



## ● Bay-Delta Management Report

### Summary

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This report provides a summary of activities related to the Bay-Delta for May 2016.

### Purpose

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Informational

### Detailed Report

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#### Long-Term Delta Actions

##### California WaterFix

On May 17, the Delta Stewardship Council Delta Science Program released a report summarizing the Independent Review Panel (the Panel) review of sections of the draft Biological Assessment (BA), as well as the draft Analytical Approach to developing the Biological Opinion for the California WaterFix. The Panel was convened by the Delta Science Program at the request of the National Oceanic and Atmospheric Administration (NOAA) to provide the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife (CDFW) with an independent scientific evaluation of the methods and approaches for developing the joint Biological Opinion requirements and analyses prepared for the CDFW 2081(b) Incidental Take Permit application. The Panel found that the best available science was generally used as a basis for the BA's models and analytical methods and that these were adequately described. However, the Panel cautioned that there were significant uncertainties surrounding the current science on Delta species and significant knowledge gaps. This conclusion supports the adoption of a commitment to extensive future research, monitoring, and adaptive management in construction and operational phases. The full report can be found on the NOAA website:

[http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/BDCP/ca\\_waterfix\\_aq\\_sci\\_review\\_report\\_final.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/BDCP/ca_waterfix_aq_sci_review_report_final.pdf).

#### Near-Term Delta Actions

##### State Water Resources Control Board

The State Water Resources Control Board (SWRCB) established a revised schedule for the public hearing to consider the petition requesting changes in the point of diversion for the State Water Project and Central Valley Project as part of the California WaterFix Project. Part 1A of the hearing dealing with effects on other legal water right holders is now scheduled to commence on July 26, 2016 and opening briefs by the California Department of Water Resources (DWR) are due May 31. Part 1A of the hearing will be dedicated to the petitioners' case and cross-examination of petitioners' witnesses, and Part 1B of the hearing will comprise of testimony from other parties. Part 1B will commence on October 20, 2016 and opening briefs for Part 1B are due September 1. Staff, in collaboration with other public water agency participants, is preparing for participation in the proceedings.

## Board Report (Bay-Delta Management Report)

### Science Activities

Staff attended the Interagency Ecological Program (IEP) 2016 Annual Workshop on April 20-22. The workshop is a science conference focused on recent research results and technical analyses related to the Bay-Delta ecosystem, with a focus on projects conducted or supported by IEP. The workshop highlighted advances in understanding of the lower trophic levels, biology of salmonids, sturgeon, and smelt, advances in sampling techniques, habitat restoration, and drought impacts. Much of the results presented at the workshop will help guide future efforts in restoration and management of listed species. In addition, applying advanced techniques in satellite technology, metabolic analyses, genetic analyses, and behavioral particle tracking models will be more widely applied.

As part of the IEP work plan, a multi-agency science team was formed last year to conduct a salmon and sturgeon science synthesis called the Salmon and Sturgeon Assessment of Indicators by Life Stage (SAIL). In the last month, draft SAIL documents have been released for public review. Metropolitan staff reviewed the draft SAIL documents and provided comments to the multi-agency SAIL team. The SAIL document is a synthesis of the status of current monitoring data for Winter-run Chinook salmon, Green sturgeon, and White sturgeon and provides recommendations for more monitoring to cover gaps in information both geographically and temporally. Staff provided comments to the Winter Run SAIL and both Sturgeon SAIL reports.

Metropolitan contracted with Anchor QEA to begin a study of the relationship between sediment loading, wind, and turbidity in Suisun Bay. The study involves a linkage between a hydrodynamic model, a sediment transport model, and a wave sediment resuspension model.

Staff is working with Cramer Fish Sciences to develop an Environmental DNA (eDNA) study for Delta smelt. Environmental DNA is DNA that is released by living organisms into their environment. Fish DNA can be captured in water samples and analyzed to identify the source species. Ultimately, this technique might be used to determine the presence of various species without the need to capture the fish or even to identify the fish visually. The technology is currently in development, and the purpose of this study is to evaluate how far away the eDNA signal of Delta smelt or similar fish can be detected in water and to validate the use of the technology as a tool to study Delta fish.

### Habitat Restoration

DWR and the U.S. Bureau of Reclamation (USBR) are jointly planning the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project to comply with the 2009 NMFS Operations Biological Opinion. The purpose of the project is to significantly increase seasonal floodplain rearing habitat availability with biologically appropriate frequency and duration from December through April in the lower Sacramento River Basin. Metropolitan staff is participating in a working group developing project alternatives. In May, staff developed an additional alternative for the project, which includes the creation of multiple gates in Freemont Weir with sloughs constructed to connect the gates and the natural geography to increase frequency and the duration of flooding events. The increases will produce more floodplain habitat for salmonids.

### Delta Emergency Preparedness

#### Delta Flood Emergency Management Plan

DWR is currently relocating a large portion of rock stockpiles originally placed in temporary storage at the Port of Stockton in 2008 to a dedicated, high capacity and readily accessible site at Rio Vista with all-weather ingress and egress. This will be the primary rock storage site for emergency operations in the Delta, and accommodates rock removed from the temporary West False River drought barrier, which is now dedicated to emergency operations.

At the DWR stockpile site on the San Joaquin River in the City of Stockton, current construction is upgrading drainage to provide all-weather access to facilitate movement of stockpiled materials in emergencies. Water, sewer, electrical service, and lighting to support, stockpile, warehouse, and command facilities are being improved as part of the upgrade. A portion of the rock temporarily stockpiled at the Port of Stockton, along with rock conveyors and containerized materials are being relocated to this site.

## Board Report (Bay-Delta Management Report)

The Delta Working Group has been developed as a multi-agency coordination team, to coordinate Delta emergency response responsibilities on an ongoing basis, as a part of the Delta Flood Emergency Management Plan. Quarterly meetings are held with the five Delta counties, Cal Office of Emergency Services, U.S. Army Corps of Engineers and DWR as lead participants. Local agencies including the five counties are supported by DWR grant programs to improve local emergency response capabilities, flood fighting, training, and exercises, to make critical improvements.

### Bay Delta Conservation Plan Expenditures

#### Overall

The table below shows the funding and commitments based on the December 2008 Delta Habitat Conservation and Conveyance Program (DHCCP) Funding Agreement and July 2010 Supplemental Funding Agreement. Prior to these two funding agreements, an additional \$13.5 million was expended under the November 2006 BDCP Cooperative Cost-Share Agreement for startup costs related to development and review of the BDCP and consulting resources necessary to prepare the BDCP. In addition to these funding agreements, an agreement was executed between DWR and the USBR to provide additional planning funds by the USBR. To date, \$5.7 million of these additional funds have been received and are reflected in the table below including the budget total.

#### Metropolitan's Share.

Metropolitan's commitment under this program remains at \$63 million.

Funding Agreements	Total Project (in millions) as of April 2016		
	Budget	Commitment	Remaining
Dec 2008 – DHCCP Funding Agreement	\$ 139.6	\$ 139.6	\$ 0
Jul 2010 – Supplemental Funding Agreement	\$ 100.0	\$ 100.0	\$ 0
USBR Federal Funding Agreement	\$ 5.7	\$ 9.1	(\$3.4)
<b>TOTAL</b>	<b>\$ 245.3</b>	<b>\$ 248.7</b>	<b>(\$ 3.4)</b>

\* November 2006 BDCP Cooperative Cost-Share Agreement totaling \$13.5 million is not included in the above table.