



Meeting Minutes

Meeting of the California Water Commission

Wednesday, October 15, 2014

State of California, Resources Building
1416 Ninth Street, First Floor Auditorium
Sacramento, California 95814
Beginning at 9:30 a.m.

1. Call to Order

The meeting was called to order at 9:33 a.m.

2. Roll Call

Executive Officer Sue Sims called roll. Commission member Anthony Saracino participated by phone and Commission members Andy Ball, Joe Byrne, Danny Curtin, Joe Del Bosque, Kim Delfino, Lu Hintz, and David Orth were present, constituting a quorum. Commission member Armando Quintero was absent.

3. Approval of August and September 2014 Meeting Minutes

A motion was made and seconded to approve the August 20, 2014 and September 17, 2014 meeting minutes. A vote was taken and the motion passed unanimously.

4. Executive Officer's Report

Sue Sims provided the Executive Officer's Report. Ms. Sims provided the members with an informational document prepared by the Department of Water Resources on Proposition 1, the proposed water bond which will be on the ballot in November. Staff is preparing the Commission's workplan for 2015, identifying the activities and resources that may be needed. Next month's Commission meeting will include a public workshop on water conservation and efficiency, looking at success stories and opportunities. The Commission has responsibilities for regulations pertaining to the recently-signed groundwater legislation. Gary Bardini will speak to those issues later in the meeting, and there will be an additional briefing on the topic at a future meeting.

5. Public Comments

There were no public comments.

6. Legislative Update

Kasey Schimke, Department of Water Resources (DWR) Legislative Director, briefed the Commission on state and federal legislative activity pertaining to water management issues. The water bond (Proposition 1, AB 1471) will go before California voters in November. Major groundwater legislation was passed during the last session, as well as many bills specific to various agencies and regions of the state, including the Monterey County Water Resources Agency and the Coachella Valley Water District. There were three bills for urban water

management and conservation. Assembly Bill (AB) 2067, Senate Bill (SB) 1036, and SB 1420 deal with implementing the recommendations of an independent technical panel relating to urban water management. AB 2636 set up a revolving fund that will create a loan program for water users who want to participate in water use efficiency activities. There are also bills pertaining to the California Environmental Quality Act (CEQA) and Salton Sea restoration. AB 1249 relates to Integrated Regional Water Management (IRWM) plans and prioritization in areas with certain water contaminants. SB 1120 would require a survey, similar to the survey on which the Commission, DWR, and the Association of California Water Agencies (ACWA) collaborated, to be made publically available by DWR. Mr. Schimke also discussed several bills that were vetoed. One related to the translation of CEQA documents; AB 1527 aimed to use Safe Drinking Water State Revolving Funds to assist certain areas; and SB 1337 would have held the directors of California's departments and agencies civilly responsible for information provided by their organizations.

Mr. Schimke also briefly discussed federal drought legislation that was considered in Congress in 2014. Congressmen Nunes and Valadao sponsored legislation that passed the House of Representatives. Senators Feinstein and Boxer authored similar legislation to address drought issues in the western states. Key points of the Senate legislation include evaluation of operation of the Delta Cross Channel Gates, a 1:1 ratio for voluntary water transfers, and prioritizing California for federal WaterSMART grants. The House legislation includes repealing provisions for San Joaquin River restoration, preempting certain state laws, cancelling provisions of the Central Valley Project Improvement Act, and extending federal water contracts. Congress is in recess until November 12. Conversations have been ongoing through the summer and fall on these bills, and Mr. Schimke noted there is still hope for some agreement on a legislative package for drought relief and water management.

Commissioner Delfino asked if the state has participated in the discussions of federal legislation. Mr. Schimke said Secretary Laird was engaged in commenting on the legislation. Mr. Schimke does not have access to any drafts of the legislation. Ms. Delfino asked if the state has asked for information to be shared more widely. Mr. Schimke said he is not aware of any requests for information-sharing.

7. Update on Department of Fish and Wildlife Activities by Director Chuck Bonham

Chuck Bonham, Director of the California Department of Fish and Wildlife (CDFW), briefed the Commission on CDFW's activities. California is home to more species than any other state and has the highest number of endemic species. CDFW's mission is to manage biodiversity in perpetuity. In this time of drought, CDFW must make difficult decisions about scarce resources amid competing tensions. The state entered 2014 amidst an atmospheric event called the 'Ridiculously Resilient Ridge,' which shunted precipitation north of California. In January, CDFW requested that the California Fish and Game Commission close certain waters for fishing in order to reduce pressure on fish stocks. State Water Project (SWP) allocations were reduced in January in response to the drought. This decision was based on how much water had to be held in reservoirs to avoid deadpool and meet basic health and safety needs. CDFW initially thought the entire winter run of Chinook salmon would need to be brought into captivity because flows were so low. There are also important water needs for agriculture, wildlife refuges, and preventing saltwater intrusion in the Delta. Balancing those needs was difficult. In March, CDFW partnered with the State Water Resources Control Board (State Board) under the Governor's first emergency drought

proclamation, which allowed expedited permitting for rural landowners to build water storage ponds. In exchange for expediting and reducing paperwork, many landowners agreed to make available some of their water at certain times of the year to allow the state to achieve water supply flexibility and fish mitigation.

In April, over 12 million smolts were trucked from the federal and state hatchery systems. River conditions at the time may have prevented the fish from making it to the ocean. It would be preferable for the fish to imprint to home water, but trucking them was best decision given conditions. In May, CDFW and the National Marine Fisheries Service (NMFS) launched a voluntary drought initiative in five watersheds in response to landowner concerns and stranded fish. CDFW entered into a voluntary Memorandum of Understanding (MOU) with interested landowners. These MOUs allowed CDFW to enter landowners' properties to move fish, in exchange for using existing authorities to give landowners incidental take coverage while the drought proclamation exists. On June 16, the fish in two hatcheries on the American River were evacuated because the temperature of incoming water was too high.

More than 58% of California is now in a state of exceptional drought and every county is experiencing some form of drought. This year was one of the most productive waterfowl years in Canada and the upper Midwest, so CDFW is predicting the largest influx of birds into the state. Unfortunately, they will be faced with extremely dry habitat. Usually by mid-December there are about 300,000 acres flooded in the Central Valley. CDFW is projecting that there may be a maximum of 30,000 acres flooded by mid-December. There will be crowding of a large population on scarce habitat, which will increase the risk of a rapid outbreak of avian botulism. CDFW operates a hatchery in Mount Shasta where it currently holds a small population of the extremely rare, native McCloud River Redband Trout. Staff is dedicated to preserving the population until rains allow the fish to be released. CDFW staff has rescued and brought into captivity several unique fish and wildlife species. The drought is affecting both wildlife and human populations. To make it through the next year, the state must balance the needs of all populations. Mr. Bonham provided an example of an action that balanced multiple needs. Glenn-Colusa Irrigation District (GCID) agreed to draw water from Shasta Lake later in the spring than it normally would. This allowed the cold water to flow at a time that otherwise would have posed a temperature risk for fish, thus using the waters for dual purposes.

Commissioner Curtin asked Mr. Bonham to elaborate on the dual use of water in the example he described. Mr. Bonham clarified that if GCID had taken their allocation earlier in the year, the cold water would not have been available to protect salmon. GCID was still able to use the water for consumptive needs, but the change in timing allowed for the greatest mitigation benefit for fish.

Ms. Delfino asked for a description of the current state of winter run salmon. Mr. Bonham said the situation did not turn out to be as dire as CDFW originally predicted. CDFW is now sorting through the lessons learned in order to shape future response actions. If California experiences more frequent droughts, it is possible that there is an opportunity to collect baseline information in the current drought. The Governor's leadership has been vital for drought response. A \$38 million revision to the state budget allowed CDFW to respond to the drought emergency. Funding was used to support emergency monitoring and that information is being used to shape the design of an early warning system that will be used this water year. Ms. Delfino asked what the

conditions are now. Mr. Bonham said the relevant state and federal agencies are working on a drought operations plan. Data is being reviewed to shape operations for the coming water year. Ms. Delfino said water transfers can have positive and negative impacts on fish and asked if CDFW is providing input on a transfer being discussed between the U.S. Bureau of Reclamation and the San Luis and Delta-Mendota Water Authority. Mr. Bonham said CDFW is weighing in on water transfers. State agencies were directed to expedite water transfers for drought response, but water transfers can be an example of competing interests. Ms. Delfino said it would be useful for CDFW to provide input so water transfers can provide the most benefit. Mr. Bonham said the cornerstone of using transfers efficiently is early consultation that includes all of the respective approval entities.

Commissioner Del Bosque said people south of the Delta hope that the state is able to capture stormwater when it flows through the Delta and asked about CDFW operations in the Delta. Mr. Bonham said there were experiences from the past year that may be transferrable to the upcoming year to allow for stormwater capture. There were requests from the agricultural community for CDFW to work with federal counterparts under the controlling biological opinions for the SWP and Central Valley Project (CVP). The agencies were able to operate within the boundaries of controlling law and take advantage of provisions in the biological opinions to find flexibility in some of the provisions. Shaping those operating constraints allowed more water to be moved. A similar approach could be used this year. One big 'pinch point' is around the Delta Cross Channel Gates where there is a confluence of migrating salmon and salinity intrusion threats. Work must be done to understand the presence and absence of fish in the system in order to move toward a technology-based approach to knowing where fish are relative to infrastructure. Improved tracking will allow CDFW to better judge distance of the fish from infrastructure facilities, which should improve water supply flexibility.

Mr. Curtin said better solutions are produced when agencies cooperate. He suggested that CDFW should consider how water storage funding in the water bond could provide the most benefit to fish and wildlife. Mr. Bonham said the need to modernize the system and improve flexibility is great and CDFW is already considering how to move quickly if the bond passes. Mr. Byrne added that early engagement would be helpful.

8. Briefing by Delta Stewardship Council on Work to Prioritize State Investments in Delta Levees

Cindy Messer, Delta Stewardship Council Deputy Executive Officer for Planning, provided an overview the Council's Levee Investment Strategy. The Delta Reform Act of 2009 required the Council to recommend priorities for state investment in Delta levees. There is already a set of interim policies in the Delta Plan; the Levee Investment Strategy will provide an update to those priorities. Expected outcomes of the strategy are a comprehensive levee investment and risk reduction strategy, an update of Delta Plan provisions, and a computer-based decision-making tool for future use. The strategy will help ensure that the state uses a coordinated and systematic approach to levee investment. The Levee Investment Strategy will be developed through stakeholder input and an independent scientific peer review process. It will consider state interests, threats, assets, environmental impacts, and costs. The strategy will also include recommended levels of improvements for levees and recommendations for allocating costs among beneficiaries. The computer-based decision-making tool will allow the Council to input information to update the strategy and tiered ranking.

Development of the Levee Investment Strategy is organized into six phases. Phase 1 began in July and ended in September. Phase 2 began this month with compiling and gathering existing data and information on levees, islands, and the environment. The Council will work with a series of technical experts to vet the information and data that will be used. Phase 3 will involve more intensive development of the computer model. Phase 4 will mobilize the computer-generated tool to develop portfolios of projects to meet key state objectives. Phases 5 and 6 will involve the final report on the strategy, changes to regulatory policy, and a draft environmental report. The final phase will occur in 2016. A similar tool was used by the state of Louisiana to make decisions about making investments to meet certain objectives. Louisiana developed the computerized tool with a budget of \$50 billion and generated portfolios of projects. It makes sense to utilize this approach for Delta levee investments given certain similarities. The tool will allow the Council to input different budgets and determine which projects will maximize benefits on a given budget.

The Council is trying to create an open and transparent process. There will be a myriad of interests, groups, and agencies that the Council will engage to develop the Levee Investment Strategy. The communication and outreach strategy will include technical coordination, meetings and briefings for stakeholder groups, public meetings and workshops, and a website. There will be four public meetings throughout the process. The Council's staff developed an issue paper that was released in September. The issue paper brought together key issues that the strategy must address. The Delta Plan directs the Council to develop the funding priorities for Delta levees in consultation with the Commission.

Mr. Curtin asked if there is a cost estimate and funding sources for the project. Ms. Messer said there is not yet a specific budget, but the tool will allow the Council to input available funding and determine what actions can be taken.

Mr. Byrne asked how the Council plans to work in consultation with the Commission. Ms. Messer suggested that the Commission be updated on the process in early 2015, invited the Commission to participate in public meetings, and offered to send progress updates. The Council will brief the Commission in the later stages when there is a work product. Ms. Delfino asked if the Council is looking for more formal input from the Commission. Ms. Messer said there will be opportunities for written input at the later stages of the process. Ms. Delfino said it would be helpful to know more specifically what the Council expects from the Commission.

9. Update on State Water Action Plan Implementation

Gary Bardini, DWR Deputy Director of Integrated Water Management, briefed the Commission on progress toward implementation of the California Water Action Plan (CWAP). The CWAP aligned state agencies to address water management challenges. The plan featured three main goals and 10 broad actions. The first year implementation strategy revolved around drought response, budgeting, water bond negotiations, and groundwater policy. Mr. Byrne asked how the state budget impacted the plan. Mr. Bardini said the CWAP connected the dots between programs and implementation. Foundational drought response actions this year included community assistance and drought response funding. Many elements of the CWAP were rooted in an April 2013 Integrated Water Management Summit that brought together water leaders. Needs identified at that summit included improvement of government alignment at all levels, stable financing,

improvement in planning tools, investment in science, and methods for tracking progress toward resiliency. The CWAP aims to work toward those goals.

It is necessary to align statewide planning and programs to actions in the CWAP objectives. Federal and local governments have an active role in alignment. Executive Order 1-17-2014 and Executive Order 4-25-2014 have worked toward increasing water conservation. DWR's new Water-Energy Grant Program and the Save Our Water campaign have also promoted conservation and water use efficiency. The IRWM program increases regional self-reliance. If California had not implemented IRWM, the impacts to many communities resulting from the current drought would be more critical. The state streamlined its drought grant funding to respond quickly to conditions. Preparing for and responding to drought have been a focus of state actions this year since the state is in an exceptional drought. Critical groundwater conditions are a longstanding problem. State efforts to achieve sustainable groundwater management have been ongoing. The California Statewide Groundwater Elevation Monitoring (CASGEM) program was created in 2009 and has been used for funding eligibility. Mr. Bardini outlined the phases of groundwater legislation implementation. Phase 1 will consist of realignment of governance. The state will provide guidance for local management of groundwater. Phase 2 will involve development and adoption of groundwater sustainability plans. Phase 3 will be the early implementation groundwater sustainability plans through water budgets. Phase 4 will be sustainable groundwater management. CASGEM prioritized basins based on which areas rely on groundwater the most. The legislation focuses on the high priority basins. DWR is currently planning for the many tasks it must undertake to implement the legislation. In the first phase, DWR must update the basin prioritization, adopt regulations for revising basin boundaries, determine criteria for evaluating plans, publish water availability information, and update Bulletin 118. The State Board will be in close coordination with DWR.

Commissioner Saracino asked what the Commission's role will be in the regulations. Ms. Sims said the Commission must approve all DWR regulations and there are benefits to early involvement. Mr. Bardini said the Commission will be involved in the regulation process, but the plan for developing regulations is still in progress. Mr. Saracino recommended developing an outline of the process soon. Mr. Bardini agreed and noted that budgetary resources for scoping the process may be an issue.

Mr. Curtin said the report on water availability that DWR must produce seems to go hand-in-hand with decisions the Commission will make if the water bond passes, and pointed out that it may be useful to have that information when the Commission begins making decisions. Mr. Bardini said the focus will be articulating what statewide reliability looks like, but the next step is determining which types of projects could strengthen that sustainability.

The second phase of implementing the groundwater legislation will be primarily focused on the groundwater sustainability agencies. In the third phase, the State Water Resources Control Board may function as a backstop for basins that are out of compliance. It should be acknowledged that it will take a long time to fix California's groundwater problems and build management capacity. There are other programs that must be considered in the overall management of groundwater. The CWAP, CASGEM, ongoing management planning, Bulletin 118, and IRWM all impact sustainable groundwater management. Ongoing management planning and state financial

assistance will be vital to achieve sustainable groundwater management. The state must also determine how to handle interregional assistance.

There has been significant effort focused on flood management, particularly to protect small communities. There are many opportunities for multi-benefit flood management projects. The CWAP calls for sustainable and integrated financing opportunities. The use of general obligation (GO) bonds has grown significantly since the early 2000s. The Public Policy Institute of California (PPIC) assessed annual spending and found that ratepayer driven expenditures primarily fund water supply. Most of the money spent by local agencies is raised locally. Since 1996, the state has invested \$15 billion in water management. The state's water management systems have benefitted from those investments. Bond funding is needed but will not address all of California's water financing needs.

The California Water Plan Update provided the long-term foundation of the CWAP. Major themes from the California Water Plan Update are reflected in the CWAP. These themes include attaining resilient outcomes, aligning government roles, and the need for investment in innovation and infrastructure. The value of integrated water management must be promoted to achieve sustainability.

Mr. Byrne noted that the comprehensive approach has been implemented well during the drought. Commissioner Orth said it is important that groundwater is framed as part of a comprehensive action plan. Mr. Orth asked what actions will be taken in the next few months and if DWR has the resources to perform a significant reprioritization of the groundwater basins in the coming months. Mr. Bardini said DWR will have to work with the best available information, but staff is actively working on how to go about the reprioritization. Mr. Orth said local agencies need DWR and the Commission to provide clarity on criteria to redefine basin boundaries, requirements for sustainability plans, and definitions of terms. The sooner there is a timeline for public involvement and the role of the Commission, the better.

Ms. Delfino pointed out that one of the 10 actions in the CWAP is providing safe water for all communities, but there are reports that some communities will run out of water soon. She asked what is being done about those situations. Mr. Bardini said there are a number of programs that cover water needs for areas with larger populations, but assisting smaller populations and disadvantaged communities has been a challenge.

Mr. Curtin said there do not appear to be many areas of the state that lend themselves to groundwater replenishment and asked if DWR has a sense of the size and number of these sites. Mr. Bardini said DWR knows where replenishment has been attempted. More sites will be identified when groundwater sustainability plans are developed by local agencies. It will be challenging to determine how those projects can work together regionally. Mr. Saracino added there is a greater opportunity for in-lieu groundwater banking. In-lieu banking does not require the same recharge infrastructure because surface water is used in-lieu of groundwater. There are a number of ways to recharge groundwater, but in-lieu recharge opportunities exceed locations that can be used for spreading grounds or injection.

Mr. Byrne offered to assist in developing a schedule for the Commission's participation in groundwater management.

10. Briefing on California Water Plan Update 2013

Kamyar Guivetchi, Chief of DWR's Statewide Integrated Water Management Branch, introduced the topic stating that now is an important transformation period for the California Water Plan because the Governor's Water Action Plan and DWR's Water Plan Update 2013 (Update 2013) are aligned. The Update 2013 Highlights document is under final review by the Governor's office and will be distributed soon.

Mr. Guivetchi introduced a delegation of scientists and engineers from Columbia that attended today's Water Commission meeting to hear about the California Water Plan Update.

Mr. Guivetchi noted that there was a piece of legislation not mentioned during the legislative update that could impact water financing. SB 628, by Senators Beall and Wolk, defines enhanced infrastructure financing districts. The bill authorizes local regional entities to form a financing district to finance multi-sector and multi-benefit projects that are funded by multiple sources. IRWM groups may take advantage of this authority to fund infrastructure projects. Mr. Curtin asked if the bill allows for private investment. Mr. Guivetchi said it does. He offered to distribute a brochure that describes the legislation and suggested a speaker on the topic.

Paul Massera, Program Manager for the California Water Plan, provided an overview of Update 2013. Update 2013 maps out over 300 specific actions to align with the CWAP and is a good resource for implementing the CWAP. The three themes of Update 2013 have support from a broad range of stakeholders. The first theme is a call to integrate. California's water system is interconnected and understanding of the connections is evolving. A new component of Update 2013 is a coastal area management. It also provides a well-supported definition of integrated water management. The second theme is alignment of government agencies. Update 2013 includes principles for improving alignment and actions for aligning government agencies. Mr. Curtin asked if there will be new legislation to address alignment issues. Mr. Massera said the recommendations and legislation will shape future alignment.

The third theme and an enhancement in Update 2013 is finance. Data that was developed to support integrated water management has become useful for discussing current and future water financing issues. Funding is variable, and the goal is to create more stable funding. The state should advance a sustainable, integrated finance framework. Stakeholders have had discussions regarding shared values to guide state investment in water management. Update 2013 includes actions to develop state finance strategies, including a menu of funding and finance alternatives.

Part of producing Update 2013 involved understanding how California uses and supplies water. It also includes a range of future water use scenarios. The primary drivers of water use in the future will be irrigated crop area and population growth. There is a high degree of uncertainty surrounding future water demands, so DWR developed water demand estimates based on different scenarios. The ranges for water demand in both agricultural and urban water management are large. The projections are based on a future without any new practices or policies. One of the key messages of Update 2013 is that regional conditions, preferences, and

priorities demand regional solutions. The California Water Plan provides a lot of data, creates a call for action, and provides a path forward for more sustainable water management. For Update 2013, DWR is planning to launch a roll-out and communications effort that goes beyond previous efforts.

Commissioner Hintz referred to the pie chart on regional investment in Mr. Massera's presentation and asked about the 22% of funding shown to increase water supply. Mr. Massera said that category includes recycling activities, conjunctive management, and other types of projects. He clarified that the 22% figure is a percentage of total investment rather than an increase in reliability.

11. Update on Drought Conditions and DWR Activities

Bill Croyle, DWR's Drought Manager, updated the Commission on drought conditions and activities. The current drought in California is an emergency situation. Most Californians are taking personal action to conserve and be informed. As we move forward, conservation education will be even more critical. DWR is planning for and expecting a dry 2015 and examining the past water year for lessons learned. There are serious drought conditions throughout the West Coast and DWR is using the best available information to respond to conditions. California began the water year with about 3 million acre-feet less water than last year. Effective drought response this year will require multi-agency coordination. This year, there was a real-time water operations group comprised of many agencies working together to find a balanced approach to SWP and CVP operations in order to protect the Delta and export water. That group is working on a drought operations plan that will be submitted to the State Water Resources Control Board. Groundwater conditions are a key drought issue. A decrease in surface water led to an increase in groundwater use, and many wells have gone dry as a result. DWR is aware of roughly 1,200 dry wells, but the total number of dry wells could be much higher.

Many areas of the state are now requesting assistance. Tulare County is facing some of the worst groundwater problems. DWR is developing a multi-agency approach for dealing with individual wells and small communities to resolve their needs for water. There are some emergency resources to use for that process. State and federal housing agencies are also working on these issues. Part of the challenge has been that not all local entities and communities want state involvement, but 25 of the state's 58 counties have declared emergencies. An additional 13 cities, 9 tribes, and 12 special districts have declared drought emergencies. There are 30 local drought task forces and two tribes have drought task forces to deal with conditions. DWR and other agencies are working to make sure tribes are included in drought response. There is full engagement of local, state, and federal agencies. There is close coordination and communication in management of the SWP and CVP. The U.S. Army Corps of Engineers, U.S. Geological Survey, and a number of federal agencies have provided data assistance. The National Drought Resilience Partnership will soon look for pilot projects in California.

One of the key state actions is conservation education. DWR will be working on water contingency plans and working with local agencies to assist them in developing robust plans. Mr. Croyle outlined some potential actions for a dry 2015. Curtailments will be continued and pre-1914 water rights may be revisited. The State Board is trying to develop a system to turn curtailments on and off to provide flexibility. DWR is planning for the installation of barriers in the

Delta. Hopefully they will not need to be deployed, but they may be necessary to prevent salinity intrusion. Within DWR's Drought Task Force there are two workgroups primarily dealing with water systems that have more than 15 connections to ensure these communities have water supplies. The greater challenge has been addressing systems with less than 15 connections because they are not regulated by the State Water Resources Control Board. Those systems are a priority and DWR is examining resources and technical assistance to support those communities. Non-governmental organizations and public partners are assisting with actions such as donation of water and installation of tanks. The next steps of the IRWM and drinking water programs will focus on how to use state resources to support these communities. The state is learning from current efforts to plan for the future. The state is encouraging locals to come forward and better identify their needs. Consolidation of small systems to help support fees for more reliable and safe drinking water will be helpful.

Commissioner Ball asked how long the supply in California's reservoirs will last if there is no rain. Mr. Croyle said depends how we use the water that we have. Assuming the current rate and types of use, surface water would last roughly one year. Mr. Ball asked at what point the state will consider a definitive mandate for water use if there is no rain. Mr. Croyle said the Delta operations plan considers several sets of assumptions. If hydrology has not changed by December and January, there will be discussion regarding curtailments and mandatory conservation. Conservation education is absolutely critical. DWR is increasing funding for Save Our Water. Mr. Ball said voluntary water use reduction has not been very successful. Mr. Croyle said there has been an 11% reduction in water use statewide compared to last year and the state must reduce water use by 20% sooner than 2020.

Mr. Del Bosque asked what actions the state is taking to respond to communities that will soon run out of water, such as East Porterville. Mr. Croyle said East Porterville is one of the drivers behind DWR's drought strike team. Part of the response has been to ensure that locals not only have an initial response plan, but are also involved in the plan to resolve water supply problems in the long term. It was necessary to determine what the community is willing to do to resolve water supply issues. Communities are finally allowing state assistance. Merced and the central coast are areas of concern. There are success stories. Last January, the Sacramento area exceeded the Governor's 20% conservation goal because Folsom Lake was extremely low and conservation education was effective.

13. **Action Item: Consideration of Revised State Water Project Encroachment Permit Regulations** (This item was taken out of order.) Jim Openshaw, DWR Attorney, discussed changes to the State Water Project Encroachment Permit Regulations. Since the Commission's last approval of the regulation in May 2014, the regulations were submitted to the Office of Administrative Law (OAL). OAL had suggestions for changes to improve the regulation package, so DWR chose to work with OAL to realign the regulations. There have not been significant additions or subtractions, but the regulations have been realigned to make obligations clearer. DWR is prepared to return the regulation package to OAL next week.

A motion was made and seconded to approve the regulation. A vote was taken and the motion passed unanimously.

12. Briefing on DWR System Reoperation Study

Ajay Goyal, Chief of DWR's Surface Storage Investigations Branch, briefed the Commission on DWR's work on system reoperation. The Commission previously discussed the need to consider surface water and groundwater together; some of the work pertaining to the system reoperation study is relevant to that discussion. DWR was directed by the legislature to conduct planning and feasibility studies for reoperating flood and water supply systems in conjunction with groundwater. The studies were designed to determine water supply reliability, flood hazard reduction, and ecosystem protection and restoration. The study had four phases: develop a plan, formulate reoperation scenarios, initial analysis, and reconnaissance analysis. DWR took strategies for reoperation and worked with stakeholders to determine four strategies for further study. DWR is currently doing initial analysis of those strategies. Phase 2 began with identifying reservoirs and groundwater basins that could be considered for reoperation and vetted those sites with relevant agencies. Several reservoirs do not have much flexibility for reoperation. Some are going through relicensing and did not want to participate. There is ample space in well managed groundwater banks for extra storage. Groundwater banks are limited instead by surface water available to fill the banks.

DWR is analyzing four strategies: reoperating Oroville, reoperating Shasta, reoperating New Exchequer, and integrating the SWP and CVP. All of those strategies include a groundwater component. There are three operational components for reoperation: supplemental ecosystem flows, conjunctive management, and forecast based operations (FBO). DWR found that conjunctive management in Northern California and south of the Delta are different. In Northern California groundwater recharges naturally, so groundwater substitution appears most feasible. Groundwater banks are already used extensively and are limited by access to surface water in areas south of the Delta. Typically a reservoir has dead pool space, conservation storage space, and space for flood control. The goal of FBO is to encroach into flood control space or conservation space based on a five day forecast. In phase 2, a tradeoff analysis was performed to test the flexibility of the system in Oroville and Shasta. Supplemental ecosystem flows were released at different times and in different amounts from each reservoir during spring months. DWR also performed conjunctive management through groundwater substitution. Lastly, ecosystem flows and conjunctive management were combined. DWR ran several cases for each of the reservoirs and found that there is not much flexibility in the system and there are tradeoffs. Providing supplemental ecosystem flows leaves less water in storage, which impacts cold water pool, water supply, and hydropower.

Mr. Goyal shared preliminary results of reoperation of Lake Oroville. The goal was to release about 100,000 acre-feet (AF) of supplemental ecosystem flows per year. On average, 27,000 AF were released, but that decreased storage in Oroville and SWP and CVP exports. When ecosystem flows were combined with conjunctive management, storage in Oroville and exports were improved relative to the first scenario. DWR next performed the analysis with supplemental ecosystem flows, conjunctive management, and FBO. This increased storage in Oroville and increased exports while still releasing ecosystem flows. Key observations are that existing reservoirs have limited flexibility, ecosystem flows impact reservoir storage, and FBO improves system flexibility. Through the process of the reoperation study, DWR developed an analytical framework for integrated analysis of surface and groundwater storage. Future planning studies should consider recharge of depleted basins as an objective.

Mr. Orth said the foundation of conjunctive management in the southern Central Valley is to capture flood flows for in-lieu groundwater substitution or on-farm floodwater utilization. He asked Mr. Goyal to expand upon the issue of beneficial use. Mr. Goyal said groundwater basins are recharged through in-lieu, injection, or spreading basins. Groundwater tables are currently so depleted that there is subsidence, which impacts the whole region. Because it impacts the public at large, groundwater recharge should be considered as a public benefit. Mr. Saracino said the Commission must consider how to characterize public benefits as they relate to groundwater recharge or banking projects. Ms. Delfino pointed out that AB 1471 states that groundwater storage and recharge provide extraordinary public benefit. If the bond passes, the Commission will need to consider that. She said that updates as the study progresses would be helpful.

14. Update on the Status of Agricultural Water Management Plans

Diana Brooks, Chief of DWR's Water Use and Efficiency Branch, provided an update on agricultural water management plans (AWMPs). Agricultural water management planning is necessary to achieve water use efficiency. Data and planning are the basis of effective water management. Planning sets the conditions for an integrated water management approach for more sustainable regional operations. It can provide benefits to water quality, flows and timing, and energy efficiency. Planning also provides an opportunity for public participation. The plans are posted online to provide a public record. AWMPs are required for the agencies to be eligible to receive state grants and loans. There are also federal and state mandates for agricultural water management planning. The passage of SBX7-7 in 2009 required formal adoption of AWMPs by suppliers that provide water to 25,000 irrigated acres or more. It also required implementation of efficient water management practices (EWMPs). Required elements of the plans were laid out in the legislation. AWMPs must contain basic information about the district, efficiency improvements achieved and expected, compliance with the agricultural water measurement regulation, and reports on implementation of EWMPs. The plans must be prepared every five years. The first round had to be adopted by December 31, 2012, but DWR did not receive all the plans on time. There are two types of EWMPs: critical and conditional. Critical EWMPs must be implemented and conditional EWMPs are to be implemented if they are cost-effective and technically feasible. The critical EWMPs are water measurement and volume-based pricing. The agricultural water measurement regulation requires measurement at different accuracies based on specific criteria. If the 14 conditional EWMPs cannot be implemented, the water supplier must provide an explanation. Fifty-four water suppliers were required to adopt AWMPs by December 2012. Of those, 40 have submitted plans to DWR, nine have not, and five have notified DWR that they are still working on their plans. This represents a 74% compliance rate for suppliers required to submit plans. Some suppliers submitted regional plans and some suppliers submitted plans voluntarily.

Mr. Byrne asked what the consequences are for not submitting required AWMPs. Ms. Brooks said that in order for suppliers to be eligible for state funding, they must be compliant with AWMP requirements. DWR does not review the plans' accuracy, but ensures that they are complete. Ms. Delfino asked if all the submitted plans are complete. Ms. Brooks said DWR has verified that all the submitted plans contain the required elements.

Mr. Hintz asked if there is anything DWR can do about the plans that are required but have not been submitted. Ms. Brooks said that early on, DWR had workshops around the state to go

through requirements. Later, DWR followed up with letters to remind suppliers that plans were due. Ms. Delfino asked if suppliers that have not submitted plans are unable to apply for only specific state funds or all state funds. Ms. Brooks said plans are required for all state funds. In 2013 and 2014, DWR awarded grants for agricultural water use efficiency planning and implementation. In 2013, 39 grants were awarded totaling \$14.75 million. Suppliers can apply for planning grants to work on developing AWMPs. Ms. Brooks briefly discussed some of the water use efficiency implementation grants that were awarded. Mr. Del Bosque if any of the grants funded water measurement instruments. Ms. Brooks offered to check with staff.

DWR is in the process of updating the Guidebook for preparing updated AWMPs. Compliance with reporting requirements in the upcoming second round of plans should be better than the first round since most suppliers simply have to update their existing plans. DWR will continue to provide technical assistance for EWMPs, promote research and development, and review and update EWMPs.

Mr. Orth asked if DWR has made direct contact with the agencies that have not submitted plans to learn why and offer technical assistance. Ms. Brooks said that when DWR began reaching out, more suppliers had not submitted plans. DWR has called, sent letters, and sent emails to agencies. Ms. Brooks said she does not have a list of why the plans were not completed, but it could be because it was the first round, or possibly because of resource considerations due to drought response activities. Mr. Orth asked if there has been consideration of how agricultural water management planning requirements will interact with the provisions of the Groundwater Sustainability Act. Ms. Brooks said that is an ongoing process that is underway. The benefits of agricultural water use efficiency have a relationship with groundwater management.

Mr. Hintz said that considering the number of workshops and the controversy surrounding AWMPs, the development of AWMPs has been a success and bodes well for the future of water conservation.

15. Update on DWR's 2014 Integrated Regional Water Management Drought Grant Solicitation

Tracie Billington, Chief of DWR's Financial Assistance Branch, discussed the status of the IRWM drought grant program. Proposition 84 authorized \$1 billion for IRWM grants that was allocated to 11 funding areas. DWR is in the process of awarding \$808 million for implementation and construction activities. The 2014 drought solicitation is for \$200 million. DWR was directed by SB 104 to expedite the solicitation. Applications were due in July, and DWR received 39 applications requesting \$349 million for 180 individual projects. DWR developed principles for draft funding awards which targeted areas of the state with the largest drought need and impacts. The principles set maximum award amounts for each of the funding areas. The funding areas were ranked based on overall drought need. DWR awarded the maximum amount for the regions with the highest drought impact and worked through the ranking list until the available funding in this round ran out.

DWR announced draft funding recommendations in September. Eighteen applications were recommended for full funding and five were recommended for partial funding which varied between 62% and 15% of the amount requested. The draft recommendations were based on the amount of money available by funding area. Eligibility issues for this funding were CASGEM

compliance and IRWM plan compliance. Several regions and individual projects were disqualified for not meeting these requirements. The draft funding recommendations were released for public comment between September 23 and October 8. Opposition was generally concerned with the ranking of funding areas based on drought impacts. Since the release of draft funding recommendations, two applicants have come into CASGEM compliance by becoming designated monitoring entities, and one individual project's CASGEM issues have been resolved. DWR staff is working with Director Cowin to finalize the awards, and final awards should be announced by the end of the month. DWR hopes all agreements will be executed by June 2015. Approximately \$251 million will be available for the 2015 funding round. DWR initially planned to begin that round as soon as the drought grants were finalized, but is now considering delaying because the final awards for the previous funding round were just executed. The 2015 funding round will likely begin mid-year.

16. Consideration of Items for Next California Water Commission Meeting

Items for the next meeting will include the public workshop on water use efficiency and conservation from 10am until approximately 3:00 pm. Prior to the workshop, the Commission will discuss its workplan for next year and responsibilities for the Commission if Proposition 1 is approved by voters on November 4.

Mr. Byrne adjourned the meeting at 2:19 p.m.