

**Statement of
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Committee on Resources
Subcommittee on Water and Power**

Concerning “Perspectives on California Water Supply: Challenges and Opportunities”

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Introduction

Chairwoman Napolitano, and members of the Subcommittee, I appreciate the opportunity to appear before you today to discuss the challenges and opportunities facing California’s water supply.

Recognizing the critical importance of a reliable water supply to our economy and our environment, Governor Arnold Schwarzenegger’s administration has focused unprecedented resources and leadership to address the state’s water issues. Those efforts culminated this past November with the passage of a comprehensive water package and bond proposal that will reform, rebuild and restore California’s water system. At the federal level, focus and support from our California Congressional delegation and the Obama Administration has been vitally important in dealing not only with our current water crisis but also the steps necessary for our long-term water reliability and security.

There is no single approach to managing California’s water resources or the entirety of our state’s natural resources in the face of ecosystem needs, the needs of a struggling economy, and the impacts of climate change. However we have the opportunity to implement programs and make management decisions based on strong science that achieves a new level of sustainable and integrated resource management. This may not be easy, but a sustainable resource management approach is the only way we can move forward in the 21st century.

Today I would like to discuss current water conditions and how that relates to Southern California’s water supply. I would also like to provide the Subcommittee with an overview of the comprehensive legislative package I just mentioned, and finally discuss the importance of a strong federal-state partnership to address the Delta and other statewide water issues.

Water Supply Conditions

As you know, 2009 was a third straight year of drought in California. We saw 500,000 acres of farm land fallowed or pulled out of service. There are more than 60 water agencies with mandatory conservation requirements. We have seen significant and alarming over drafting of groundwater basins. Going into this winter, the carryover in the state's major reservoirs was one-third to one-half below normal. The latest Fall Midwater Trawl by the California Department of Fish and Game, which measures fish populations, has the lowest indices on record for delta smelt and longfin smelt. This is further evidence that the Delta, through which much of the water supply for Central and Southern California is conveyed, is an ecosystem in peril and in desperate need of restoration.

Last month, the Department of Water Resources announced the lowest initial allocation on record for the State Water Project -- just 5% of contractor requested amounts. The initial allocation is a very conservative estimate of what we expect to deliver in 2010 as a percentage of SWP contractors' initial requests for water deliveries. At that time, our Sierra snowpack levels were well below normal. Over the past 10 days, we have seen a marked improvement in conditions. But even if we end this year with normal levels of snow and runoff, our water supply outlook will not improve significantly. Regulatory restrictions on Delta exports in the spring and early summer will make it difficult to deliver water to Southern California, the Central Valley, the Bay Area and coastal cities, even if it is available in our reservoirs. Hopefully the current "El Nino" track of storms will improve our water supply conditions without causing significant flood damage.

Climate Change

Many factors contribute to our current water crisis. From recent regulatory ecosystem protection measures to a multi-year drought, combined with an overlay of climate change that is not only affecting current conditions but will increasingly impact our water systems. Climate change impacts, including less snowpack, higher flood peaks, and sea level rise, create new uncertainties. By 2050, scientists project a loss of at least 25 percent of the Sierra snowpack with more of our precipitation occurring in the form of rain because of warmer temperatures, increasing the risk of flooding. More variable weather patterns may also result in increased dryness in the southern regions of the state.

Many of the effects that could occur due to climate change can be mitigated, in part, with the same water management strategies one would employ when dealing with an extended drought.

DWR's strategy to mitigate the combined effects of climate change and a decrease in the snowpack is multi-pronged and diverse. We are building a diverse and comprehensive "portfolio" of water management strategies that are effective in combination with each other, both in the short-term and long-term.

In the short-term, DWR is promoting and financing programs which increase public education and awareness about water use and improve and increase water conservation and water recycling throughout California. We are striving to improve our emergency response to both flood and drought conditions. Of particular note, we activated our Drought Water Bank program last year, and a Water Transfers Program for this year to help alleviate statewide drought conditions. The Drought Water Bank serves as the “broker” between parties seeking to market or sell some or all of their legal water supplies to buyers who have critical water needs such as orchard growers. DWR staff responsible for the day-to-day operations of the State Water Project work closely with operators of the Central Valley Project and staff of the National Weather Service to optimize the efficiency and effectiveness of joint water project operations in tandem with forecasted weather conditions.

Regional Planning, Research and Technological Advances

For the longer-term, DWR continues to be involved in funding research and advising on the development and advancement of new technologies such as desalination and water recycling, developing better climate change modeling capabilities and the administration of regional water use efficiency programs such as the Integrated Regional Water Management Program.

DWR utilizes and continues to develop a variety of tools to forecast water supply dynamics. One of our significant efforts involves collaboration with NASA (National Aeronautical and Space Administration) to incorporate satellite imagery data into our assessments of snowpack extent and depth using different radar technologies. We are also developing detailed models of individual watersheds, within the larger Bay-Delta watershed, which can predict amounts and timing of snowmelt runoff, as well as runoff temperature.

In an effort to better balance the needs for protection of potentially catastrophic flooding and a dwindling water supply in Central Valley reservoirs, new Forecast-Coordinated Operation partnerships are being developed among the reservoir operators and hydrologic forecasting agencies to improve decision support systems and to take advantage of improved meteorological forecasting to better optimize real-time reservoir management.

Colorado River

Another major source of water supply for Southern California is the Colorado River. The Quantification Settlement Agreement -- or QSA -- is particularly important to ensure California preserves stability in its Colorado River supplies. The State Superior Court’s recent tentative ruling invalidating key elements of the QSA agreements threatens California’s water supply reliability; however, it is important to stress that the QSA parties, including the State of California, intend

to work together to deal with issues raised in the court's ruling and jointly, will preserve this important agreement.

Policy Priorities and Funding

We have a serious and complex water crisis looming in California, but this is also a time of great opportunity. It is a time for creativity, a time for new ideas, and most importantly, a time for action to ensure that future generations have a clean, reliable water supply that we've enjoyed for decades in this state.

The legislative package that was passed in November with bipartisan support, and signed by Governor Schwarzenegger, recognizes the importance of solving California's complex water problems. It signals a commitment to the co-equal goals of water supply reliability and ecosystem restoration, a workable Delta governance structure and a clear path for the Bay Delta Conservation Plan. And it includes, for the first time, statewide conservation requirements for urban and agricultural water users as well as groundwater monitoring.

We now have a policy framework for moving forward and a proposed \$11 billion bond that will be on the November ballot. The bond is essential, providing funding for virtually every water management project that we can conceive of. This includes funding for water supply reliability, drought relief, surface and groundwater storage, Delta restoration, water recycling, conservation, watershed restoration, and groundwater protection and cleanup. Every region in the state will benefit from these funds. A portion of funding is guaranteed to each of the hydrologic regions, and all regions are eligible to compete for additional funding to help finance water management projects and programs with local, regional and statewide benefits.

The South Coast region, which includes parts of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties would receive \$856 million for water supply reliability projects and be able to tap into a share of \$6.3 billion in other regional and statewide funding from the bond.

The Sacramento-San Joaquin Delta

The Delta is not just the hub of California's water supply system, but a dramatic and critical manifestation of complex resource conflicts. It is, in many respects, the canary in the coal mine and the mine in this case is, "How will society deal with complex resource conflicts at a statewide and national level?" How do we find that balance between our economy and our environment as we move forward?

The answer to that question lies to a large degree in a process we and numerous other government and non-government entities are currently engaged in known as the Bay Delta Conservation Plan or BDCP. BDCP represents a completely

different approach to dealing with water problems. In the past, we would propose a project, and commit to mitigation of that project. In the case of BDCP, we've actually proposed developing recovery plans, a Habitat Conservation Plan (HCP) under federal law and a Natural Community Conservation Plan (NCCP) under state law, and we are looking at conveyance as a component of that strategy. It is a different approach but it is essential to moving forward and dealing effectively with California's future water needs. It is imperative that we continue on that path and it is imperative that we meet critical deadlines before the end of this year.

That leads to the importance of the state-federal partnership. Active and committed federal involvement to solving California's water issues is essential. Having the high-level commitment from Secretary of the Interior Salazar and Secretary of Commerce Locke is essential to us carving out this new frontier on how we are going to resolve problems. Everything that we are trying to do and every approach that we are trying to make in terms of achieving co-equal goals and a balance in the Delta is dependent on federal decisions and the federal agencies being part of the solution. We cannot do it on our own.

Fixing the Delta means real-time commitment and real-time decision making over the next 11 months. We have to make major accomplishments on flows, on conveyance, on extent of habitat, and a failure of us to make progress in 2010 prior to a transition to a new Governor taking office means, in the best case, delays. In the worst case, it means starting over. We cannot afford that either - for the economy or the environment.

In December, the federal agencies issued an Interim Federal Action Plan for the Delta. In that document, federal officials strongly commit to work with California on a coordinated plan by February. That plan will identify our most important initiatives and near term action items deserving progress during 2010. Many forces---including old challenges and new leadership--converged to make this new state-federal partnership both necessary and possible. It represents a new era of unprecedented, close collaboration - a federal-state partnership that is absolutely essential to fixing the Delta and will represent a new frontier of problem-solving complex resource conflicts.

The work plan provides an overview of key activities needed to make progress in the Delta and on wider water challenges in California. Among the major issues are development of a public draft of the Bay Delta Conservation Plan, action on water transfers for drought response, and coordination of state and federal Delta monitoring and research facilities. On water project operations, the plan calls for providing scientific information and working with the National Academy of Sciences on its current review of smelt and salmon biological opinions. Expedited action is contemplated on infrastructure projects including an Intertie linking the Delta-Mendota Canal and the California Aqueduct, providing more flexibility for state and federal water system operations and deliveries. Habitat

restoration is also a major priority including a project to achieve flood control and ecosystem restoration benefits in the North Delta.

Making it work probably means pushing harder than we have in the past, including tough calls and going outside our comfort zone. But there is no doubt that we need a collaborative approach to take advantage of the window of opportunity we have to change the way that we manage natural resources in California.

Conclusion

We stand at a critical juncture in dealing with California's water issues. Our new reality is that we must manage a resource that is characterized by uncertainty and vulnerability due to climate change and changing ecosystem needs. The past is no longer an accurate indicator of the future.

What we need is a roadmap of strategies for sustainable water use in California. We hope that the Congress and the federal government will continue to recognize the severity of this issue to our state and our nation, and work with us to make the changes and investments necessary to improve our water future.

Thank you for the opportunity to testify before this Subcommittee. I would be happy to answer any questions.