ability to overcome adversity. We in the water industry respectfully ask that you support our efforts to adapt to and surmount the challenge of our changing climate. Thank you for your time.