



Meeting Minutes

Meeting of the California Water Commission

Wednesday, January 18, 2023

Warren-Alquist State Energy Building

1516 9th Street, Rosenfeld Hearing Room

Sacramento, CA 95814

Beginning at 9:30 a.m.

1. Call to Order

Chair Matt Swanson called the meeting to order at 9:30 a.m.

2. Roll Call

Commissioners Arthur, Bland, Curtin, Gallagher, Makler, Matsumoto, Steiner, and Swanson were present, constituting a quorum. Commissioner Solorio arrived during agenda item 5.

3. Closed Session

The Commission did not hold a closed session.

4. Approval November 16, 2022 Meeting Minutes

Commissioner Curtin motioned to approve the November 16, 2022, meeting minutes. Vice-chair Steiner seconded motion. Commissioners Arthur, Bland, Curtin, Gallagher, Matsumoto, Steiner, and Swanson voted to approve the minutes. Commissioner Makler abstained.

5. Executive Officer's Report

Executive Officer Joe Yun shared websites with information on major water supply reservoirs, the daily statewide hydrologic update, and California Water Watch. He gave an update on the Water Storage Investment Program (WSIP) strike team meeting, and said the drought working group has begun drafting straw proposals that will help inform the Commission's white paper. On January 17, he accompanied the Chair and Vice-Chair to meet with representatives of the Shingle Springs Band of Miwok Indians regarding the Commission's draft Tribal Representatives Comment Policy. In an effort to incorporate the Tribe's input into the policy, he asked that Agenda Item 10 be tabled.

6. Commission Member Reports

Commissioner Makler participated in the California Foundation for the Environment & Economy's annual water meeting on December 8-9. Commissioner Gallagher attended virtually the Northern California Water Association Dry Year Task Force on January 10. Commissioner Matsumoto participated in the Drought Working Group on December 16 and January 9. Chair Swanson said the January 17 meeting with the Shingle Springs Band of Miwok Indians was a great day of learning and feels the Commission is on the path to a great comment policy document. Vice-chair Steiner said it was a positive meeting and encouraged people to visit the Tribe's museum. She said she virtually attended the Public Policy Institute of California's Conference on Surplus and Shortage: California's Water Balancing Act.

7. Public Testimony

There was no public testimony.

8. Election of Commission Officers (Action Item)

Commissioner Steiner nominated Chair Swanson to serve another year. Commissioner Makler seconded the motion. Commissioner Solorio motioned to close nominations and vote. Commissioner Makler seconded the motion. Ms. Muljat called the roll. The Commission voted unanimously to re-elect Chair Swanson. Commissioner Solorio nominated Vice-chair Steiner to serve another year. Commissioner Makler seconded the motion. Commissioner Gallagher motioned to close nominations and vote. Commissioner Makler seconded the motion. Ms. Muljat called the roll. The Commission voted unanimously to re-elect Vice-chair Steiner.

9. 2023 Commission Workplan

Executive Officer Yun presented an overview of planned Commission activities for 2023 and anticipated subjects for discussion at each meeting. Major workflows include WSIP final funding hearings for two projects; long-term drought expert panels, workshops, and white paper; Big Notch eminent domain proceedings; State Water Project briefings. The Commission will also hear updates from relevant programs within the Department of Water Resources (DWR), including grant programs, SGMA (Sustainable Groundwater Management Act), and the 2023 Water Plan. Virtual tours of WSIP projects include the Harvest Water Program in March and Los Vaqueros Reservoir Expansion Project in August. In September the Commission will consider Strategic Plan Goal 5: Flood Project Advocacy.

Commissioner Makler requested a briefing on any conveyance work that has happened since the Commission issued its white paper.

Commissioner Arthur said the time was right to pursue the Strategic Plan Goal 5.

Commissioner Solorio suggested holding Commission meetings in different areas of the state. He also asked if the Commission could play a role in expediting water storage projects.

Vice-chair Steiner asked for clarification that the Commission does not approve the contracts for the administration of public benefits (CAPBs) in the WSIP. She was told it does not.

10. Tribal Representative Comment Policy (Action Item)

This item was postponed to a future meeting.

11. 2022 Annual Review of the State Water Project (Action Item)

Water Code section 165 requires the Commission to conduct an annual review of the progress of the construction and operation of the State Water Project (SWP). Public Information Officer Paul Cambra presented the draft 2022 Annual Review of the SWP for Commission consideration and approval. The theme of the 2022 SWP briefings was “Preparing for climate extremes – ensuring a reliable State Water Project to meet the challenges of drought, flood, and wildfire.” The Commission received 10 briefings in 2022. SWP power generation was higher than in 2021, and its power use was lower. Water deliveries were down, driven in part by limited precipitation and diminished runoff. The Commission found, in 2022, that DWR took steps to better account for climate change in its water supply forecasting; advanced multiple climate change-informed planning processes; improved its modeling of burn-scarred areas in the

Feather River watershed; took actions to mitigate the impacts from the drought by considering more extreme scenarios in its water supply planning; apprised the Commission of its financial goals, budget, and cost projections; used a risk-informed process to prioritize infrastructure projects for the repair, refurbishment, and replacement; executed contract extension amendments with state water contractors to mitigate affordability concerns due to cost compression; and informed the Commission about key construction activities undertaken in the past year to manage and maintain the SWP. The Commission recommends that DWR provide it with information on how SWP operations will need to adapt to increasing aridity and the reduction in available water supply; how it balances the needs of its multiple beneficiaries over the long term and particularly in years of extreme drought; how it responds to drought conditions and supports water transfers to offset drought impacts; how it employs the latest technologies for real-time data collection and measurement to help with decision making; how it uses its understanding of atmospheric rivers to prepare for floods and improve resiliency; any actions taken to address wildfire-related issues; financial and capacity updates and projections that reflect future resource needs to address aging infrastructure repair; how they advance large-scale infrastructure construction and maintenance in a manner that is inclusive of diverse stakeholders; and to work with staff to arrange facility tours for the Commission.

Commissioner Curtin asked if new research found the climate to be drier in addition to hotter and was told that aridification relates to loss of water supply, which is the basis of the Governor's Water Supply Strategy. A drier climate requires more water to do things.

Commissioner Bland asked for a briefing on water transfers.

Commissioner Arthur said the recommendations on forecasting, allocations, real-time data collection, and better understanding of atmospheric rivers are going to be helpful in continuing to understand these questions about aridification and hotter and drier conditions.

Commissioner Curtin said they should think through conveyance in a different way. Getting water to places where we can get it into the ground, we may be able to store more of it.

Commissioner Makler requested the report be posted online and shared on social media. It provides an overview of how the state manages water with a very complex, unique-in-the-world system. We are dealing with greater volatility; this is a risk management activity. Investment in grey, green, and existing infrastructure is critical.

Vice-chair Steiner suggested having someone from Los Angeles talk to the Commission about how they managed to harvest and store excess water during the recent storms.

Commissioner Curtin remarked how it was difficult to switch between gallons and acre-feet.

Commissioner Arthur encouraged staff to include water users and those on the receiving end of the SWP in our briefings as a way to pull in stakeholder engagement.

Commissioner Gallagher said the state water contractors play a big role in the SWP and it would be good to include them in briefings as well. There is a lot of science involved in the recommendations, and the science is relatively new regarding what happens to the ground after a wildfire. Things are shifting radically in front of us.

Public comment from Terry Church, who asked if there is any consideration or efforts to support farmers and ranchers in adjusting their land management practices to allow lands to be able to infiltrate more rainwater, as there are a number of farmers and ranchers practicing regenerative agriculture. Mr. Yun said that is part of Flood-MAR and we should learn more about that in the Water Plan Update.

Commissioner Arthur motioned to approve the report as is. Commissioner Steiner seconded. The Commission voted unanimously to approve the report.

12. Water Storage Investment Program: Road to Final Funding – Final Award Process

Water Storage Investment Program (WSIP) manager Amy Young presented an overview of the remaining process and anticipated timeline for projects to receive final funding awards. Administering agencies – California Department of Fish and Wildlife (CDFW), State Water Board (SWB), and DWR will present the draft CAPBs to the Commission for review and comments. The administering agencies may consider comments before executing the contracts; the Commission does not approve the contracts. Staff will hold a Q&A session to help the public understand how the CAPB templates are structured. Draft CAPBs will be posted on the Commission website and available for public review and comment for 14 days. Comments will be posted on the Commission website and forwarded to the administering agencies for their consideration. Prop. 1 requires the applicant to submit documentation showing CAPBs, contracts for non-public benefits, feasibility studies, final environmental documents, and required federal, state, and local approvals and agreements. Funds will not be made available until the Commission holds a public hearing allowing for public comment. Regulations require applicants to submit quarterly reports documenting their progress, and provide a description of changes to the planned projects that may have occurred since receipt of the maximum conditional eligibility determination (MCED). The Commission shall consider any changes before determining a final award. After the draft CAPBs come before the Commission, the applicant will present a virtual site visit, then submit all required documentation and request a final award hearing at a future meeting. Commission staff will review all submitted information and make a funding recommendation to the Commission. At the final award hearing the Commission will hear from the applicant, and the administering agencies will be present to answer questions. The Commission can award an amount up to the MCED. The funding agreement will be executed after the award decision. Then, funds for construction will be available for reimbursement. A funding agreement template is posted on the Commission website. Harvest Water and Los Vaqueros should both appear for an award hearing this year, with the rest to come in between 2024 and 2027.

Commissioner Makler asked when the CAPB templates will be available and was told late February/early March.

Commissioner Matsumoto asked how the administering agencies plan to coordinate enforcement of contracts. Commission Legal Counsel Holly Stout said each agency is responsible for managing its own benefits. Because the Commission is the one awarding the funds, they will be involved in the process, which will be explained in the template. This is a work in progress, no one has ever tried to do this before, it all depends on the situation.

Commissioner Makler asked if the Commission will have an enforcement role in the public benefits, will the Commission's authority be reflected in the agreement, and do the agreements contemplate third-party enforcement. Ms. Stout said if the administering agencies feels that the benefit will not accrue, they will come before the Commission to explain what is happening. The Commission's authority to enforce the agreement will be stated in the agreement, and they are still working through third-party standing.

Vice-chair Steiner asked if the CAPB Q&A session will be virtual or in-person, and was told it will be virtual, like a webinar, with staff from the Commission and administering agencies available to present the templates and answer questions.

Commissioner Curtin said they will make the funding decision based on the administering agencies' analyses, and it will be up to them whether the public benefits are being met. Ms. Young said the CAPB templates will provide a good opportunity to see the process involved in following the public benefits as they accrue.

Commissioner Arthur said the public benefits are achieved not only through the building of the project but in the operation and delivery of water to refuges.

Commissioner Makler said since there will be a determination prior to the Commission awarding the MCED, that says the project will meet the public benefit goals, the ongoing enforcement would be a creature of the CAPB, where the primary people are the project proponents and the administering agencies. Will the Commission have the mandate and the resources to be a party of enforcement or is it better left with the administering agencies? We provide the funding on the basis of a mechanism we think is going to work. We should discuss as a Commission whether we want to be part of this contract. There is no statutory obligation.

Ms. Stout said the Commission needs to be part of this contract on an ongoing basis. The Commission is providing the funding, but the benefits are going to the agencies. To have a valid contract, the funding agreement and the CAPBs need to be one whole agreement. Because the statute doesn't give the administering agencies an enforcement role, it is part of the funding agreement, so that means a continuing obligation for the Commission.

Commissioner Arthur said today's presentation gave her more clarity as to the timing of when they will see the CAPBs and the public review process.

Commissioner Makler suggested any entities that will provide public financing for a project should provide comments to the project proponents at an early enough stage of the process.

Commissioner Curtin asked if there was any statutory time limit to awarding the funds, and was told no, the only time limitation was the January 1, 2022, eligibility deadline. He recalled that the MCED could be no more than half of the project's cost, and was told some project types, such as conjunctive use or reservoir reoperation projects, are eligible for more than half.

Commissioner Matsumoto said the onus is on the project proponents to complete the requirements and was told, yes, once those are done, the funding process can move forward. She encouraged the project proponents to describe any changes that could affect the public benefits as early as possible and walk the Commission through them on the virtual tour. She was told the draft CAPBs should give some indication as they are close to being final.

Commissioner Gallagher asked where the project proponent would turn if faced with a challenge with an administering agency. Mr. Yun said he does not foresee such a thing happening. There is a task force put together by the secretary of the California Natural Resources Agency (CNRA) working to move these projects forward.

Commissioner Bland asked if the CAPB would include a comprehensive analysis of the public benefit as well as the overall operational cost of the project, and was told the CAPBs would have project specific information on the physical public benefits, but cost information would come close to the final award hearing.

Commissioner Arthur asked if they could get a staff analysis on whether the public benefits are the same as what were proposed in the application at the time the draft CAPBs come before the Commission. Mr. Yun said that staff will take every opportunity to make sure there are no surprises, and it will be beneficial for Commissioners to understand what may be shifting.

Commissioner Curtin said if all the awards go as allocated, project proponents would be responsible for any cost overruns, unless there was a statutory change. Mr. Yun said currently the MCEDs account for all the funds in Proposition 1 Chapter 8. If the state wanted to provide more funding it would be a specific, separate action.

Commissioner Makler said the Commission is the primary public forum, and we need an exhaustive explanation and public discussion on what the public benefits are.

Vice Chair Swanson asked if the work that has been done by the administering agencies and the Secretary's task force could be characterized as exhaustive, and is the Commission the last line of defense should applicants bring in a defective project? Mr. Yun said folks are really working to figure out the reasonable public benefits the state can expect. The efforts have not been cursory or superficial. Once all the statute's requirements are completed, the projects should be ready to go to construction. There is not a high risk in the Commission's funding decision.

Commissioner Arthur said the Commission must assess the public benefits since that is what the funding decision is based on. Ms. Young said the public benefits contracts will be executed before the final award hearing.

Commissioner Curtin said there will be a lot of unhappy stakeholders who are paying for at least half of the project's cost, if it turns out there is no viability to the project, so there will be some other eyes on this. The Commission's job is to verify the viability of the public benefits.

Commissioner Matsumoto said this is a huge experiment, there is a lot of public interest, and the negotiations for public benefits are taking place outside of the view of the public. There will be a relatively short amount of time for us to make this all transparent and provide an opportunity for the public to weigh in before we make a funding decision.

Public comment by Maureen Martin, Special Projects Manager at Contra Costa Water District, representing the Los Vaqueros Reservoir Expansion Project, who complimented Commission staff on the work they have been doing, addressing not only the Governor's urgency to deliver these projects, but their dedication to interpreting the statute, ensuring that when the sprint begins the Commission is well prepared. All the project proponents are coordinating their efforts on the CAPBs. Even though it is not coming before you in a public forum, there is a tremendous amount of coordination and work being done behind the scenes.

Public comment by Ashley Overhouse, with Defenders of Wildlife, who complimented staff on continually providing clear communication and transparency leading up to today's meeting, thanked the Commissioners for the lively and informative discussion, thanked staff for offering a CAPB Q&A session, and requested the public review time be extended from 14 to 30 days.

Public comment by Ron Stork who agreed with the previous commenter's remarks.

13. Long-term Drought: Overview of State Drought Actions

DWR Interstate Resources Manager Jeanine Jones gave a presentation originally scheduled as part of a July 2022 expert panel on California droughts of the past, present, and future. Drought is a function of its impacts because impacts drive response. Drought differs from traditional emergencies because of its very slow timescale. California is either blessed or cursed with a high annual, as well as in-season, variability in precipitation. We have depleted much of our groundwater storage due to numerous drought years over the last decade. Looking at drought as consecutive dry years, the state has had a lot more in recent years. This drought and the immediately prior five-year drought have not been the same in terms of impacts. The 2012-2016 drought saw the warmest years on record and record low statewide snowpack, zero allocations to Central Valley Project (CVP) agricultural contractors, 500,000 acres fallowed, and first-ever state emergency response for dry private residential wells. The current drought had zero CVP allocations for two years, a health and safety allocation, five percent SWP allocation, water restrictions in Southern California, record low Lake Oroville elevation, and groundwater impacts in parts of Sacramento Valley. Historically the Colorado River has been California's most reliable surface water supply in droughts, but 2022 saw reduced elevations in the nation's two largest reservoirs. A warming climate is exacerbating drought's impacts, as well as significant cutbacks in major water supplies. Progress since 2009 includes statewide coverage of groundwater level data in major aquifers, consolidation of small water systems, long-term resilience funding, and drought response grants. Progress has not been made in seasonal precipitation forecasting. All but two of the state's 20 largest and most damaging fires have occurred from 2000 onward, leading to massive destruction to parts of large urban water distribution systems. Impacts from past droughts are highly site specific and vary depending on the ability of water users to invest in reliability. Small water systems are most at risk of public health and safety impacts. Large urban water agencies can manage multiple years of drought with minimal impact to their customers. The expected impacts of multi-year drought include risk of catastrophic wildfire on unmanaged systems, and health and safety to small water systems. Lessons learned are to act sooner when dry conditions emerge, and recognize that increased temperatures are creating new or intensified impacts. We need to transition from thinking about drought as an occasional emergency to thinking in terms of creating resiliency in a more arid climate. The state has been making extraordinary amount of funding available for the current drought. We cannot assume there will be substantial financing available in future droughts. Capacity building is sometimes cheaper than massive grant programs.

Commissioner Bland asked if cuts to the Colorado will affect both upper and lower basin states, and was told that it is a broadly shared problem. States were asked to provide proposals to the Department of the Interior, and the upper basin proposal said their users above the reservoir were already curtailed from a water rights standpoint. The lower basin said it needs both the

upper and lower basin to respond to the crisis of incredibly diminished reservoir storage. Mexico has more than two million people dependent upon Colorado River water.

Commissioner Matsumoto asked if the small water systems on fractured rock that are susceptible to health and safety impacts are non-SGMA areas, and was told, yes, DWR has identified 700 such systems, many of which predictably run out of water.

Commissioner Gallagher referred to the annual water runoff graphic and asked to explain how we are “starting from a lower base.” She was told that the chart compares this drought to droughts in the early part of the 20th century, which was generally wetter.

Commissioner Solorio said the amount of smaller water storage programs developed in different parts of the state have all been helpful during recent droughts.

The Commission took a one-hour lunch break.

Agenda item 13 continued with representatives from DWR, CDFW, SWB, and the Department of Conservation (DOC) providing an overview of state drought actions.

DWR Interstate Resources Manager Jeanine Jones said SWP allocations are 5 percent so far this year. DWR requested a change to the project operation standards from SWB to conserve water, installed a temporary emergency drought barrier in the West False River, and provided conveyance for water rights transfers. General fund drought grant programs included \$300 million last fiscal year and \$500 million this fiscal year, and \$25 million for groundwater sustainability agencies (GSAs). Many times, the struggles for small water agencies during the drought are not hydrology-driven problems but an infrastructure or capacity problem. Other assistance programs include leak detection, guidebooks and tools for water agencies, and data and forecasting programs. SB 522 requires small systems to prepare shortage contingency plans, and counties to have a drought task force. It is cheaper to invest in capacity building, which includes improved precipitation forecasting, snowpack and snowmelt monitoring, and forecast-informed reservoir operations (FIRO). A longer lead time to respond to drought is important to water agencies. Many decisions are made at the beginning of the wet season, leaving little discretion for the end of the it. Precipitation forecasting models are typically two weeks out. Sub-seasonal to Seasonal (S2S) weather prediction can be from two weeks to 60 days (sub-seasonal) to 12-24 months (seasonal). An experimental forecast funded by DWR, from November 2022 to March 2023, outperformed the National Oceanic and Atmospheric Administration’s (NOAA) seasonal forecast. A federal appropriations bill provides \$12,100,000 to NOAA to pursue a pilot project for S2S precipitation forecasts. Improved snowmelt runoff forecasting requires better snowpack data from aircraft monitoring. Three research pilots are underway in FIRO. FloodMAR allows agencies to take advantage of forecasting to put more water into storage, and buy them some time for longer-term investment needed to transform some existing water infrastructure to handle what we expect to see from climate change.

CDFW Statewide Drought Coordinator Brycen Swart said CDFW received \$300 million over the last two years to respond to the impacts of drought to fish and wildlife, including terrestrial and aquatic rescues and monitoring, hatchery improvements and fish production, habitat restoration and fish passage, water operations and permitting, drought resiliency on state-owned lands, human/wildlife conflict response, and law enforcement. CDFW extended low-flow

closures along the north coast rivers and streams, encouraged people not to fish during times of day when water temperatures are high and stressful on the fish, implemented a number of fish recues throughout the state, jump-started relocation efforts for endangered winter-run Chinook salmon, implemented voluntary drought agreements in the Russian River Watershed, and worked with SWB to coordinate instream flow requirements, curtailments, and temporary urgency change petitions. CDFW upgraded infrastructure at 22 hatcheries, trucked juvenile Central Valley Chinook salmon to bays, increased Central Valley Chinook salmon production, and relocated hatchery fish in two watersheds due to warm water temperatures. CDFW implemented infrastructure improvement at wildlife areas, increasing wetland carrying capacity and efficiency in water conveyance. Other improvements include the translocation and captive rearing of amphibians and reptiles, guzzler refills for Bighorn Sheep and other wildlife, and increased injured wildlife care and human/wildfire conflict response. CDFW increased funding for law enforcement efforts related to poaching, streambed alteration violations, forensic analysis, data collection, and drones for monitoring. CDFW worked with CNRA to develop a drought budget change proposal, and with DWR on several programs. CDFW has funded more than 50 projects with partner organizations including fish passage improvements, flow enhancements, habitat restoration, increased waterfowl habitat, and monitoring and scientific studies. A drought web grants portal is on the CDFW website. Continued collaboration is key to implementing many of these projects, as well as sustained funding, secured water for the environment, and additional habitat restoration and connectivity.

SWB Division of Water Rights Program Manager for Drought, Policy & Planning Jessica Bean said the State Water Board is housed under the CalEPA and their responsibilities are to protect water quality under the Clean Water Act; regulate drinking water, which includes issuing permits and inspecting facilities; administer water rights, while considering other beneficial uses of water; and provide financial assistance for a variety of projects, including construction of drinking water facilities, municipal sewage and water recycling facilities, groundwater cleanup and stormwater capture. The Safe and Affordable Funding for Equity and Resilience (SAFER) drinking water program supports smaller frontline communities who experience contamination, aging infrastructure, legacy challenges, and racial equity issues. Their funding has made improvement to 650,000 people and 120 communities, consolidated 80 water systems to date, and reduced the amount of people without safe drinking water by 40 percent. Emergency curtailment regulations in six watersheds implement the priority system while protecting fish, wildlife, and human health and safety. The regulations are good for one year, and may be adopted again this year. Voluntary solutions are encouraged, and have been used in the Russian River, Scott River, and Shasta River Watersheds. Tens of thousands of water rights were curtailed this year, many of which belong to senior rights holders who have never been curtailed. Since the middle of 2022, SWB has completed more than 1,000 inspections, issued more than 700 notices of violation, and ordered nearly 100 penalties for violations. Water conservation is the fastest, cheapest, and easiest way to stretch water supplies. In January 2022 the SWB adopted emergency wasteful water use prohibitions, adopted a regulation for water demand reduction in June, and water loss prevention standards in October. SWB provided \$3.3 billion to communities to boost drought resilience and increase water supplies, including recycled water projects, emergency projects, drinking water construction projects, and wastewater and stormwater projects. Providing financial assistance

allows them to learn what any legacy issues are and to look for longer-term solutions. Drought planning efforts include a recycled water strike team assembled in January 2023, a storm water project to begin in early 2024, a desalination interagency group that began in October 2022, an ongoing groundwater recharge permit prioritization, and water rights modernization. SWB's collaboration efforts include advisory groups, workshops and listening sessions, interagency workgroups, and actively working to target the local knowledge for solutions. SWB will plan for a hotter, drier future with their long-term strategy, Conservation as a Way of Life, which looks at urban water suppliers to calculate conservation objectives and use various tools to meet those standards.

DOC Assistant Director Keali'i Bright said they were brought to the drought table to support the entities that do the work within watersheds and help them develop strategies to address bigger landscape challenges. We are in a critical inflection point with the social and ecological factors that tie to the water supply. California farmland is a finite resource. As water availability goes down, we will have less quality farmland. Left up to the traditional economic forces that drive land use decision making at the parcel-by parcel level, we will see families and corporations leave agriculture haphazardly. Intentional planning can maximize water supply, yield, and public benefit, and minimize harm to habitat and public health. The Multi-benefit Land Repurposing Program was meant to provide the base layer of capacity to partners to address these challenges statewide. California's regions and locals are best suited to lead these multi-pronged strategies. The program aims to sustain agricultural economies where they are, but understands there will be significant impacts from reduced water. The program is currently available for critically over-drafted basins, and high- and medium-priority basins if they are within an emergency drought order. The program's goal is to support coordinated regional efforts, provide short- and medium-term drought relief, repurpose agricultural lands, sustain land-based economies, reduce groundwater use, create and restore habitat, provide benefits to disadvantaged communities, and foster partnerships and collaborations. DOC is relying on its sister agencies to develop a program that can meet these goals, working in close partnership with DWR. Regional block grants are given to GSA-led regional collaborations that are inclusive and have strong, diverse membership and outreach. After three rounds of grants there will be 10 regional entities operating in the state. They are first investing in the capacity of these organizations to lead, requiring them to develop a multi-benefit agricultural repurposing plan, and funding project development and permitting to get the projects shovel ready. They received \$113 million in applications for a \$40 million pot of money. Current grantees include the Pixley Irrigation District GSA, the Kaweah Water Conservation District, Madera County, and the California Marine Sanctuary Foundation. They dedicated \$5 million to Tribal led projects. DOC will not be able to cover the whole state with block grantees.

Commissioner Curtin asked when they are issuing permits for groundwater recharge, do they discuss the infrastructure needed in places that may not have that current capability, and was told that would be under DWR's jurisdiction.

Commissioner Solorio asked Ms. Bean about the number of Californians who do not have access to clean drinking water, and was told it is challenging to track and hard to come up with an exact number. They can look at numbers, but there are always changes as water systems come in and out of compliance. He asked Mr. Bright about the repurposing of agricultural land,

and if they are leading efforts to get people out of farming or helping the communities running out of water with economic development, and was told they are not trying to push people out of farming, but trying to lead people to use their lands in a way that uses less water and results in less harm. They want to sustain the socio-economic foundations for those communities, and do not want piecemeal fallowing to erode the ability of a region to produce agriculture.

Commissioner Makler asked Ms. Jones if we can draw any causation with climate change with respect to the period of a drought duration, and was told because our precipitation is so variable from year to year, it is probably better to think about what climate change does to the relative amounts we get. We can look at the loss of runoff efficiency and compare past droughts to conditions now. He asked Mr. Bright how the California Air Resources Board scoping plan, which includes a lot of solar, is being incorporated into DOC's land use planning, and was told those decisions will be made by the regions that develop their plans. DOC works closely with the Energy Commission to identify good opportunities for solar in each of these areas, identifying how it aligns with block grantees regional priorities and goals.

Commissioner Arthur asked what each agency's challenges are, what tools they need, and what authority they lack in an extreme drought scenario. Ms. Bean said SWB is focused on data quality, there is an inability to fully understand what is happening in a lot of our watersheds. If we can expand our tools to have more geographic models, we could be nimbler in our curtailment. Mr. Swart said CDFW can better prepare by establishing thresholds and triggers so they can respond to things ahead of time and aren't always in an emergency response. Mr. Bright said DOC is trying to achieve stability in their partnerships, with strategic plans that everybody buys into, and functional governance within those groups. Ms. Jones said money, both for data and tools for forecasting support, and to help vulnerable small water systems.

Commissioner Gallagher asked Ms. Jones if any funding is currently going to S2S forecasting, and was told there is a small, token acknowledgement in the current budget. It would require sustained federal investment on the research side.

Commissioner Bland said the \$1 million they did receive is the way to get into the appropriations cycle and put them on the path to long-term appropriations.

Commissioner Gallagher asked Ms. Bean to explain water rights modernization, and was told they think of it as stabilization, how they can better implement the current system, making information available to make better decisions. They are not changing people's water rights. They have poor reporting, are getting poor data, and need to improve the tools and the methodology. We have a 19th-century water system, 20th-century data base, and a 21st-century climate. She asked Mr. Swart about problems occurring with the salmon and what will it take to help this species survive, and was told that a lot of species around the state are experiencing a number of stressors that are amplified by drought. She said land repurposing sounds like getting rid of agricultural land to some extent. These are disadvantaged communities that depend on infrastructure that took years to develop; do you think these communities will be self-sustaining once these grants are gone? Mr. Bright said accomplishing groundwater sustainability will have a worse impact on those communities. They are trying to minimize the harm that would happen otherwise. Groundwater sustainability has a rippling effect across a landscape and a community. How do we get ahead of those impacts, manage

what we have and provide for the people and the resources that depend on them? With DOC's program, we will see some great opportunities to use fallowing to improve a community's groundwater well stability, helping people bring together the resources needed to do complex recharge programs. These are all voluntary programs. Ms. Gallagher asked, How do you think about the landowners, the employees, and the community impacts at the same time? If you can facilitate the organizing at the local level, you do empower the communities. They are committed to looking at options that support the humans that rely on these lands, not just thinking about it as molecules of water or acres of land. She asked all presenters, when it comes to interagency collaboration, who was missing at the table, who is not represented that you would like to have more communication with. Ms. Bean said building the local capacity so they can participate. Mr. Swart could not think of anyone, but said they do a lot of partnerships with federal agencies as well. Mr. Bright said there is a socio-economic component to drought that does not get addressed within the resources bubble. The state sets lofty goals and relies on local planning agencies to accomplish them. We need more local capacity. Ms. Jones said a more climate literate or educated citizenship. Local agencies struggle to get votes on projects that they may seriously need to improve their situation. We need more on the education and outreach side to the people who will be voting for those kinds of investments.

Commissioner Matsumoto asked Mr. Swart about the reintroduction of the juvenile salmon from Battle Creek to the Sacramento River, and was told there was successful adult spawning and successful emigration of juveniles. She asked the panel, if they considered a drought longer than six years, what are the things that keep them up at night when it comes to fish and wildlife and communities. Mr. Swart said potentially seeing extinction of vulnerable species. How do you change that trajectory to recovery? Ms. Jones said when we think about the combination of water temperature and supply, are there places better suited to investing, such as the above the rim dams. The state has quite a disconnect between land use planning and water supply availability, we've seen that problem in a lot of small rural communities. Do you allow development in an area that is already stressed? Mr. Bright said when the solutions are achievable, but locals cannot organize effectively with their populous to implement those actions. Ms. Bean said everybody is going to fall into their natural state of what they have always done. The reality is we are all going to need to give up something.

Chair Swanson thanked the panel for being on the front lines, and making a difference in a very difficult time.

14. Consideration of Items for Next California Water Commission Meeting

The next meeting of the Water Commission is currently scheduled for Wednesday, February 15, 2023, when the Commission will hear from an expert panel on drought preparedness and response, welcome the first SWP briefing of 2023, and hear an informational presentation for the fifth group of land holdings being considered for resolutions of necessity for the Big Notch Project.

15. Adjourn

The Commission adjourned at 2:55 p.m.