



## **Meeting Minutes**

Meeting of the California Water Commission

Wednesday, March 20, 2019

State of California, Resources Building

1416 Ninth Street, First Floor Auditorium

Sacramento, CA 95814

Beginning at 9:30 a.m.

### **1. Call to Order**

Chairman Quintero called the meeting to order at 9:35 a.m.

### **2. Roll Call**

Executive Secretary Kimberly Muljat called the roll. Commission members Carol Baker, Andy Ball, Joe Del Bosque, Cathy Keig, and Armando Quintero were present, constituting a quorum. Commission members Joe Byrne, Danny Curtin, and Maria Herrera were absent.

### **3. Closed Session**

The Commission did not hold a closed session.

### **4. Approval of February 20, 2019 Meeting Minutes**

Commissioner Keig moved to approve the February 20, 2019 meeting minutes. All Commissioners present voted in favor.

**Item 5 was taken out of order, after Item 11.**

### **6. Commission Member Reports**

There were no Commission member reports.

### **7. Public Testimony**

Jim Watson, with Sites Project Authority, addressed a letter received from several environmental organizations regarding Sites Reservoir Project. Mr. Watson said the applicant is taking environmental and tribal concerns seriously and making efforts to work with concerned groups.

### **8. 2018 State Water Project Annual Review**

Jennifer Ruffolo, Assistant Executive Officer, presented the draft State Water Project (SWP) Annual Review. Aging infrastructure, climate change, and the reconstruction of Oroville Dam Spillway are the key issues addressed in the Annual Review. The review includes sections on planning initiatives and internal process changes, such as financial and asset management programs.

Findings on key issues include DWR's efforts to modernize its organizational structure, to update the Commission on dam safety, to respond to climate change, to reduce greenhouse gas emissions from SWP operations, and to recover from the Lake Oroville spillways incident. Ms. Ruffolo summarized the previous year's recommendations and DWR's efforts to respond to them.

Commissioner Del Bosque asked if Lake Oroville has operated normally since the beginning of the water year. Ms. Ruffolo believed it to be operating normally.

### **9. Model Water Efficient Landscape Ordinance**

Peter Brostrom, Chief of DWR's Water Use and Efficiency Branch, provided a brief presentation on the Model Water Efficient Landscape Ordinance (MWELO). The goal of the MWELO is to reduce the amount of high water plants used in landscaping. The ordinance was revised in 2010 and again in 2015. AB 2525 directed DWR to update the MWELO every three years or decide that an update is not effective or useful at the time.

DWR has chosen not to revise the ordinance due to current standards being effective. Also, if DWR revised the MWELO, local agencies with their own ordinances would have to revise those ordinances to match. There has been inconsistent implementation of the MWELO by local agencies. DWR plans to address implementation issues by documenting stakeholder recommendations, developing a guidebook, and conducting studies to identify barriers to implementation.

Commissioner Keig inquired about the low percentage of agencies meeting the annual reporting requirement that was added in 2015. Mr. Brostrom stated there is no incentive to report and it is a new requirement which is likely not being prioritized. Commissioner Quintero asked if DWR is doing any work related to improving messaging to water users about fixed costs for water delivery. Mr. Brostrom responded that there are not efforts specifically related to the MWELO, but DWR has hosted workshops on different rate models.

### **10. Flood Managed Aquifer Recharge (Flood-MAR)**

Kamyar Guivetchi, DWR's Manager of Statewide Integrated Water Management, provided an overview of Flood-MAR. Flood-MAR is an integrated and voluntary management strategy that uses high flows for groundwater recharge to improve water resources sustainability and climate resiliency. Flood-MAR is scalable and multi-faceted and can provide a wide variety of benefits. DWR identified eight implementation factors and Mr. Guivetchi highlighted some potential implementation barriers. Mr. Guivetchi summarized DWR's current plans and activities, including development of a Research and Data Development Framework. Stakeholders at a variety of levels, including landowners, NGOs, and government agencies, can take actions to expand the use of Flood-MAR strategies.

Dr. Helen Dahlke, with UC Davis, discussed Agricultural Managed Aquifer Recharge (Ag-MAR), which is essentially the same as Flood-MAR. Ag-MAR involves using winter storm runoff to flood farmlands with surface water and recharge underlying groundwater. There are a wide range of

questions about Ag-MAR, including suitable locations, water availability, effects on water quality, and costs. UC Davis has participated in several on-farm experiments and studies which have examined crop suitability, soil types and infiltration, soil nitrate leaching, and flood flow availability. Dr. Dahlke provided an overview of integrated groundwater-surface water modeling and how long-term recharge can improve groundwater storage. She also discussed several decision support tools for Ag-MAR.

Don Cameron, General Manager of Terranova Ranch, delivered a brief presentation on Terranova Ranch floodwater capture and recharge efforts. Mr. Cameron discussed the benefits of on-farm recharge and how it will provide increasing benefits with climate change. The ranch took the first steps to capture floodwater to use in lieu of groundwater in 1982 and began an on-farm recharge project in 2011. The ranch flooded portions of their working farmland for several months, letting the area dry before planting. The ranch staff observed efficient infiltration and monitored salt and nitrogen. The ranch experimented with flooding wine grapes, which most growers do not do, and experienced a normal harvest after closely monitoring the effects on the grapes. In 2012, Terranova Ranch received a grant from DWR to divert water from the river to prevent downstream flooding. The new project is more sophisticated and larger than the original project. Mr. Cameron added that most farms and areas in the San Joaquin Valley lack the infrastructure necessary to perform on-farm recharge, but projects like these will be necessary.

Dr. Laura Foglia, with UC Davis, gave a brief presentation on a groundwater recharge pilot study on the Cosumnes River; the project involves flooding vineyards during winter months. Permitting and funding slowed the project and construction began recently. Dr. Foglia discussed the comprehensive pilot study and the goal to understand the benefits of recharge to aquifers and rivers. The recharge site is ideal for groundwater banking due to soil and topography. The system is designed to work for 10 years using two existing diversions on the river to flood dormant agricultural fields in the off season. Their goal is to divert a minimum of 4,000 acre-feet per year. Dr. Foglia discussed the amount of water available for diversion and the types and degree of monitoring being performed as part of the study. The main goals of the study include understanding impacts to water quality, how soil impacts recharge rates, and how much water can be recharged.

Commissioner Del Bosque asked about the suddenness of stormflows and how fast water can infiltrate into the ground. Dr. Foglia stated that her study has observed approximately one foot of infiltration per day, but infiltration rate depends greatly on soils. Dr. Dahlke added that one of the groundwater banking tools included in her presentation uses a soil data survey that considers five factors to evaluate soil suitability. Mr. Del Bosque also asked about challenges to implementing these projects. Mr. Cameron said funding and permitting for water diversions are the main challenges. Mr. Guivetchi added that DWR's Flood-MAR white paper examines a wide range of challenges.

Commissioner Ball asked if the age of the trees was taken into consideration when flooding the farmland. Mr. Cameron responded that young trees have not developed enough root structure, therefore they are more susceptible to damage.

Commissioner Baker asked if increasing groundwater recharge in the Central Valley will impact Delta outflow. Mr. Guivetchi said that Flood-MAR involves peak flood flows, when there is more water than the system can handle; although Delta outflows might be reduced, there should not be detrimental effects. Commissioner Quintero inquired about groundwater levels increasing. Mr. Cameron stated that Terranova Ranch has experienced a rise in water table elevation.

The Commission took public comment. Deirdre Des Jardins, with California Water Research, expressed concern regarding severe soil degradation and salinity and raised the question of whether Flood-MAR projects should be performed in those areas with potential water quality impacts.

#### **11. Action Item: Water Storage Investment Program – Future Available Funding**

Commission staff drafted a resolution addressing the Commission's priorities if any further funding becomes available through the Water Storage Investment Program (WSIP). The Commission discussed the resolution and some of the possibilities the Commission might face if funding becomes available. Commissioners Ball and Keig noted that the resolution does not impose any restrictions on future Commissions. Commissioner Keig moved to approve the resolution and Commissioner Ball seconded the motion. All Commissioners present voted in favor.

#### **5. Executive Officer's Report**

This item was taken out of order. Executive Officer Joe Yun reported a change in the applicant for the Temperance Flat Reservoir WSIP application. The original applicant, San Joaquin Valley Water Infrastructure Authority, was replaced by another Joint Powers Authority (JPA), the Temperance Flat Reservoir Authority (TFRA). The change was mutually agreed upon by the two JPAs and TFRA meets all the eligible applicant requirements of the WSIP. Staff has reviewed the comment provided by Save California Salmon at the February meeting regarding the meetings with WSIP applicants and agencies on the contracts for administration of public benefits. Mr. Yun contacted DWR's Tribal Liaison, who reached out to Save California Salmon. Mr. Yun added that there was no Open Meeting Act violation during the February WSIP applicant meetings, which was a concern raised by Save California Salmon.

Mr. Yun discussed two comment letters received by staff. One letter was from the Karuk Tribe, asking Sites Project Authority to recirculate their environmental documents. The second letter was from a coalition of NGOs asking the Commission to recommend that Sites recirculate their environmental documents.

Commissioner Keig expressed appreciation for the thorough response to the concerns by Save California Salmon.

Commissioner Keig left the meeting early. The meeting was adjourned at 12:33 p.m., during this item. The remainder of the meeting was conducted as a workshop without a quorum.

The Commission took public comment. Tom Stokely, representing a coalition of environmental, tribal, and fishery groups, expressed concerns about potential impacts from the proposed Sites Reservoir Project. The group urges the Commission to suggest that the Sites Project Authority recirculate its draft Environmental Impact Statement/Report (EIS/EIR). Regina Chichizola, with Save California Salmon, expressed concern for the Klamath River and the Sacramento River as a result of the impacts Sites Reservoir may pose. She also expressed concerns for tribal fishing rights and consultation and urged the Commission to request a recirculated draft EIS/EIR. Jim Watson, with Sites Project Authority, stated that the authority wants the project to work for everyone and looks forward to meeting with Pacific Coast Federation of Fishermen's Associations and Save California Salmon. Deirdre Des Jardins, with California Water Research, expressed concerns with the modeling for the Sites Project. Morning Star Gali, with Save California Salmon, reiterated her concern that only tribes in the footprint area of the Sites Reservoir Project are being consulted, and not tribes in other areas that will experience impacts.

## **12. Water Storage Investment Program Update**

Amy Young, WSIP Program Manager, provided an overview of the required contracts for the administration of public benefits, which must be completed prior to an applicant's final award hearing. The contracts are required by Proposition 1 and the content is outlined in section 6014 of the WSIP regulation. In February, staff conducted orientation meetings with each applicant and the agencies that will administer the contracts. The applicants provided information about their schedules and required permits, and the administering agencies described the contract development process. Ms. Young described the main points made by DWR, the California Department of Fish and Wildlife, and the State Water Resources Control Board, as well as key questions from the applicants.

The Commission took public comment. Tom Stokely, representing Pacific Coast Federation of Fishermen's Associations and Save California Salmon, asked whether the contracts for the administration of public benefits will quantify volumes of water or percentage of yield. Ms. Young responded the quantities were established during the previous year's process. Mr. Yun added that the contract requirements will depend on the types of benefits. Deirdre Des Jardin, with California Water Research, stated that the use of a block of water for the environment was pioneered in Australia, which has caused problems. She noted that it is important to examine failures and make sure they are not repeated.

## **13. Consideration of Items for Next California Water Commission Meeting**

Agenda items at the next meeting will include a panel on urban stormwater capture, a presentation on in-lieu aquifer recharge, and presentation of the final draft 2018 Annual Review of the State Water Project.

## **14. Adjourn**

The Commission adjourned out of order at 12:33 p.m., during agenda item 5.