

October 20, 2021

Attention: Imported Water Committee

Bay-Delta Update (Presentation)

Purpose

This memo provides an update on various activities that may impact State Water Project (SWP) yield.

Executive Summary

- In the face of a second consecutive year of dry conditions, the State of California is taking several steps to reduce diversions, preserve storage, and protect water quality in the Bay-Delta.
- The Metropolitan Water District of Southern California (MWD) also made operational changes and authorized the purchase of north-of-Delta transfer supplies to preserve its storage along the SWP to support agencies in the MWD service area that typically rely solely on SWP supplies, and thus are referred to as SWP-only areas.
- SWP supplies are anticipated to be limited going into 2022 and may continue to be constrained unless hydrology improves significantly.
- The State and water agencies continue working toward voluntary agreements to update and implement the goals of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan) without relying solely on regulation of unimpaired flows.
- The California Department of Water Resources (DWR) is developing environmental and technical documents for the proposed \$15.9 billion (in 2020 dollars) single-tunnel Bay-Delta fix. DWR expects to complete the environmental review in 2023.

Background

In three separate proclamations on April 21, May 10, and July 8, 2021, Governor Newsom declared a drought state of emergency that progressively expanded to 50 counties across California. Only eight counties, including San Diego, are not under a state of emergency. These proclamations call on agencies across the state to promote awareness, encourage actions to reduce water use, and prepare for other actions that may be necessary to address drought, temperature, and salinity conditions in the Bay-Delta.

In a July Executive Order, Governor Newsom requested California residents voluntarily reduce water use by 15% compared to 2020. Water Authority General Manager Kerl stated that while the San Diego region's investments in supplies, storage, and conservation have made it drought-safe this summer, the Water Authority supports the Governor's call for voluntary conservation to allow agencies to maximize water supplies in collaboration with each other and the state.

Through the Water Authority's decades-long diversification effort, today, about 10% of the Water Authority's supplies come from the Bay-Delta through its purchases of MWD supply. As the hub of water exports for the SWP and Central Valley Project (CVP), the Bay-Delta also supports a

critical ecosystem that is home to many endangered species. For decades, the water community has been looking for ways that projects can co-exist with the fragile ecosystem. The most recent solution is a one-tunnel Bay-Delta fix that is currently undergoing environmental review. The Water Authority's interest in the Bay-Delta fix is two-fold: to ensure the project supports the long-term health of the ecosystem and stabilizes exports, and to ensure costs are allocated properly so the Water Authority's ratepayers are protected.

Discussion

MWD State Water Project Supplies

In March 2021, after a second consecutive year of dry hydrology in combination with high temperatures and reduced runoff, DWR lowered the SWP Table A allocation from 10% to 5%, making it the second time in history the final allocation is at 5%.¹ With this allocation, MWD's Table A supplies are reduced to about 96,000 acre-feet (AF). While MWD has nearly 3.2 million AF in dry-year storage to satisfy its estimated 617,000 AF supply gap for 2021, the availability of annual stored supplies depends on take and/or exchange capacity of its storage portfolio. In addition, there are certain agencies in the MWD service area that, due to MWD infrastructure constraints, typically rely solely on SWP supplies, and thus are referred to as SWP-only areas. These agencies are more susceptible to potential shortages when SWP supplies are limited.

In April 2021, to address reduced SWP supplies and preserve storage for SWP-only areas should dry conditions persist next year, the MWD board approved the purchase of up to 65,000 AF of north-of-Delta water transfers for up to \$675 per AF prior to expected conveyance losses of 20-30%, or about \$965 per AF with these losses included. MWD reported it will use monies from the almost \$100 million in excess funds collected in fiscal year 2021 for its budgeted SWP costs, which are recovered via transportation rates. This use of SWP funds veers away from MWD's traditional cost of service to pay for transfers from its Supply Programs budget, which is funded via supply rates.

MWD also made operational changes to expand deliveries of Colorado River supplies and Diamond Valley Lake storage into areas that typically only receive SWP supplies to preserve SWP and Central Valley storage for SWP-only areas.² In May, the MWD board approved a program to provide credits to offset increased costs incurred by member agencies that shift their normal operations, at MWD's request, to instead take deliveries of Colorado River supplies during calendar years 2021 and 2022. This program will compensate the Los Angeles Department of Water and Power for accepting deliveries of treated rather than untreated water to assist MWD in serving SWP-only areas,³ as it did in 2014 and 2015. (MWD faced two consecutive low SWP allocations in 2014 and 2015 but did not consider additional actions to address SWP-only areas because the dry period was followed by a 60% allocation in 2016.) MWD is considering other near- and long-term drought actions and infrastructure investments to reduce demands for SWP supplies going forward.

¹ DWR's SWP Water Contractors page contains lists of historic SWP allocations: <https://bit.ly/3ypXliM>

² MWD rehabilitated the Greg Avenue Pump Station, which can pump roughly 3,000 AF of Colorado River supplies per month into areas typically supplied with SWP supplies.

³ Staff estimated that this action would save over 20,000 AF of SWP supplies in 2021. Overall, MWD estimates its drought actions to preserve SWP supplies will save 150,000 AF in 2021 and 240,000 AF in 2022.

On July 27, DWR and the United States Bureau of Reclamation (Bureau) submitted to the State Water Resources Control Board (State Board) a petition for a temporary change to their project permits to increase flexibility for meeting peak CVP demands. The change allowed the Bureau to borrow a maximum of 150,000 AF of SWP water from the San Luis Reservoir, provided that it be placed back once CVP operations allow delivery. By the end of 2021, the Bureau will also return 50,000 AF that was transferred to the CVP earlier this year through a different petition.

As of October 18, 2021, Lake Oroville and San Luis Reservoir are at 22% and 10% of capacity, respectively, or 37% and 20% of average for this time of the year.⁴ With low end-of-year storage, MWD staff reported it anticipates the initial SWP allocation for 2022 will be 0%, with a roughly even chance of reaching a 20% allocation by the end of 2022. In September, MWD staff reported it is exploring opportunities to withdraw from emergency storage in DWR's reservoirs in early 2022 to serve SWP-only areas in anticipation of the low SWP allocation and to repay any water withdrawn as soon as possible.

Bay-Delta Diversions

Governor Newsom's May 10 proclamation called on the State Board to consider adopting an emergency regulation to curtail diversions in the Delta watershed to protect supplies for health, safety, and the environment. In June, the State Board sent Notices of Water Unavailability to all water right holders in the Delta watershed. While not orders to stop diverting, these notices alerted post-1914 appropriative water right holders that the State Board determined water supply is insufficient to support diversions under their rights and warned pre-1914 appropriative right holders of impending unavailability. MWD expected this notice to put a portion of its north-of-Delta water transfers at risk; in September, MWD reported it expected to reduce its transfer supply purchases from 65,000 AF to 43,000 AF, about 66% of its authorization.

On July 23, the State Board released a draft emergency curtailment and reporting regulation for public review and comment and a Notice of Water Unavailability for senior water right holders in the Delta watershed. Adopted on August 3, this requires water right holders in the Delta watershed to curtail their diversions in order of water right priority when the State Board determines water is unavailable for their rights. The regulation will remain in effect for one year unless repealed or readopted. On August 20, the State Board issued curtailment orders through August or September to about 4,500 out of 6,600 right holders in the Delta watershed. On September 2, a group of irrigation districts and the City and County of San Francisco filed suit against the State Board, challenging its authority to curtail diversions.

In July, MWD Bay-Delta Initiatives Manager Arakawa reported that given the notices of unavailability, MWD contacted the lessees on its Delta islands to ensure they are conforming with all relevant drought guidance and regulations. In response to Director Hogan's question on how the emergency curtailment regulation is affecting MWD's SWP supplies, Arakawa stated that because most SWP supplies this year are coming from the San Luis Reservoir, which is south of the Delta, the SWP contractors are working to ensure they preserve access to these stored supplies.

⁴ As shown on DWR's Daily Reservoir Storage Summary: <https://bit.ly/3x8Xefq>

Bay-Delta Salinity

In June, the State Board granted a petition from DWR and the Bureau that reduced Delta outflow and agricultural water quality requirements in the summer months to preserve storage to meet other project obligations in 2021 and improve storage conditions going into 2022. DWR also constructed an Emergency Drought Salinity Barrier on the West False River in the Delta in June to address salinity intrusion and preserve storage in upstream reservoirs. Under its permit, the barrier is supposed to be removed no later than November 30, 2021, but DWR requested a one-year extension due to drought conditions.

While the State Board approved several such emergency measures as the drought progressed, it earlier warned DWR and the Bureau about SWP and CVP violations of flow and salinity requirements in an April 30 letter:⁵

Although the current violations are exacerbated by the extreme dry conditions, they are in part the result of the overallocation of Project water during dry conditions. Additionally, risk management and operational decisions by the Projects were made that appear to have discounted the need to maintain regulatory compliance... [As] we look beyond the current water supply struggle—whether it is unpredictably relieved or extended next year—we cannot revert to managing the Projects as though ensuing years will be “average.”

Voluntary Agreements

The State Board’s effort to update the Bay-Delta Plan to address southern Bay-Delta salinity and San Joaquin River flow levels started in 2009. In 2018, the State Board issued a framework to address water quality concerns in the Sacramento River/Delta based on unimpaired flows, which would reduce water exports. Since then, the California Natural Resources Agency has been simultaneously negotiating voluntary agreements with water agencies and some non-governmental organizations to update and implement the goals of the Bay-Delta Plan without relying solely on regulation of unimpaired flows.

In February 2020, Governor Newsom released an updated framework for the voluntary agreements, which called for over \$5 billion in funding from the federal and state governments and water users. The governor’s framework included 815,000 to 912,000 AF of flows for the environment, over 60,000 acres of habitat restoration, a science program, and a goal to double salmon populations by 2050. Some non-governmental organizations criticized the voluntary agreement framework for double counting habitat restoration and providing fewer flows than those proposed in the State Board’s updated framework based on unimpaired flows.

Due to differences between the recently adopted operating rules for the SWP and CVP, the state and federal governments have been in litigation since early 2020. Due to the litigation, the voluntary agreement negotiations paused shortly after the Newsom Administration released the updated framework. However, on January 20, 2021, President Biden issued an Executive Order calling for a review of several environmental rules and regulations issued during the Trump Administration, including the biological opinions underlying the SWP and CVP coordinated long-

⁵ See the State Board Chair’s letter to DWR and the Bureau regarding Compliance with Water Right Requirements in the Bay-Delta Watershed: <https://bit.ly/37911yW>

term operations. On September 30, the Bureau requested review of the biological opinions to meet the requirements of the Executive Order and “voluntarily reconcile” SWP and CVP operations. The review may result in an update to both federal and state rules and resolution of the litigation.

The Governor released a new proposed voluntary agreement framework in August with flow requirements similar to those in the state’s operating rules, and the Governor’s May Revise budget proposed \$466 million for the voluntary agreements. There have been reports that the Governor and water agencies are working to reach an agreement as soon as possible, and that the term of the agreements has been shortened from 15 years to eight.

In its press release announcing adoption of the emergency curtailment regulation, the State Board encouraged water users to collaborate on the voluntary agreements. However, conservation, environmental justice, fishing groups, and tribes have sent correspondence to both the Biden Administration and state legislators opposing the voluntary agreements and their proposed funding, claiming the groups have been excluded from the “backroom” negotiations, and calling for the State Board to implement its unimpaired flow standards through a public process.⁶

Bay-Delta Project

At its July 2019 Board meeting, the Water Authority conditionally supported Governor Newsom’s water resilience portfolio approach, including a single-tunnel Bay-Delta project and integrated multi-benefit solutions that address water supply availability and environmental health.⁷ The support for the tunnel is contingent upon costs being properly allocated to supply charges to ensure alignment with its purpose to stabilize water supplies, and to ensure Water Authority ratepayers would not be disproportionately impacted due to the Water Authority’s reliance on MWD to transport its independently obtained Colorado River supplies.

The \$15.9 billion tunnel would result in a “dual conveyance” system by creating an alternative method for SWP water diversion north of the Delta to complement existing facilities. DWR is preparing a draft EIR, expected in mid-2022. The final EIR is expected in 2023, and DWR expects to secure permits by 2024. DWR will also develop initial operating criteria in its draft environmental documents and adopt final operating criteria following completion of the environmental processes. DWR hosted public informational webinars between July and September 2021 to provide background related to the draft EIR.⁸ These webinars covered operations of the SWP and tunnel, fisheries, climate change, and environmental justice.

MWD estimates the supply benefit of the single tunnel may range from 100,000 AF to 1,000,000 AF annually depending on regulatory decisions such as the implementation of the Bay-Delta Plan framework or voluntary agreements. In December 2020, the MWD board approved funding up to

⁶ See the May 7, 2021, letter to the Secretaries of the Department of the Interior and Department of Commerce: <https://on.nrdc.org/3xyiv2g>

See the August 3, 2021, letter to California State legislators: <https://bit.ly/3fLsLyd>

⁷ See the July 2019 Bay-Delta & Project Policy Principles: <https://bit.ly/3zJa9q6>

⁸ For more information about the webinars, including presentations and video recordings, visit DWR’s Informational Webinars webpage: <https://bit.ly/3ibE8Rv>

47.2 percent (\$160.8 million) of the \$340.7 million project planning costs, representing roughly its own Table A shares.

In August 2020, DWR filed a validation suit to seek judicial affirmation of its authority to issue revenue bonds to finance the proposed tunnel. A number of Bay-Delta water agencies and environmental groups are challenging the validation, arguing it is unlawful because DWR has not yet defined a final project or completed the public environmental review and permitting processes.

The Delta Conveyance Finance Authority, a Joint Powers Authority originally formed by contractors participating in the discontinued California WaterFix project (working with DWR) to issue bonds to finance the twin tunnels, continues to meet on an as-needed basis to complete administrative actions since the shift in direction to a single-tunnel project. The Delta Conveyance Design and Construction Authority (DCA), another Joint Powers Authority also originally formed by WaterFix participating contractors to undertake design and construction activities, assists DWR with engineering and field work activities to support the single tunnel's environmental review process. Some Delta-region participants in the DCA's Stakeholder Engagement Committee, created to provide input on engineering concepts for the tunnel, have left the group over dissatisfaction with the process.

State Water Project Contracts

In February 2021, MWD executed a SWP contract amendment for water management tools, which will provide more flexibility in managing SWP supplies through transfers and exchanges between contractors in the face of growing supply uncertainties. The amendment became effective February 28, 2021. In September 2020, non-governmental organizations filed two lawsuits challenging DWR's final EIR and approval of the water management tools amendment based on alleged violations of the California Environmental Quality Act, the Delta Reform Act, and the public trust doctrine. MWD and 21 other SWP contractors also executed an amendment to extend the SWP supply contracts through 2085, but DWR is waiting for a trial court decision on its lawsuit to validate the contract extension before implementing this amendment.

On September 21, an appellate court affirmed three prior rulings related to the litigated 1994 Monterey Amendment to the SWP contracts, which made changes to water supply management practices, including allocations during times of shortage. The amendment also recommitted DWR to make reasonable efforts to complete SWP facilities and transferred ownership of what is now the Kern Water Bank to Kern County Water Agency. MWD staff reported it believes the September 2021 ruling will conclude the 26-year litigation over the Monterey Amendment.

Next Steps

Water Authority staff will continue to monitor activities that affect SWP yields and the Bay-Delta tunnel project and report back to the Board with additional updates as necessary.

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