

March 20, 2019

Attention: Imported Water Committee

Bay-Delta Flows and Update (Presentation)

Purpose

This memo provides an update on various activities that could impact State Water Project yield and California WaterFix.

Executive Summary

- Over the last several months, state and federal agencies have taken actions that could impact State Water Project (SWP) yield and California WaterFix (WaterFix).
- Most notably, Governor Newsom announced his support for a one-tunnel WaterFix project, which prompted the Department of Water Resources (DWR) to ask for and receive a 60-day stay for change in diversion points hearings being held at the State Water Resources Control Board (State Board).
- On December 12, 2018, before Governor Newsom took office, DWR and the Bureau of Reclamation (Bureau) reached several agreements related to SWP and Central Valley Project (CVP) operations as well as WaterFix, some of which may reduce State Water Project supplies.
- Also, on December 12, 2018, the State Board approved an update to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan) for the San Joaquin River based on unimpaired flows, which have energized several state and water agencies to work together on voluntary settlement agreements as an alternative method of implementing the Bay-Delta Plan.
- These issues will continue to evolve due to pending actions and legislation in the months ahead.

Background

As the hub of the SWP, the Sacramento-San Joaquin Bay-Delta (Bay-Delta) is a key component in Southern California's water supply source,¹ yet its ecosystem is declining due to development, pollution, farming, water exports, climate change, and other factors. Ever-increasing environmental regulations coupled with a series of prolonged droughts in recent years have significantly reduced water exports from the SWP and CVP. Regulatory measures such as salinity control, outflow

¹ A portion of the Water Authority's supplies comes from the Bay-Delta via Metropolitan Water District (MWD). Over the past two decades, the Water Authority and its member agencies have increased the region's water use efficiency and diversified its supplies, and as a result, significantly reduced the region's reliance on MWD, which, in turn, reduced the region's reliance on supplies from the Bay-Delta. These efforts are consistent with the state's directive to decrease dependence on the Bay-Delta in meeting California's future water supply needs. Nonetheless, a small portion of the Water Authority's supplies may continue to come from the Bay-Delta. Thus, the resolution of the Bay-Delta conflicts and resultant cost recovery of a Bay-Delta solution is of continued interest to the Water Authority.

requirements, and regulation of reverse flows are intended to minimize environmental impacts and influence water exports. To address ecological and supply issues, state and federal agencies developed the Bay Delta Conservation Plan (BDCP), which has since been separated into two components: California EcoRestore and California WaterFix.²

Since 2012, the Water Authority Board spent considerable time guiding staff's review of BDCP and subsequently WaterFix. It did not take a formal position on the project until August 2018 due to the project's unclear cost and supply impacts to the Water Authority's ratepayers.³ Following MWD's decision, in April 2018 and again July 2018, to support the WaterFix project and commit to pay 64.6 percent of the project's cost estimated at \$16.7 billion,⁴ last August, the Water Authority Board updated its Bay-Delta policy principles and authorized conditional support for WaterFix "as currently proposed." Because the MWD Board committed to pay for the twin tunnels project, the focus of the Water Authority's Board became how MWD will allocate the project's costs among its rates and charges. The Water Authority Board conditioned its support for the project on a MWD financing and rate recovery plan that properly allocates the project costs to conservation, or supply, as similar projects had been historically categorized and allocated in MWD's SWP supply contract. The updated policy principles continue to support the co-equal goals of ecosystem restoration and water supply reliability, state ownership and operation of SWP, including WaterFix facilities, and the establishment of an independent oversight function to provide transparency and accountability.

Discussion

This report provides an update on some of the recent developments affecting Bay-Delta policies and SWP operations since the Board expressed conditional support for WaterFix.

Bay Delta Plan Update

State Board Process

On December 12, 2018, the State Board approved updated flow requirements for the San Joaquin River tributaries as part of its update to the Bay-Delta Plan.⁵ The Bay-Delta Plan establishes water quality control measures and flow requirements to provide reasonable protection of beneficial uses in the watershed. It is being updated through two separate phases, the first of which involves the San Joaquin River and the second of which involves the Sacramento River and Bay-Delta flows (Sacramento/Delta). The San Joaquin Plan update requires irrigation districts to reduce diversions and leave 40 percent of watershed runoff in the rivers⁶ to help boost salmon populations, which have decreased by 85 percent since the mid-1980s.⁷ The State Board

² More information about the Water Authority's Bay-Delta memos and presentations may be found here: <https://www.sdcwa.org/bay-delta-board-memos-presentations>

³ Over seven years, the Water Authority Board discussed what is now WaterFix at more than 40 public meetings with presentations from 18 stakeholders to hear different viewpoints on the project.

⁴ In 2017 dollars.

⁵ See the Bay-Delta Plan updates here:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/2018_sed/docs/appx_k_revised_w_adopted_changes.pdf

⁶ With an allowed adaptive range of 30-50 percent.

⁷ Under the current Bay-Delta Plan, diversions can sometimes leave only 6 percent of available flows in the river in dry years, with an average flow ranging from 21-40 percent of unimpaired flow. For additional information, see the

estimates these new flow requirements will result in a 14 percent reduction, about 293,000 acre-feet, in surface water supply for agriculture, drinking water, and hydropower generation for San Joaquin River users.⁸ The update is grounded on the premise that maintaining freshwater flows preserve healthy salinity levels and dilute other pollutants in the Bay-Delta; it also includes more stringent salinity standards for the southern Bay-Delta, creating a year-round standard rather than the current seasonal standards.

The San Joaquin Plan update is now in effect following the Office of Administrative Law's approval last month. Separately, the Sacramento/Delta Plan update, which will impact SWP exports, is still in development. Last July, the State Board issued a framework document for the Sacramento/Delta Plan update, which would require about 55 percent of unimpaired flows to be left in the river, or about 2 million acre-feet impact to water deliveries. The State Board plans to continue the Sacramento/Delta Plan update later this year with the release of a draft proposed plan and staff report for public review.

Voluntary Settlement Agreements

The State Board's reliance on unimpaired flows to set flow standards is of concern to many water districts.⁹ On December 12, the same day as the State Board was deciding the San Joaquin Plan update, the DWR and the California Department of Fish and Wildlife (CDFW) presented a framework proposal for voluntary agreements with water agencies to update and implement the goals of the Bay-Delta Plan. The voluntary settlement agreements process is supported by both the Brown and Newsom administrations. Rather than relying solely on leaving flows in the rivers, these agreements would lean on non-flow measures to address environmental deterioration. While the State Board did not incorporate the framework proposal in the update, it did indicate that it would make "allowances for reduced river flows on tributaries where stakeholders have reached voluntary agreements to pursue a combination of flow and 'non-flow' measures that improve conditions for fish and wildlife, such as habitat restoration and reducing predation."¹⁰

Under the proposed framework, these voluntary agreements would last a minimum of 15 years and would consider conditions in each individual watershed to adopt appropriate flow and non-flow measures to accomplish the objectives set out in the Bay-Delta Plan without "a lengthy

State Board's FAQs here:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/bay_delta_faq.pdf

⁸ See Executive Summary of the Substitute Environmental Document for the Bay-Delta Plan Update here:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/2018_sed/docs/00_ES.pdf

⁹ In a letter commenting on the Bay-Delta Plan amendments, the Association of California Water Agencies (ACWA), which represents over 445 public water agency members, stated that "[b]y reducing available surface water supplies and triggering increased groundwater pumping, the [State Board's] approach works against the goals of the Sustainable Groundwater Management Act ("SGMA"). The proposed approach would additionally undermine the implementation of the California Water Action Plan, particularly in the areas of improving water supply reliability, sustainably managing groundwater, and providing safe drinking water for all communities." See ACWA's complete comments here: <https://www.acwa.com/wp-content/uploads/2018/07/ACWA-Comments-Revisions-to-Proposed-Bay-Delta-Plan-Amendments.pdf>

¹⁰ Reported in the State Board's press release:

https://www.waterboards.ca.gov/press_room/press_releases/2018/pr121218_bay-delta_plan_update.pdf

administrative process and the inevitable ensuing lawsuits.”¹¹ Funding to implement the agreements would come from water suppliers, state bonds, and potentially the federal government, and the participants would also be responsible for monitoring, assessing, reporting, and managing the programs. Some groups argue that many habitat restoration projects included in the proposed framework for voluntary agreements are already required or planned and, therefore, the proposals would not add enough new environmental benefits.¹²

On March 1, 2019, DWR and CDFW submitted documents to the State Board outlining more details of the potential voluntary settlement agreements for further legal and scientific analysis and review.¹³ The submission included a cover letter signed by 44 parties, some of whom were representatives of environmental groups, that outlined a common goal of reaching an agreement. Measures to generate increased flows include land fallowing, reservoir storage, demand reduction, and limited use of groundwater substitution and would consider “the ability for economies to absorb changes in water supply, water quality requirements, and funds available to purchase water for environmental uses.” According to the project description, these measures would result in roughly 700,000 “new” acre-feet of water flowing into the Bay-Delta.¹⁴ Through contributions based on deliveries and diversions, participating water agencies anticipate generating \$425 million for flow measures and \$262 million for habitat restoration and a science program to inform implementation of flow and non-flow measures over the proposed 15-year term of the agreements. There may also be more than \$832 million in state and federal funding. The agreements will be enforceable under yet-to-be specified terms, but that are consistent with the State Board’s responsibilities and legal authority. Some issues that are to be addressed by June 30, 2019, to meet the State Board’s review timeframe, include how to manage the impact of diversions on third parties, how to enforce the agreements and potential remedies for failure to implement their measures, and the relationship between the agreements and existing regulatory requirements.

Legal Challenges

Since the passage of the San Joaquin Plan update, the State Board is now facing several legal challenges due to the Plan’s requirements regarding unimpaired flows and the precedent it may set for future updates. The City and County of San Francisco, the San Joaquin Tributaries Authority, the Merced Irrigation District, the Modesto Irrigation District, the Santa Clara Valley Water District, and the California Farm Bureau Federation have all filed lawsuits against the plan, alleging California Environmental Quality Act (CEQA) violations and detrimental effects

¹¹ A letter from Governor Brown and then-Lieutenant Governor Newsom to the State Board found here: <http://www.norcalwater.org/wp-content/uploads/BrownNewsomLetter.nov2018.pdf>

¹² At the January Water Planning & Stewardship Committee meeting, MWD staff appeared to confirm that flow increases proposed in the voluntary agreements were commitments to existing regulations in the 2008 and 2009 biological opinions: <https://mavensnotebook.com/2019/01/10/metropolitan-water-planning-stewardship-committee-coordinated-operations-agreement-for-the-swp-cvp-voluntary-settlement-agreements/>. More details on habitat restoration projects found in the Sacramento Bee article “*Newsom inherits a ‘whole bunch of headaches’ despite last-minute water deals by Brown*”: <https://www.sacbee.com/news/state/california/water-and-drought/article223570390.html>

¹³ All supporting documents found on the California Natural Resources Agency website: <http://resources.ca.gov/voluntary-agreements/>

¹⁴ 670,000 AF in dry, 669,000 AF in below normal, and 704,000 AF in above normal years.

on local water supplies and the local economy without accomplishing intended benefits. Environmental groups generally support the plan as a first step but prefer a 60 percent flow requirement based on the recommendation of a flow criteria report adopted by the State Board in 2010, which did not consider impacts to other water users.¹⁵

Update to the Coordinated Operation Agreement

On December 12, 2018, DWR and the Bureau also signed an addendum to the Coordinated Operation Agreement (COA), which governs how to jointly operate the SWP and CVP. The COA, adopted in 1986, defines how the two projects are to be operated to optimize the exchange of water and services; to optimize exports, including storage releases; and to meet regulatory obligations. This update, the first since the COA's adoption, was meant to incorporate the effects of new facilities and regulations that have since come into effect.¹⁶ The results of the COA addendum shift exports from the SWP to the CVP in varying amounts based on the "year type." The CVP will gain approximately 113,000 acre-feet in average years and approximately 207,000 acre-feet in dry years.¹⁷ About half of this reduction in water supply for SWP contractors would impact MWD's water supply.¹⁸ This addendum is in effect now, but faces a legal challenge from the Pacific Coast Federation of Fishermen's Association, the North Coast River Alliance, the Institute for Fisheries Resources, the San Francisco Crab Boat Owners Association, and the Winnemem Wintu tribe.¹⁹

Updated Biological Opinions for Bay-Delta Species

Last October, President Trump signed a Presidential Memorandum that among other things called for "streamlining Western water infrastructure regulatory processes and removing unnecessary burdens." The memorandum accelerated a process that began under the Obama administration, and set a deadline of January 31 for updated biological assessments for the coordinated operation of the CVP and SWP under Section 7 of the Endangered Species Act (ESA).²⁰ On February 5, the Bureau released its biological assessment, which if incorporated into updated biological opinions would have the effect of relaxing environmental regulations to maximize water supply and delivery. As part of the formal Section 7 consultation process, the assessment is being reviewed by the U.S. Fish and Wildlife Service, the National Marine Fisheries Services and the public. The Presidential Memorandum also called for the fishery agencies to issue final biological opinions later in 2019. The current biological opinions, from 2008 and 2009, include information about the effects of CVP and SWP operations on species and critical habitat listed in the ESA, as well as alternative actions to mitigate negative impacts.

¹⁵ See the State Board's press release here:

https://www.waterboards.ca.gov/press_room/press_releases/2018/pr121218_bay-delta_plan_update.pdf

¹⁶ New SWP facilities include the Barker Slough Pumping Plant and the Harvey O. Banks Pumping Plant 4-pump expansion, and new regulations like biological opinions regarding SWP and CVP operations and updates to the Bay-Delta Plan in 1995 and 2006.

¹⁷ See the full Environmental Assessment here:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=36503

¹⁸ Based on MWD's allocated Table A State Water Project supply.

¹⁹ Information about the lawsuit found here: <http://www.volkerlaw.com/wp-content/uploads/2019/01/34-2019-80003057-Verified-Petition-for-Writ-of-Mandate-and-Complaint-filed-2019-1-16.pdf>

²⁰ See the complete memorandum here: <https://www.whitehouse.gov/presidential-actions/presidential-memorandum-promoting-reliable-supply-delivery-water-west/>

Though generally supported by CVP contractors, the Bureau's assessment may not be supported by State regulators, who can impose more stringent regulations to meet current obligations under state law.²¹ For example, in October 2017, the Bureau operated CVP in a manner with which CDFW disagreed; as a result, CDFW required storage releases from SWP to protect the species. In the 2019-20 Legislative Session, Senate President pro Tempore Atkins and other Senators have proposed Senate Bill 1, which would ensure that certain federal environmental protections in existence prior to Trump taking office are not weakened and would be enforceable under state law.²²

Cost Sharing Agreement

On December 12, 2018, DWR and the Bureau also signed a cost sharing agreement to meet the existing 2008 and 2009 biological opinions governing SWP and CVP operations, subject to the availability of funds. This cost-sharing agreement is seen by some as a quid-pro-quo exchange for the state giving up water through the COA Addendum.²³

Water Infrastructure Improvements for the Nation Act

The Water Infrastructure Improvements for the Nation (WIIN) Act, enacted in December 2016, authorized billions of dollars for water projects across the United States. A subsection of the WIIN Act directly addressed California's recent drought through long-term projects and short-term provisions to maximize available water supply and create alternative supplies. The WIIN Act allowed more operational flexibility when implementing environmental restrictions on pumping in the Bay-Delta through 2021. Senator Dianne Feinstein and Representative Kevin McCarthy, along with Governor Brown and the Trump administration, supported an amendment to extend the Act's expiring provisions that would allow for increased pumping and funding for storage, desalination, and water recycling projects. However, in January 2019, Senator Feinstein announced that the proposed "amendment is no longer being considered in any current legislative package," though environmental and fishing groups are still concerned that the federal government will increase pumping from the Bay-Delta.²⁴

California WaterFix

Joint Powers Authorities

In mid-2018, a number of water agencies formed two joint powers authorities (JPAs) to oversee the WaterFix project. MWD and 10 other agencies have agreed to participate in the Delta Conveyance Design and Construction Authority (DCA), which will oversee the design and construction of WaterFix, and the Delta Conveyance Finance Authority, which will secure financing for the project.

²¹ More about reactions to the assessment found here: <https://www.sacbee.com/news/state/california/water-and-drought/delta/article225376065.html>

²² The full text of Senate Bill 1 can be found here:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB1

²³ More details can be found on the Bureau's Bay-Delta Office website: <https://www.usbr.gov/mp/bdo/index.html>

²⁴ Senator Feinstein's statement found here: <https://mavensnotebook.com/2019/01/21/daily-digest-martin-luther-king-day-edition-sen-feinstein-drops-support-for-wiin-act-teenage-diver-finds-tons-of-golf-balls-rotting-off-california-coast-federal-shutdown-impacting-eel-river-salmo/>

DWR Consistency Filing

On December 7, 2018, DWR withdrew the California WaterFix Certification of Consistency with the Delta Stewardship Council (Council). As a requirement of the Delta Reform Act, DWR filed a determination of California WaterFix's consistency with the Delta Plan in July 2018. Nine appeals were filed by outside parties that led to a public hearing and workshop later in the year. In its letter of withdrawal, DWR stated that though it considered its filing of the certification appropriate based on the information that had been prepared for WaterFix, it also recognized "that there are unresolved issues related to interpretation of the requirements of the Delta Reform Act and Delta Plan policies."²⁵ Some concerns highlighted by the Council involved flow objectives, reduced reliance on the Bay-Delta through improved regional water self-reliance, and the use of best available science.²⁶

No Harm Agreement

On December 12, 2018, DWR and the Bureau executed a "no harm" agreement, which among other things provides that DWR "shall avoid, mitigate, or offset, through forms agreed to by Reclamation, any CVP water supply reduction resulting from CWF [California WaterFix] operations."²⁷ Subsequently, DWR Director Karla Nemeth sent a letter to various water districts and government agencies outlining the State's expectation that parties who stand to benefit from the COA Addendum and no harm agreement will withdraw current challenges and refrain from filing future challenges against WaterFix with the State Board.²⁸

One-Tunnel Project

Governor Brown pushed hard to get the Twin Tunnels project across the finish line before he left office in January 2019. However, in Governor Newsom's inaugural State of the State address in February, he outlined his vision to resolve the Bay-Delta conflicts and made it clear that he does not support the two-tunnel configuration. Instead, he expressly indicated his support for a one-tunnel project, coupled with a portfolio approach to developing additional regional and local water supplies to improve water supply reliability and resiliency. He also named Joaquin Esquivel as the new Chair of the State Board, which many believe shows Governor Newsom's willingness to reach a compromise on water policy with various stakeholders who viewed the former Chair as less flexible.²⁹

On March 1, 2019, as a result of the Governor's announcement, DWR and the Bureau requested a 60-day stay in change in the points of diversion hearings at the State Board. In August 2015,

²⁵ The full letter found here: <http://deltacouncil.ca.gov/withdrawn-department-water-resources-california-waterfix-certification-consistency-delta-plan>

²⁶ Delta Stewardship Council staff's draft determination found here: <http://deltacouncil.ca.gov/sites/default/files/2018/11/Staff%20Draft%20Determination%20re%20California%20WaterFix%20%28C20185%29.pdf>

²⁷ The No Harm Agreement found here: <https://www.restorethedelta.org/wp-content/uploads/No-Harm-Signed-3.pdf>

²⁸ The full letter found here: <https://www.restorethedelta.org/wp-content/uploads/Letter-Re-Dismissals-1.pdf>

²⁹ Esquivel replaces Felicia Marcus, who has been supportive of reducing water exports to cities and farming communities in order to restore fish populations. Supporters believe this may mean the Board will now support voluntary settlement agreements, which Newsom expressed support for in the past. Read more in the Sacramento Bee: <https://www.sacbee.com/news/state/california/water-and-drought/delta/article226144155.html>

DWR and the Bureau submitted a petition for a change in points of diversion for WaterFix, which would give the agencies permission to construct intakes to divert water from the Sacramento River at a point upstream of the existing diversions. These intakes could have impacts on water right holders and existing users and must be approved by the State Board. DWR and the Bureau were granted a 60-day stay in hearings while California determines the details of a one-tunnel project with portfolio elements.

While many specifics about the project have yet to be determined, including the size and environmental review requirements, substantial analysis has been performed for the project since 2011. In 2018, DWR published a cost-benefit analysis for Stage 1 of WaterFix, which would include a single tunnel.³⁰ Design and construction of the tunnel, including mitigation, was estimated at \$11.09 billion in undiscounted 2017 dollars, with operation and maintenance costs ranging from \$31.1 million to \$49.5 million annually over the 100-year project. Other unknowns include the impact of the no-harm agreement on a one-tunnel project, which requires SWP avoid, mitigate, or offset CVP water supply reductions resulting from WaterFix. If less water is able to be exported through a single tunnel, SWP contractors may be significantly impacted by the agreement to not reduce CVP water supply.

Next Steps

Water Authority staff will continue to monitor activities that will affect WaterFix and State Water Project yields and report back to the Board with additional updates as necessary.

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³⁰ The 2018 WaterFix Economic Analysis found on the WaterFix website: https://live-california-waterfix.pantheonsite.io/wp-content/uploads/2018/02/WaterFixEconomicAnalysis_Final.pdf