

## **Prepared Statement**

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Committee on Natural Resources**

**"The California Drought: Actions By Federal And State Agencies  
To Address Impacts On Lands, Fisheries, And Water Users"**

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### **Introduction**

Chair Rahall, Mr. Hastings and members of the committee, thank you for your interest in this critical issue and for inviting me to testify before you today. I am here to talk about California's ongoing drought, the impacts of that drought, the actions that Governor Schwarzenegger has directed we take as a state to mitigate the impacts, and finally, the importance of a long-term solution to California's persistent water problems in the form of ecosystem and infrastructure investment.

### **Water Supply Conditions**

California is currently experiencing a third consecutive dry year. Parched watersheds and mid-season warming trends have reduced the runoff capacity of snow that has fallen in the mountainous areas that supply most of the state with water for drinking, industry and agriculture. Additionally, aging water infrastructure and a deteriorating Sacramento-San Joaquin Delta ecosystem have brought water supplies to an all new level of low reliability.

Additional statistics related to California's current water supply conditions:

- Three-year precipitation (2007, 2008, and 2009) is running less than the average during the 1986-1991 drought.
- Seasonal runoff through March 1, 2009 has only been 44 percent of normal statewide.
- End of year runoff forecast is at 64 percent of normal statewide.
- Current 3-year runoff will rank in the top five driest of 3-year periods on record.

Governor Schwarzenegger's February 27, 2009, proclamation declared a state of emergency due to drought conditions. At the time, statewide reservoir storage was at an all time low, snowpack water content was 39 percent below normal and State Water Project allocation was set at 15 percent. Unfortunately, dry conditions were exacerbated

by depletion of surface and groundwater storage caused by very dry conditions in 2007 and 2008.

Storms in late February and early March this year have helped soften the drought, bringing additional inflow to our state's key reservoirs. However, while there have been some improvements in hydrologic conditions, allocations to state and federal water contractors are expected to remain at or near record lows for 2009. As a result, many parts of California will be faced with reduced water supplies this year. These conditions, nearly identical to last year - overall dry but with enough precipitation to foster underbrush growth – has set the stage once again for a potentially disastrous fire season throughout California.

Responding to conditions this year, and preparing for possible future dry years pose a compelling, but critically important challenge to meet statewide water needs.

### **A Beleaguered System: California's Water Infrastructure**

California's last major drought occurred from 1986 to 1991. Although our current precipitation totals have tracked slightly better than this previous drought period, there are many hydrologic similarities. It is tempting to make comparisons between now and then, but truth be told, our water supply outlook was much rosier in 1986-1991. Here is why:

- Since 1991, California has added 9 million new residents, increasing the demand for water supplies.
- California Department of Food and Agriculture (CDFA) and U.S. Department of Agriculture (USDA) data also shows that high-value permanent crop acreage has dramatically increased in recent years, reducing farmers' flexibility in fallowing land when water is scarce.
- Four fish species have been listed as threatened or endangered since 1991.
- New, restrictive biological opinions designed to protect fish species have constricted the flexibility of water project operations. This means that often, even when water is plentiful and available, we have a limited ability to move water to our export facilities.

Climate change brings an additional layer of uncertainty to these complex water supply issues. More extreme weather patterns are projected, which speaks to the need for greater adaptive flexibility to store more water during wet years for use during dry periods of unknown severity and duration.

The State Water Project, built almost four decades ago, was originally designed to serve a state whose population has grown more than most could have imagined. System expansions were planned from the onset. Incremental upgrades and creative operation has allowed the system to keep pace with increased demand, however, changing hydrology, environmental safeguards, and lack of comprehensive planning or investment have eroded water supply reliability. A highly altered ecosystem, subsequent environmental regulations to protect particular species and more erratic weather conditions restrict the water system and have introduced a variable of uncertainty into the economy that has evolved around and long depended upon the reliability of those supplies.

## Drought Impacts

This current drought is causing economic hardship, particularly in agricultural communities. A collaborative economic impact modeling effort between CDFA, the University of California-Davis, the Berkeley Economic Center and the California Department of Water Resources (DWR) has estimated income and employment impacts in the San Joaquin Valley based on the current forecasted water project deliveries and estimates of local water supply availability. The result of those findings are as follows:

- San Joaquin Valley farm revenue loss is estimated to range between \$482-\$647 million.
- Total income losses to those directly involved in crop production and to those in businesses related to crop production are estimated to range between \$652-\$874 million.
- The associated total employment loss is estimated to be between 24,000 and 32,000 full-time equivalent jobs, with the majority of jobs lost in the lowest paying categories.

The State of California very much appreciates the recognition by the federal government of the urgency of our drought conditions, and for addressing this serious problem by announcing the Interagency Federal Drought Action Team more than a month ago. We are eager to engage our federal partners when the team begins its important work.

As California's Secretary for Natural Resources, I am also all too aware of the ways in which the cumulative effects of multiple years of drought affect our forests and brush lands and significantly increase fire hazards. The reduced moisture content of drought-stressed vegetation is one obvious effect that increases flammability over a longer portion of the year, resulting in an active fire season that starts earlier and lasts longer than normal. This means we need to bring on seasonal staff earlier and release them later, resulting in increased operating costs.

A less obvious effect is that drought-stressed vegetation is more susceptible to insects and diseases. A recent example being the Gold Spotted Oak Borer (GSOB) infestation in San Diego County, resulting in high mortality in trees and shrubs, leaving our wildlands with high levels of tinder-dry woody material ready to ignite and burn explosively. Since 2003, state, federal, and local programs have been focused on wildland and wildland/urban interface areas in San Diego, San Bernardino, and Riverside counties to remove massive quantities of dead trees resulting from the repeated drought cycles that area has faced over the past decade and projected in the years ahead.

In 2008, extensive northern and Southern California wildfires burned nearly 1.6 million acres and destroyed over 2,200 structures, which is more than double the state's five-year average. This may be an unfortunate harbinger of what we are facing again in the coming fire season.

With the continuation of drought conditions, the California Department of Forestry and Fire Protection (CAL FIRE) will continue to reposition fire-fighting resources when severe fire weather conditions, such as strong wind events, are anticipated. CAL FIRE also will continue to educate homeowners about the importance of establishing and maintaining defensible space around their homes, which is all the more critical in drought

conditions. USDA's Forest Service has informed California that it will be allocating federal stimulus funds for fuels reduction projects that can help to lessen fire risks by creating strategically located fuel breaks. These federal funds are especially important at this time due to elevated fire hazards that result from prevailing dry conditions in California.

There are a number of important federal wildland fire management issues that become even more critical under the current drought conditions. First, is the ongoing issue of how the federal government budgets for fire suppression. The current method of calculating the annual federal budget for fire suppression using a 10-year rolling average results in a structural firefighting budget deficit. The current method of budgeting for fire suppression has not accurately estimated firefighting costs in at least 8 of the last 10 federal fiscal years. When the USDA Forest Service exceeds its base funding for fire suppression and has to draw funds from other budget areas, resulting in the decreased ability of the agency to deliver important programs areas such as National Forest Management and State and Private Forestry. We urge Congress to conclude action on legislation to address this problem in a manner that strengthens National Forest Management and State and Private Forestry programs (*The House of Representatives passed the FLAME Act on March 26, 2009; No action yet in the Senate*).

Another federal area of concern for California is the ongoing reduction of the Forest Service's initial attack air tanker fleet. This fleet totaled 42 aircraft in 2002 and now stands at 19 aircraft – a 55 percent reduction in seven years – and, at this time, there is no successor air platform for the next generation of initial attack tankers. As a result, California's tanker fleet has had to spend an increasing amount of time supporting federal incidents, and California's overall initial attack air tanker resources have declined significantly.

We also want to express our appreciation for the level of federal support for the Resources Ordering and Status System, or ROSS. The improvement of this critical incident management tool was of great assistance during the multiple massive fire sieges California experienced in the past fire season.

### **Governor Schwarzenegger's Leadership on Drought**

In June 2008, Governor Schwarzenegger issued an executive order calling on state agencies to address serious drought conditions and water delivery limitations and proclaimed a state of emergency in nine Central Valley counties due to severe water shortages.

Following the Governor's call on state agencies to address serious drought conditions and water delivery limitations, DWR implemented a number of actions to prepare for a potentially dry 2009 and beyond, including the sponsorship of drought workshops for local agencies and an expedited grant program to provide funding for water conservation activities. DWR is also currently implementing a Drought Water Bank to assist local agencies in meeting water supply needs for this year. The Notice of Exemption for the Drought Water Bank, based on the Governor's emergency proclamation, was filed with the State Clearinghouse on March 5, 2009. The participant contracts are being finalized, and execution is expected soon pending the issuance of the U.S. Fish and Wildlife Service's (USFWS) biological opinion for giant garter snake.

Governor Schwarzenegger's February 27, 2009, emergency proclamation is based on worsening drought conditions and ordered various California government agencies to engage in activity to provide assistance to people and communities impacted by the drought. The proclamation:

- Requests that all urban water users immediately increase their water conservation activities in an effort to reduce their individual water use by 20 percent.
- Directs DWR to expedite water transfers and related efforts by water users and suppliers.
- Directs DWR to offer technical assistance to agricultural water suppliers and agricultural water users, including information on managing water supplies to minimize economic impacts and implementing efficient water management practices.
- Directs DWR to implement short-term efforts to protect water quality or water supply, such as the installation of temporary barriers in the Sacramento-San Joaquin Delta or temporary water supply connections.
- Directs the California Labor and Workforce Development Agency to assist the labor market, including job training and financial assistance.
- Directs DWR to join with other appropriate agencies to launch a statewide water conservation campaign calling for all Californians to immediately decrease their water use.
- Directs state agencies to immediately implement a water use reduction plan and take immediate water conservation actions and requests that federal and local agencies also implement water use reduction plans for facilities within their control.
- In particular, the order directs that by March 30, 2009, DWR shall provide an updated report on the state's drought conditions and water availability. According to the proclamation, if the emergency conditions have not been sufficiently mitigated, the Governor will consider additional steps.
- DWR and CDFG will also recommend, within 30 days, measures to reduce the economic impacts of the drought, including but not limited to water transfers, through-Delta emergency transfers, water conservation measures, efficient irrigation practices, and improvements to the California Irrigation Management Information System.

The reports required under the Executive Order were delivered to Governor Schwarzenegger early this week. The Governor will use the reports to determine whether additional executive action is necessary.

### **Regulatory Changes Affecting California's Water Supply**

In December 2008, USFWS issued a new biological opinion for Delta smelt that will severely constrain water project operations, especially in the fall months. The U.S. Bureau of Reclamation, in cooperation with DWR, is currently reviewing the biological opinion to determine if it can be implemented in a manner that is consistent with the intended purpose of the action, is within the agency's legal authority and jurisdiction, and is economically and technologically feasible.

On March 4, 2009, the California Fish and Game Commission listed longfin smelt as threatened under the California Endangered Species Act. At the same meeting, the commission voted to “uplist” Delta smelt as endangered based on its continued decline during the drought years. These species declines and associated state and federal legal requirements have a major direct effect on water project operations.

The National Marine Fisheries Service (NMFS) is drafting its biological opinion on the Long-Term Operations, Criteria and Plan (OCAP) for the Central Valley Project and State Water Project. The draft biological opinion finds that the OCAP is likely to jeopardize the continued existence of winter-run and spring-run Chinook salmon, Central Valley and central California coast steelhead, green sturgeon, and southern resident killer whales. The draft calls for further export curtailments and habitat restoration. NMFS will finalize and publish the final biological opinion in June 2009.

### **A Long-Term Comprehensive Solution**

The single-species, single-stressor orientation of the federal Endangered Species Act (ESA) has failed for decades to protect or promote the recovery of complex natural systems. The only way to address the layered needs of a deteriorating ecosystem is through a comprehensive and holistic approach, like that available through the Habitat Conservation Planning process under ESA. Currently, California is involved in a multi-year effort to develop a Bay-Delta Conservation Plan under ESA and its own Natural Conservation Communities Protection Act (Plan). This Plan will allow permitting of water project operations, and will provide for a comprehensive restoration plan for the Delta ecosystem, including recovery of multiple species and identification and mitigation of multiple stressors. In other words, this process recognizes that the state and federal water pumps in the South Delta are not the only element affecting the overall health of the estuary.

Each year, and especially in drought years, the acute tension between the environmental and economic uses of water generates lengthy, time-consuming, and expensive controversy in the form of protracted process and litigation. An investment in a long-term solution that includes robust ecosystem restoration, increased water conservation, regional water investment, increased water storage, and a change in the manner in which we convey water across the Sacramento-San Joaquin Delta is the only way we can ultimately hope to end the constant struggle of economy versus environment. There is enough water for both to be healthy, but in order to ensure adequate supplies for both, we must invest in the long-term solution.

Chair Rahall, members of the Committee, thank you very much for inviting me to share California’s drought experience today.