2014 Water Plan Actions for Potential Inclusion in the 2015 Water Plan

General Actions

1. Modify Calculation for Estimating Incidental Take Limit for Adult Delta Smelt

Modify the cumulative salvage index calculation for determining cumulative expanded salvage, using all years in which delta smelt were reliably identified in salvage.

2. Adjust San Joaquin River Inflow to Export (I:E) Ratio

If conditions warrant, determine the 2015 San Joaquin River I:E ratio in February in advance of the May 1 California Department of Water Resources (DWR) runoff forecast for the San Joaquin Valley.

Planned: Coordinate with fishery agencies as early as March 2015 to determine if conditions warrant adjustments to the I:E ratio as allowed within the 2009 National Marine Fisheries Service's (NMFS) Biological Opinion (BiOp).

Status: As hydrology information is developed, the Bureau of Reclamation will coordinate as necessary with fishery agencies. Reclamation staff will be available to assist.

3. Streamline Water Transfers

Activate Reclamation Water Transfers Team to include a single point of contact for inter-basin transfers and with an interdisciplinary technical team to assist with analysis of transactions. This team will also interact with counterparts with DWR and the State Water Resources Control Board (SWRCB) in order to track and evaluate all proposed transfers and work to expedite review and analysis and opportunities to streamline processes.

4. Recapture San Joaquin River Restoration Program Flows – Complete Recapture and Recirculation Plan

Reclamation will continue to maximize opportunities to recapture and recirculate flows released for the Restoration Program, which includes completion of the Recapture and Recirculation Plan (R&R Plan). The R&R Plan will address recapture of the Restoration Flows in the Delta, which is not fully addressed in the 2011 R&R Plan.

5. Improve Lower Klamath River Fall Flows for Fall-run Chinook Salmon

Develop a plan for the long-term protection of the fishery resources. Reclamation released flows for augmentation in fall 2012, 2013, and 2014, with annual volumes totaling approximately 39,000 acre-feet, 17,500 acre-feet, and 64,000 acre-feet, respectively.

Planned: Reclamation will coordinate with tribes in the Trinity and Klamath River Basins, the U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Wildlife (CDFW), the National Oceanic and Atmospheric Administration (NOAA) Fisheries, environmental stakeholders, and Central Valley Project (CVP) and other water and power users in exploring alternatives, developing fish protection measures, and identifying impacts.

Status: A draft long-term strategy has been developed and is undergoing internal review.

6. Optimize Refuge Water Supply

Work with refuge interests to look for mechanisms to optimize refuge water supplies through scheduling, reallocation of refuge water supplies among refuges, supply flexibility options, and identification of diverse sources to meet refuge demands.

7. Advance Golden Gate Salmon Association (GGSA) Projects

Continue to work with the GGSA and the Five Agencies (DWR, CDFW, FWS, NMFS, and Reclamation) advancing Tier 1 projects during 2015 and identifying sponsors for pursuit of Tier 2 projects which will potentially yield fishery benefits.

8. Continue Coordination and Forecasting Improvements

On a regional basis, continue increased coordination of operations with the various diverters, water districts, hatchery operators, and the other system operators to best forecast operations and water demands in an effort to improve operational flexibility and delivery efficiency.

Planned: Initially in water year (WY) 2015, then this will be a continuous and ongoing effort. This action would result in little to no increase to net supply but will increase operational efficiency.

Status: Throughout the drought, Reclamation continued very close coordinated operations of the State Water Project (SWP) and CVP, including the preparation of our respective operational forecasts. As the interest level in these operational forecasts have increased, Reclamation has been working to educate contractors and the other agencies about what the forecasts do and do not represent and how they are used in guiding the ongoing operations of the SWP and CVP. The monthly CVP operations forecast continued to be used to plan project operations in WY 2014. In this water-short year, both Reclamation’s forecast and a similar

forecast prepared by DWR were utilized extensively to evaluate alternative operations and to assess potential impacts to water supply and fishery resources. Reclamation increased communications with stakeholders and DWR operations staff to increase coordination of the CVP with the SWP forecast of operations. Many less familiar with the monthly forecasts expected forecast accuracy without understanding the uncertainty of the input data and assumptions. Further education on forecast uncertainty and project response to uncertainty would improve use of the drought operation plans.

9. Improve Hatchery Operational Coordination with North-of-Delta Diverters

Develop and implement a plan for better coordination of hatchery fish releases to coincide with adequate natural flows or other operational releases, which would reduce the need for specific releases of stored water as a separate effort for the hatcheries.

10. Request Relief from Water Quality Objectives as Conditions Warrant

Promptly identify opportunities to collaborate to propose, review, and approve temporary modifications to water quality or flow objectives in order to balance beneficial uses and avoid disproportionate drought impacts through continued operational review. Reclamation will effectively coordinate with DWR, SWP and CVP contractors, the State and federal fishery agencies, and the SWRCB, at a minimum. The goal is to balance risks and reduce disproportionately high water supply impacts or shift a significant fishery concern or water supply impact to another part of the system.

Planned: Reclamation and DWR will continue to assess hydrological and operational conditions and coordinate with the appropriate agencies and stakeholders. Coordination will primarily occur at regular meetings of the Real Time Drought Operations Management Team, Water Operations Management Team, and operations meetings with additional briefings as needed.

11. Acquire Non-CVP Water for CVP Purposes

Reclamation will actively pursue water acquisitions, exchanges, and transfers to augment CVP water supplies for agricultural, refuge, in-stream, and other purposes. Emphasis will be given to proposals designed to meet multiple purposes and objectives.

Response to Drought

12. Determine Public Health and Safety Needs

Work with water contractors to identify requirements to meet public health and safety needs and determination of the demand upon the CVP to meet that requirement. Coordinate with DWR and the SWRCB.

13. Implement Additional Short-Term Mitigation Measures

Depending on hydrologic conditions, it may be necessary for Reclamation or its contractors to implement additional mitigating measures should drought impacts continue into 2015.

Medium-Term Actions

14. Increase Refuge Water Supply Reliability

Reclamation has engaged a broad group of CVP water contractors, refuge interests, and non-governmental organizations in a Stakeholder Technical Team and a Policy Team to address development of strategies and actions that are needed to increase water supply reliability for all CVP South-of-Delta water users, including wildlife refuges.

15. Coordinate Rice Straw Decomposition

Work with North-of-Delta water districts and land managers to better coordinate river diversions for their rice decomposition water needs and alternative methods to rice decomposition as a way to conserve water supplies.

16. Coordinate with FWS to Revise Adult Delta Smelt Incidental Take Statement by Incorporating Population Dynamic Modeling

Coordinate with FWS to support the development of a life cycle model that would allow the Incidental Take Limit (as defined in the incidental take statement from the 2008 BiOp) to be determined by the use of population dynamics instead of entrainment at the pumps.

17. Improve Salmonid Genetic Testing

Opportunities may exist to improve genetic testing of salmonids salvaged at the Tracy Fish Facility. Genetic evaluation is part of the Term and Condition 2a of the 2009 NMFS BiOp, including increasing the accuracy in estimating annual and season loss estimate of different evolutionarily significant units of Chinook salmon.

18. Complete Long-Term Water Transfer Process

Complete work on the Long-Term Water Transfer Program, which is due to be finalized by June 2015.