Statement of David Murillo, Regional Director, Mid-Pacific Region
Bureau of Reclamation
U.S. Department of the Interior
before the
Committee on Natural Resources
Subcommittee on Water, Power and Oceans
U.S. House of Representatives
on
The 2016 California Water Supply Outlook During the El Niño and Three Years of Restricted Water Deliveries
February 24, 2016

Chairman Fleming, Ranking Member Huffman and members of the subcommittee, I am David Murillo, Regional Director in the Mid-Pacific Region of the Bureau of Reclamation (Reclamation). I am pleased to appear before the subcommittee today to discuss activities underway in California to adapt to the challenges and opportunities associated with the current El Niño weather cycle, and actions the Department of the Interior (Department) is taking together with the State of California and our partner agencies to mitigate the effects of persistent drought.

The past four years have been characterized by severely reduced snowpack, reduced precipitation and significant groundwater withdrawals in much of the west and in California in particular. Water Year (WY) 2015 was the eighth of nine years with below-average runoff. Beginning with 2012, the last four years have been hydrologically classified as below normal (2012), dry (2013), and critically dry (2014 and 2015)[1]. Under average conditions, a major source of California's water for cities and farms is runoff from snowpack in the Sierra Nevada and Cascade mountains (about one third), and on April 1, 2015, California's Department of Water Resources measured statewide water content of Sierra snowpack at five percent of average for that date. These levels were lower than any year on record going back to 1950[2]. Moreover, California's 2014 and 2015 water years were also the warmest on record[3], exacerbating the effects of the current drought.

In the face of these conditions, carryover reservoir storage has been severely drawn down during this drought, and as we began water year 2016 the Central Valley Project's (CVP) reservoir carryover storage from WY 2015 into WY 2016 (October 1, 2015) was 2.9 million acre-feet, which was 24 percent of capacity and 47 percent of the 15-year average for that date. As of January 19, 2016, storage in major CVP reservoirs was 963,000 acre-feet lower than the same time last year. These conditions have taken their toll on water users, the environment, the economy and communities across the state. And, against the backdrop of that complex water

[1] http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST
[2] www.water.ca.gov/news/newsreleases/2015/040115snowsurvey.pdf
[3] www.ncdc.noaa.gov/temp-and-precip/climatological-rankings/index.php?periods%5B%5D=12&parameter=tavg&state=4&div=0&month=9&year=2014#ranks-form

and precipitation picture, innovative local agreements, adaptive management, and resilience have been essential to the survival of many farms and small communities.

The El Niño-Southern Oscillation (ENSO) is characterized by year-to-year fluctuations in sea surface temperatures in the equatorial Pacific Ocean. The National Oceanic and Atmospheric Administration's Climate Prediction Center classifies present ENSO conditions as a strong El Niño, one which is expected to peak during the winter of 2015-16 with a transition to ENSO-neutral conditions expected during the late spring or early summer of 2016.

The Department understands the urgency this Subcommittee, and numerous stakeholders in California, associate with questions about how agencies will operate during the current El Niño cycle, and whether the decisions made during this winter will meaningfully change the water supply picture in 2016 and beyond. We appreciate the chance to discuss these efforts, and we're glad to have an opportunity to continue a dialog with the members of this Subcommittee on how we can best address the needs of the water users, environment and larger community we all serve.

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. Reclamation, the California Department of Water Resources (DWR), California Department of Fish and Wildlife (CDFW), State Water Resource Control Board (SWRCB), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS), (collectively, the State and Federal Agencies) have coordinated CVP and State Water Project (SWP) operations at the highest level possible, to manage water resources through both forward-thinking and real-time efforts. This cooperative environment has allowed the State and Federal Agencies to collectively provide the necessary information to the SWRCB to support evaluation of several joint Reclamation and DWR requests for modifications to operational standards required under state Water Rights Decision 1641 (D-1641). Those collaborative actions have borne fruit with the conservation of approximately 880,000 acre-feet that would not have been conserved but for the jointly-filed Temporary Urgency Change Petitions (TUCPs) approved by the SWRCB.

Last month the State and Federal Agencies prepared and submitted a 2016 Drought Contingency Plan[4] (DCP) to provide a framework of more potential operational actions that may be requested from the regulatory authority of the SWRCB this year. The actions summarized in the DCP may be necessary even if California continues to experience the current wetter-than-average hydrology. As of this writing, the DCP provides the best big-picture summary of the objectives that will guide the State and Federal Agencies in 2016.

[4] www.water.ca.gov/waterconditions/docs/2016-DroughtContingencyPlan-CVP-SWPOperations-Feb-Nov_1.19.16-FINAL.pdf

As the subcommittee is aware, water delivery for farms and cities is not the only imperative at play in the operation of the CVP, or the state's water project for that matter. The CVP and its reservoirs are authorized to serve multiple purposes, and they provide significant benefits for flood control, recreation, water quality and power generation every year, in all types of hydrology. In 1992 Congress specifically amended the CVP's overlying authorization (dating to 1937), with the statutory directive that CVP project purposes include the "mitigation, protection, and restoration of fish and wildlife" and "fish and wildlife enhancement". Similarly, California State Fish and Game Code Section 5937 requires releases below dams "to keep in good condition any fish that may be planted or exist below the dam." Compliance with state water law and the major environmental statutes such as the Endangered Species Act and Clean Water Act are obviously significant responsibilities governing the operation of the CVP along with the many water delivery contracts in place with more than 200 water user organizations in California.

It is true that state and federal export facilities in the Delta have not operated at maximum capacity during these periods of elevated El Niño precipitation and runoff. The Bay Delta is an estuary that is home to its own in-Delta farming community, many towns where water quality could be or is acutely impacted by operation of the pumps, as well as dozens of threatened and endangered species.[5][6] The Delta serves these roles in addition to the water conveyance function it serves in providing millions of acre feet of water to users south of the Delta every year. While some have argued the state's water supply cutbacks are entirely due to environmental regulations, it has been drought – the extreme declines in annual precipitation and snowpack in California since 2012 – far more than any other factor, that has constrained the ability of the state and federal projects to deliver full allocations of water during these years.

So far during 2016, Reclamation's operations during the El Niño pattern can be characterized as adaptive and strategic. Many variables such as temperature, salinity, turbidity, tidal action, inflow, outflow requirements, storage levels and the location of threatened and endangered fish species or their habitat have required us to adapt to determine what level of exports can be supported at the pumps. To the extent that Reclamation and the state can opportunistically maximize export pumping, particularly during surges in inflow to the Delta, we have done so and will continue to do so. But we've also proactively reduced export pumping on several occasions to protect listed species such as the Delta smelt, and we will continue to do so when warranted, because we strongly believe that not doing so would necessitate far more restrictive export levels days or weeks down the road. Federal and State agencies are working to avoid the potential extirpation of species like winter, spring and fall-run Chinook salmon, Central Valley steelhead, and Delta smelt, which has been found to be in danger of extinction throughout its range[7].

[5] www.fws.gov/sfbaydelta/es/species_info.cfm

[6] www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/salmon_and_steelhead_listings/salmon_and_steelhead_listings.html

[7] www.fws.gov/sfbaydelta/species/delta_smelt.cfm

Through the implementation of a series of Federal actions and investments laid out in the Interim Federal Action Plan, we and our resource agency partners are taking affirmative steps to address the role of stressors like predation by invasive species, further complicating recovery of threatened and endangered species. In fact, in his testimony last October on H.R. 2898 and S. 1984, Deputy Secretary Mike Connor stated "the Department strongly supports well-designed collaborative scientific research into predation." These factors, and four years of drought, will not be remedied with one year's above-average El Niño hydrology. And so we want to manage expectations, as we keep releases from Reclamation's major storage facilities conservative in recognition of the fact that the preceding years of below normal to critically dry hydrology have left carryover storage levels far below average.

As stated by Deputy Secretary Connor before the Senate Energy and Natural Resources Committee this past October, the Department is taking a multi-faceted approach and marshalling every resource at its disposal to assist western communities impacted by drought. Through the WaterSMART Program, hundreds of thousands of acre feet are being conserved every year that would otherwise be lost. In June of last year, Reclamation announced investments of more than $24 million in grants for 50 water and energy efficiency projects in 12 western states, more than $23 million for seven water reclamation and reuse projects in California, and nearly $2 million for seven water reclamation and reuse feasibility studies in California and Texas. On February 8 we announced the allocation of $166 million in additional FY 2016 funding, $100 million of it directed at western drought response. And in the coming months, we will announce funding awards for dozens of additional WaterSMART awards, getting the 2016 funds out to the districts that will put them to work on the ground.

While these and many other measures have not and can never fully alleviate the drought's impacts, we've proven that we have the capacity to improve overall water management by building on the work of creative local partners. If sustained, the Department believes we can build long-term drought resiliency, even accounting for what El Niño may or may not yield in this and future years.

As we move through the remainder of this El Niño year, Reclamation will remain consistent in developing and adjusting our operations plan in conjunction with the State, requesting as much flexibility as possible while at the same time protecting the fish species. We look forward to engaging in discussions with water users on possible operational scenarios to address the needs of fisheries at the same time improving project yield.

Finally, while we understand that today's hearing is focused on near-term operational issues during the current El Niño cycle, I want to reiterate the Department's commitment to working with the State of California on long-term goals of improving California's water supply reliability, and protecting and restoring the Bay-Delta environment.

That concludes my written statement. In closing, I thank the Committee for its attention to this issue, and for fair consideration of all we are doing to operate the state and federal projects in compliance with the law for the benefit of all Californians and the environment. Reclamation

values its working relationship with all the parties represented here today. I would be pleased to answer questions at the appropriate time. #