

**Statement of David Murillo, Regional Director
Mid-Pacific Region
Bureau of Reclamation
U.S. Department of the Interior
before the
U.S. House of Representatives
Committee on Natural Resources
Subcommittee on Water, Power and Oceans
on
“Changing Demands and Water Supply Uncertainty in California”
July 12, 2016**

Chairman Fleming, Ranking Member Huffman and members of the Subcommittee, I am David Murillo, Regional Director for the Mid-Pacific Region of the Bureau of Reclamation (Reclamation). I am pleased to represent the Department of the Interior (Department) today to discuss changing demands on the Central Valley Project (CVP) in California, and actions we are taking with our partner agencies to manage river flow and temperatures in 2016 for the benefit of fish, wildlife, and our water and power customers.

In February of this year, Reclamation presented testimony before this subcommittee describing how four years of brutal drought in California were transitioning into an El Niño water year in 2015-2016. We discussed how these four drought years have severely reduced snowpack, drawn down reservoir levels and brought about significant groundwater withdrawals that have taken their toll on California’s water users, the environment, the economy and communities across the state. We cautioned against the misguided hope of many that one El Niño year would be enough to correct for the long running, persistent drought. Against that backdrop, we referenced what I continue to see as innovative local agreements, adaptive management, and resilience that have all been essential to the survival of many farms and small communities.

Today I can provide an update on conditions, and on the temperature and flow considerations that have occupied a great deal of the time, energy, and concern for me and the other witnesses here today.

As of this month, the effects of an El Niño winter across California have left the state with widely varying water supplies in its network of local, state, and federal reservoirs. Precipitation above the CVP’s Shasta Lake was abundant enough this past winter that Shasta Dam spent several weeks during the spring in or near flood control operations. Conditions in the Trinity River Division of the CVP were also improved over recent years. Trinity Reservoir is currently at 70% of the 15-year average as of today, and significant releases have been made to the Trinity River to support the Trinity River Restoration Program consistent with the Program’s 2000 Record of Decision. Further to the south, while Folsom Lake on the American River reached elevations requiring flood control releases during the winter, drought conditions on that basin can

still be felt. Unfortunately, conditions on the San Joaquin River Basin were much dryer, such that New Melones Reservoir is at only 44% of its 15-year average for this date. These storage levels illustrate the challenging results of one year of average to below-average hydrology when combined with longstanding drought in these important basins.

Even in the face of these varying hydrologic conditions, Reclamation must operate the CVP to balance the competing demands and to comply with a suite of legal requirements, including water rights permitting conditions by the California State Water Resources Control Board (State Board) and biological opinions (BiOps) for the protection of fish species listed under the state and federal Endangered Species Acts (ESA). The National Marine Fisheries Service's (NMFS) 2009 BiOp covers ESA-listed steelhead, Chinook salmon and sturgeon, and the U.S. Fish and Wildlife Service's (Service) 2008 BiOp applies to Delta smelt. Temperature considerations are required under the 2009 NMFS BiOp as well as State Board Order 90-5 for the benefit of species in the Sacramento River and conditions in the Bay Delta. This spring and early summer our agencies have been working on a 2016 temperature management plan for the Sacramento River as required by the 2009 NMFS BiOp and Order 90-5, with the primary focus of protecting critically endangered Sacramento River winter-run Chinook salmon. I know the 2016 Sacramento River Temperature Management Plan (SRTMP) is one of the central topics of the subcommittee's interest today, and I will focus the remainder of my statement on this matter.

In late June and early July, Reclamation, NMFS and the State of California finalized plans to operate the CVP and Shasta Dam consistent with temperature requirements for winter-run Chinook salmon and transmitted the plan to the State Board. We believe the plan avoids excessive mortality to winter-run Chinook salmon that would violate the ESA while allowing some flexibility to operate the CVP and State Water Project (SWP) to allow Reclamation to take other actions, recommended by scientists at the Service, to augment Delta outflow for the benefit of critically imperiled Delta smelt, also listed under the ESA. The SRTMP recommends an approach to maintain a 56.0°F daily average temperature through the end of September, while ensuring that the limited supply of cold water behind Shasta Dam can be fully and strategically utilized throughout the season. In addition, this approach helps Reclamation meet other obligations and maintain commitments for operation of the CVP and SWP. The SRTMP has also been developed to limit impacts to other beneficial uses, such as Folsom Reservoir levels, American River temperature management for species protection, and Delta water quality. The overarching proposed temperature compliance point is a location called Balls Ferry in Shasta County, and Order 90-5 requires, keeping daily average water temperature in the River at this location at 56.0°F. The SRTMP calls for actual daily releases to be based on real-time monitoring to ensure that temperature compliance is accomplished, and other downstream diversion, flow, and Delta requirements are met. Decision-making for significant changes in real-time operations is being further coordinated among the partners including Reclamation, NMFS, the Service, California Department of Water Resources (DWR), California Department of Fish and Wildlife, and the State Board (collectively, the State and Federal agencies).

The SRTMP includes monitoring activities throughout the summer and fall, and check-in points to ensure that sufficient cold water reserves are being maintained to meet the temperature management objectives identified in the plan. In the event that monitoring shows that cold water reserves are being depleted in a way not envisioned in the plan (*i.e.*, if the volume of Shasta Reservoir water < 49° F is less than 95% of the volume forecast in the plan), action will be required to ensure that the temperature objectives can be met, even if those actions have water supply implications. As always, to the extent that Reclamation and the State can opportunistically maximize export pumping from the San Francisco Bay-Delta (Delta), particularly during any sudden increases in Delta inflow, we will continue to do so just as we have done in the past. However, since the SRTMP does fall somewhat short of the previously announced schedule for releases to the Sacramento River this summer, some adjustment to 2016 CVP allocations is possible. In the coming weeks, we will be working diligently with all CVP water user groups to explore options and tools to address this possibility in a reasonably equitable manner. That said, and with progressively drier hydrologic conditions throughout the Central Valley this summer, our agencies are encouraging communities to continue to conserve water and operate as efficiently as possible. We recognize that philosophy has become business-as-usual for many water users, some of whom are alongside me here today.

The success of the SRTMP is predicated on how closely actual operations align with the predicted hydrologic modeling results. Therefore, the SRTMP includes multiple commitments for frequent updates to detailed temperature profiles, modeling projections, temperature control device gate operations, and meteorological data via weekly and monthly conference calls, meetings, and data exchanges. While I cannot give any guarantees as to how the year will play out, Reclamation stands ready to adjust operations to improve temperature conditions and continue compliance with the SRTMP if needed as the season progresses. Equally, Reclamation expects that the real-time monitoring and adjustment opportunities provided for in the plan will allow it the flexibility that is essential to help enable us to meet our commitments while operating within the law.

The development of the SRTMP is itself another example of the ongoing collaborative work being undertaken by a broad array of parties involved in California water management issues. Since December 2013, State and Federal Agencies that supply water, regulate water quality, and protect California's fish and wildlife have worked closely together to manage through the drought and problem-solve with the larger stakeholder community. The State and Federal Agencies have coordinated CVP and SWP operations at the highest level possible, to manage water resources through both forward-thinking and real-time efforts. This cooperative environment has allowed our agencies, working with the State Board, to take advantage of modifications to operational standards required under Orders 90-5 and 1641 (D-1641). Those collaborative actions have borne fruit, and without the Temporary Urgency Change Petitions approved by the State Board, collective CVP and SWP reservoir storage would have been

880,000 acre-feet lower last summer, further depleting cold water pool and creating dangerously low storage levels.

Finally, while we understand that today's hearing is focused on the operational issues playing out this summer, I want to reiterate what we have said before about the Department's commitment to working with the State of California on the long-term goals of improving California's water supply reliability, and protecting and restoring the Bay-Delta environment. I hope that the many jointly funded projects our agencies pursue each year with the water user and environmental communities in California are evidence of that ongoing partnership. At the operational, financial, and policy levels, we are committed to helping California succeed in all years, not just in times of drought, flood or environmental crisis.

The Obama Administration remains committed to collaborating with the State of CA and other stakeholders throughout CA through the National Drought Resilience Partnership (NDRP) that President Obama recently established. As our climate changes, resilience to long—term drought, especially in CA, is a critical issue every level of government needs to put as a priority. We look forward to working together with CA on this as well.

In closing, we would like to thank the Subcommittee for its attention to this issue. These past several years have been incredibly challenging and we are proud of the collaboration and creativity that all the stakeholders have shown in finding ways to manage this complicated and important system.

That concludes my statement. I would be pleased to answer questions at the appropriate time. #