

Meeting Minutes

Meeting of the California Water Commission Wednesday, November 17, 2021 Remote Meeting Beginning at 9:30 a.m.

1. Call to Order

Chair Teresa Alvarado called the meeting to order at 9:30 a.m.

2. Roll Call

Executive Secretary Kimberly Muljat called the roll. Commissioners Alvarado, Arthur, Gallagher, Makler, Solorio, Steiner, and Swanson were present, constituting a quorum.

3. Closed Session

The Commission did not hold a closed session.

4. Approval October 20, 2021, Meeting Minutes

Commissioner Solorio motioned to approve the October 20, 2021 meeting minutes. Commissioner Gallagher seconded the motion. All Commission members present voted in favor.

5. Executive Officer's Report

Executive Officer Joseph Yun said the groundwater trading workshops are complete, and staff will be discussing the Commission's groundwater trading work at five more local meetings. The initial draft of the white paper should come before the Commission in January. Today's State Water Project (SWP) presentation will conclude the 2021 briefings, and staff will begin drafting the annual review, which should come before the Commission in February. The applicant for the Kern Fan Groundwater Storage Project in the Water Storage Investment Program (WSIP) has officially changed from the Irvine Ranch Water District and Rosedale-Rio Bravo Water Storage District to the Groundwater Banking Joint Powers Authority. The Commission received two comment letters too late to post online; these were sent to Commissioners via email. Staff will post them after today's meeting. The December Commission meeting agenda will be comprised entirely of WSIP items, with the remaining four projects and some screening projects coming in for feasibility determinations.

Commissioner Solorio asked how many screening applicants will be discussed at December's meeting, and what options exist for using the remaining dollars. He was told there are two screening projects coming before the Commission and options can be discussed following the outcome of those determinations.

6. Commission Member Reports

Commissioners Gallagher and Steiner both attended the Commission's groundwater trading workshops. Commissioner Solorio was part of the California Forward Economic Summit.

7. Public Testimony

There was no public testimony.

8. Water Storage Investment Program: Chino Basin Conjunctive Use Environmental Water Storage/Exchange Program Continuing Eligibility and Feasibility Determination (Action Item)

WSIP Program Manager Amy Young presented the staff recommendation regarding the Chino Basin Conjunctive Use Environmental Water Storage/Exchange Program's feasibility, consistent with WSIP regulations and as required by Water Code §79757, for the Commission's consideration. By January 1, 2022, feasibility studies must be complete, draft environmental documentation must be available for public review, the Director of the Department of Water Resources (DWR) must receive commitments for not less than 75% of non-public benefit cost share of the project, and the Commission must find the project is feasible and will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta. The five categories of feasibility are technical, environmental, economic, financial, and constructability. A review of project operations, engineering designs, costs and construction methods found the project can be technically and physically constructed and operated. A review found that most significant impacts for the project will be mitigated, there may be significant and unavoidable impacts and a Statement of Overriding Considerations will be prepared, and documentation shows environmental feasibility. Based on a review of all benefits and costs, benefits exceed costs showing the benefit to cost ratio is greater than one, showing economic feasibility. A review found funds from all sources are sufficient to cover all costs, costs allocated to non-public beneficiaries are consistent and do not exceed benefits received, and documentation shows financial feasibility. A draft environmental report was released for public review October 28, 2021. The Director of DWR received a letter of commitment and supporting documentation for 75% of the non-public funding on October 21, 2021. Statutory requirements were met. Based on documents received, staff recommended the Commission find the project feasible.

Commissioner Makler asked about a letter sent November 10 by three retail wastewater/water service providers within the Inland Empire Utility Agency (IEUA) service area, which said that the funding sources IEUA identified for the financial commitment of the the non-public benefit cost share include future IEUA wastewater rates and water supply reliability costs paid for by member agencies. The providers are concerned that IEUA is making a financial commitment on behalf of its collective members without receiving commitments of public funds from their respective governing boards. IEAU General Manager Shivaji Deshmukh said the concerns are taken seriously and they continue to work toward addressing issues as they arise. If the project is determined to be feasible, they will continue monitoring allocations of costs.

Commissioner Solorio asked about the ongoing commitment to working with partner agencies, if not determined to be feasible, and to speak about the significance of the project in relation to Southern California. Mr. Deshmukh discussed funding in relation to rate costs for customers, stating they have secured state revolving fund loans and are confident with the amount of funding they could receive from grants in order to maintain affordable rates. Mr. Deshmukh talked about the IEUA being the only municipal water district located in the County of San Bernardino that has access to untreated SWP supplies. The Chino Basin Program also has a vast supply of groundwater to provide reliability and flexibility in the region.

Commissioner Steiner asked what the timeline is to work with agencies to finalize agreements identified in the November 16 letter submitted by seven water districts in support of the Chino Basin Project. IEUA Program Manager Liz Hurst said they are continuing to work to develop local participating agency agreements with goal of a draft agreement by winter 2022 and final agreement in summer 2023.

Chair Alvarado entertained a motion to find the project feasible and adopt a supporting resolution to that effect. Commissioner Solorio moved to accept the motion and Vice Chair Swanson seconded the motion. All Commission members present voted in favor.

9. Groundwater Trading: Workshop Results

As part of the Commission's consideration of well-managed groundwater trading programs to support Water Resilience Portfolio Action 3.6, Lisa Beutler, Executive Facilitator for Stantec, reported on the two public workshops hosted by the Commission in October. At the workshops, diverse participants discussed how groundwater trading could impact or benefit them. Most attendees represented water jurisdictions, agencies, and associations. Each workshop included panels of four stakeholders representing different entities such as researchers, environmental non-profits, farm advocates, groundwater sustainability agencies, disadvantaged communities, and others. Feedback from participants showed the importance of equity, protecting water for human and health and safety, fully engaging stakeholders, understanding third-party impacts, and ensuring a means of monitoring and mitigating impacts are in place. Participants expressed strong interest in more information and education regarding groundwater trading, and more facts about how trades will occur. They are concerned about jumping in to trading too quickly and noted that each program must be tailored to each particular location. Breakout sessions addressed points of divergence and how to find balance. In general, participants in the breakout discussions recognized the benefit of an "and/both" approach that acknowledges and incorporates the perspectives on both sides of the spectrum. In the discussion of local control vs. state oversight, most felt there should be some oversight, best at the beginning and the end, with articulated need for local control. In the discussion of customization vs. standardization, there was a general trend to customization, but a recognition that some standardization is helpful for assisting with monitoring and tracking, although standardized software may still need some customization to accommodate local conditions. In the discussion of transparency vs. confidentiality, there was a general trend to transparency, to make sure the market is fair, but an acknowledgement of the need for confidentiality to protect certain information.

Unanswered questions for future discussion included the impact of water rights, managing the surface and groundwater interrelationships, the public trust doctrine, and amending SGMA.

In conjunction with the workshops, the project team ran a four-week survey that had 135 respondents, 24 percent from Tulare County, and 67 percent were either groundwater sustainability agencies or well water users. According to respondents, the three most important things to include in future policy decisions are that trading rules are clear, water use is measured, and accounting and allocations are in place. The highest priorities for a potential state role taken from a survey of stakeholders was to ensure metrics and monitoring are in place, to provide guidance and minimum standards, and to issue best management practices.

Commissioner Steiner noted how the workshops reinforced what the Commission has heard from the expert panelist presentations at Commission meetings. People start with adamant positions, then start to recognize that neither end works and something in the middle is how it has to be done. Concerns about disadvantaged communities and tenant farmers were a significant issue.

Commissioner Gallagher noted how everyone was engaged and participating at the workshops, and had an opportunity to hear one another and go from either/or to and. What stood out the most was the idea that the system may go wrong and that is when the state steps in.

Safeguarding will be difficult, it will require lots of nuance, so it is best to start small.

Commissioner Arthur remarked on the great workshops and level of participation. All of the preparation that staff did was right on point. The Commission's white paper could focus on the state's ability play a role, and how does that safeguard role play out if things do go wrong.

Vice Chair Swanson said we should think about providing solutions. We are going to serve ourselves well by working together. Many of these solutions really flow together, and will help multiple constituencies at the same time. We need to have flexibility to go where we need to go. People find themselves on opposite sides, but solutions will be the same for both.

Chair Alvarado said what stood out was the fairness of state oversight, with the flexibility of local control, a hallmark of the Water Resilience Portfolio, and asked if there were any important stakeholder groups the Commission did not get strong response rates from. Ms. Beutler said there was huge consistency in answers, and would be surprised if further input was different. Assistant Executive Officer Laura Jensen said staff is also collecting feedback through localized outreach by attending meetings, having similar conversations, and presenting similar information.

10. State Water Project Briefing: Construction Update

The Commission continued its 2021 SWP briefings as DWR Division of Engineering Acting Manager Jeanne Kuttel briefed the Commission on the status of major SWP investigative, construction, and refurbishment efforts for 2021, providing a small representation of the more than 200 different projects of varying degree of complexity and size with a total annual expenditure of between \$200-300 million. The Fire and Life Safety Modernization program

status showed Thermalito is complete, Hyatt Pumping Plant has a final Office of the State Fire Marshal (OSFM) inspection next month, San Luis Field Division saw OSFM approve 15 of 19 design packages with the remainder to be approved this month, and the San Joaquin Field Division full design will begin next month with construction starting November 2023. The California Aqueduct Canal Liner and Embankment Repair program had 28 sites completed in 2021 with 60 to 80 sites planned for 2022. Multiple panel replacement and repair methodologies are scheduled based on operational constraints, with a planned completion in 2025. Emergency repair work was done to stop a 1,000-gallon-per-minute leak at milepost 54.95. The canal liner from milepost 173-213 was raised in response to subsidence. The South Bay Aqueduct (SBA) Reliability Improvement Program Outage includes inspection, preventative maintenance and designed repairs along the SBA pipelines and terminal tank to maintain and improve the reliability of water delivery. California Aqueduct Radial Gate Maintenance and Repairs involved ongoing improvements to condition assessment, maintenance, refurbishment and replacements to the radial gates along the aqueduct. Beginning in 2021, DWR will begin replacing 10 gates within the Delta Field Division, with completion date of 2025.

Bethany Dams Restoration and Rodent Burrow Prevention will ensure dam safety by refacing the dam with wire mesh and armoring with rip rap. The majority of the work was completed in 2021, specifically the armoring; small components of the project will continue into 2022. This project required a lengthy environmental process due to its proximity to endangered species habitat. Castaic Dam Outlet Tower Seismic Retrofit will retrofit tower piers with carbon-fiber wrapping and bridge hinge modifications. This is one of the first design and construction projects under the Castaic Dam Modernization Program. The project required a reservoir drawdown, which was coordinated with local stakeholders. The Oroville Dam River Valve Outlet System Rehabilitation will install two 72-inch spherical valves over a 12-month construction schedule. This will include demolition and reconstruction of the thrust block, pressure relief wall, and existing hydraulic and electrical equipment; and installation of a new hydraulic system, electrical system, ventilation system and seat water system. Design is complete, and start of construction will be dependent on a favorable water year. The Gianelli Pumping-Generating Plant Unit Refurbishment will redesign, replace and refurbish rotating and embedded components to Original Equipment Manufacturer (OEM) design as components are at the end of their service life. DWR has completed six of the eight unit refurbishments to date, and is scheduled to complete in the rest in 2024. Dos Amigos Pumping Plant Unit Refurbishment and Automatic Voltage Regulator replacement will redesign, replace, and refurbish rotating and embedded components to OEM design as components are at the end of their service life. This is a multi-year effort to complete the six units, at a rate of approximately one unit every two years. SWP Control, Protection, and Regulatory Compliance Asset Replacement is a multi-year effort to upgrade the entirety of SWP facilities by replacing end-oflife electrical protection and control equipment to keep compliant with increasing regulatory requirements.

The Emergency Drought Barrier on the West False River mitigates the negative impacts of the drought emergency and slows salinity intrusion with the release of less fresh water. The barrier

was constructed in June 2021 and notch construction is scheduled for January 2022. DWR will refill the notch in April 2022 and fully remove the barrier by December 2022. SB 626 provides DWR with new construction delivery authorization and is limited to projects necessary for the construction, maintenance, or operation of elements of State Water Facilities. With this bill, contractors are selected on qualifications and not solely on cost and become partners in the development of the project. Risks are reduced or transferred to the contractor. The new authorizations are not applicable to Delta Conveyance and are limited to seven projects under each procurement method.

Commissioner Makler asked if it makes sense to think beyond five years in terms of other types of projects where there may be complementary coordination. Ms. Kuttel said they always look five to 10 years out, and try to prioritize and balance projects to hit the availability of resources.

Chair Alvarado said the jobs created from construction work on these projects and the work to maintain and upkeep this system is a huge economic benefit to the state.

11. State Water Project Flexible Resources Study

SWP Power and Risk Office Executive Manager Ghassan ALQaser and Power Planning Branch Manager Cheryl Luu provided an update on the Flexible Resources Study being conducted to assess the SWP's potential to support the state's clean energy policy governing flexible demand for electricity, as required by SB 49, signed by the Governor in 2019. Short-term opportunities (1-3 years) are to continue to align and shape SWP load and generation to respond to grid needs, procure renewables to achieve DWR's Climate Action Plan goals, offer excess SWP resource adequacy capacity, actively participate in California Independent System Operator (CAISO) stakeholder processes to influence market design changes, maintain industry outreach and develop partnerships on initiatives and projects, monitor power market dynamics and adjust SWP operations and procurement strategies, partner with the State Water Contractors (SWC) to develop the SWP Energy Roadmap, develop the Flexible Resources Study Plan: Phase 2, and maintain active participation in investor-owned utilities transmission rate case filings at the Federal Energy Regulatory Commission (FERC). Mid-term opportunities (3-7 years) are to investigate and implement integration of solar and battery storage at main SWP pumping plants, work with CAISO to give the SWP more latitude in offering grid reliability services, implement physical improvements to reduce subsidence impacts on SWP operational flexibility, integrate new technologies at SWP pumping plants to reduce wear and tear on equipment, collaborate with the SWC on developing a program that coordinates water demand side flexibility, update the SWP Integrated Resources Plan, and revitalize pump-back operations at the Hyatt-Thermalito complex to provide long duration energy storage services to the grid. Long-term opportunities (7-plus years) are to develop plans to achieve a zero emissions power portfolio by 2035, develop plans to neutralize greenhouse gas emissions from Lodi Energy Center, develop plans to integrate energy storage in SWP operations and setup, develop plans to fully resource SWP portfolio with clean energy, develop bidding strategies to fully hedge SWP positions in the power market, neutralize power costs through deploying supply and demand side flexibilities, collaborate with CAISO and others to develop bi-lateral agreements that can utilize SWP capabilities to support grid reliability, secure right-of-way needed for future power

resources developments, and inform energy policy and initiatives to achieve resilient and efficient power market design. Challenges to pursuing these opportunities include power market evolution, transmission access charge escalation, changing regulatory policies and mandates, CAISO market design changes, SWP aging infrastructure and inherent constraints, subsidence of the aqueduct, climate change impacts, competing SWP priorities, financial impacts to the SWC, and water demand inflexibility. The interim action plan (2021-2025) is to continue planning work for a Phase 2 of the flexible resources assessment tracks and additional new tracks, continue to align SWP load and generation with CAISO's grid needs, monitor power market dynamics and influence needed market design changes, continue outreach to CAISO and other state agencies highlighting the SWP's plans for supporting the grid and the need for partnerships and outside funding, collaborate with CAISO to enable the SWP to offer real time load bidding and frequency regulation, partner with SWC to investigate and deploy demand side flexibility, investigate state and federal funding opportunities, continue adding renewables to the SWP power portfolio, sell excess SWP resource adequacy capacity to support CAISO's grid reliability needs, continue to maintain active participation in Participating Transmission Owners rate case filings at FERC, and advocate for more control over escalating transmission access charge cost. Next up is to finalize the draft report, circulate it to industry partners for review, consult with CAISO, then finalize the report and submit it to the Legislature by January 2022.

SWP Deputy Director Ted Craddock said DWR's strategic plan is to secure the SWP for future generations, ensure reliability, and provide benefits to the state's economy. Key goals are to be flexible and innovative in running the SWP power program, be adaptive to changes occurring, be supportive of the state's electric grid, and to develop new and refined strategies for the SWP power portfolio. The overall planning process will look at mid- and long-term goals, weigh the risks and benefits of each initiative, and identify which are most important to move forward with as DWR works toward issuance of a final report.

CAISO Vice President Mark Rothleder said they appreciate SWP efforts this summer employing construction expertise to deploy emergency-based resources in the system. SWP can help maintain grid reliability in a way that is sensitive to carbon reduction. Shifting when pumps are being used when there is excess clean energy in the middle of the day and moving away from using energy when net peak occurs later in the evening helps reduce carbon emissions. There are some unique challenges in coordinating water conveyance with grid reliability needs, but there are opportunities where CAISO can provide the SWP the necessary flexibility and optionality on what pumps are actually utilized. Flexibility is a key component for clean reliable operations in the future, and CAISO sees the SWP as a source of clean, flexible capability.

California Energy Commission (CEC) Deputy Director for Energy Assessments Division Aleecia Gutierrez said the SWP has the ability to shift pumping loads and provide resources as both a short- and long-term solution. DWR has the unique capability to meet net peak loads when other renewable resources are not available. Long-term, CEC is looking at large hydro as an essential resource to meet shortfalls under extreme weather events in those net peak hours, getting the state to the years when new renewable resources are coming online. As the state

transitions to a clean energy system, DWR's load flexibility asset is a critical component. CEC is looking at how to use flexible loads to optimize the resource portfolio and prevent an overbuild of other renewable resources that might have a larger footprint.

Public comment from SWC Energy Manager Jonathan Young, who said a reliable SWP can be an important tool to support the state's energy policy and result in a more reliable water supply. The SB 49 report is coming at a pivotal time as there is a growing urgency to address the impacts of climate change and extreme weather, and it can demonstrate how additional investment in the SWP can help California achieve its climate goals, provide more operational flexibility in maintaining water deliveries, and provide grid resiliency. This report is not an end point but a starting point of a larger conversation about funding the future development of California's energy grid and how the SWP can be best positioned to contribute to solutions.

Commissioner Makler asked Mr. Rothleder what the appropriate compensation to the SWP would be for the benefits it supplies to electric markets and was told that recognition of the value of the new capabilities that are needed to operate the grid reliably will start to show themselves as being necessary and be compensated for. He asked Mr. ALQaser what surprised him in this analysis and was told there were no surprises other than the limitation of the existing infrastructure, and with investment DWR can really unleash the potential the SWP has to support grid reliability and clean energy policy. In emergencies DWR is always willing to step up and provide support to the grid, but for sustainable deployment of SWP capabilities we need to work on a market design change that allows us to offer what we can offer and collect the compensation that allows us take on investments and develop more flexibility.

Commissioner Solorio asked how aggressive the SWP is in trying to get federal funding support. Mr. Craddock said DWR is looking at FEMA programs that provide hazard mitigation assistance, and is taking a close look at the infrastructure bill, which has opportunities for funding dam safety programs and aging infrastructure.

12. Consideration of Items for Next California Water Commission Meeting

The next meeting of the Water Commission is currently scheduled for Wednesday, December 15, 2021, when the Commission will consider staff's recommendations for feasibility determinations for four projects in the WSIP – the Kern Fan Groundwater Storage Project, the Pacheco Reservoir Expansion Project, the Sites Project, and the Willow Springs Water Bank Conjunctive Use Project. Separately, the Commission will also review materials submitted by projects not currently in the WSIP to determine if they are feasible and will help advance restoration of ecological health for beneficial uses of the Delta. If the Commission makes these findings, the projects will be eligible for potential WSIP funding if the Commission later decides to pursue a second project solicitation.

13. Adjourn

The Commission adjourned at 12:06 p.m.