

Meeting Minutes - DRAFT

Meeting of the California Water Commission

Thursday, July 16, 2015

State of California, Resources Building

1416 Ninth Street

Room 335

Sacramento, CA 95814

Beginning at 8:30 a.m.

1. Call to Order

The meeting was called to order at 8:30 a.m.

2. Roll Call

Executive Officer Paula Landis called roll. Commission members Joe Byrne, Joe Del Bosque, Danny Curtin, David Orth, and Armando Quintero were present. Commission member Andy Ball was absent, and Commission members Paula Daniels and Maria Herrera came in a shortly after roll call.

3. Action Item: Consideration of Model Water Efficient Landscape Ordinance Regulations

This item was not heard. The Commission acted on this item on July 15, and discussion was not carried over.

4. Water Storage Investment Program (WSIP) Issue Working Session: Definitions, Public Benefits, and Technical Review

Tracie Billington, Chief of DWR's Financial Assistance Branch, discussed how the relative environmental values of water quality and ecosystem benefits will be incorporated into the project evaluation process. One approach is to evaluate projects based on the magnitude of public benefits provided, and then evaluate a subset of projects for relative environmental values. Another option is to evaluate relative environmental values for all projects and bring each evaluation to the Commission. Once the metrics for determining ecosystem and water quality priorities and relative environmental values are finalized, it will be easier to compare and weigh projects against one another. However, if there are a large number of applications, review may be time-consuming if the Commission does not use some manner of pre-screening process.

Commissioner Orth asked if relative environmental values will be evaluated for every project. Ms. Billington responded that if projects are screened for magnitude of public benefits first, the project list would be narrowed and remaining projects would then be reviewed for relative environmental values. Mr. Orth stated that the public would not support any method that screens out projects before they reach the Commission members. Commissioner Curtin added that if they use a pre-screening process, small projects may be unfairly screened out. The calculation of

magnitude of benefits must be designed to take not only size, but also proportion into account. Jenny Marr, WSIP Project Manager, added that the Agency team (the Delta Stewardship Council, Department of Fish and Wildlife, the State Water Resources Control Board, and the Department of Water Resources) would prefer to evaluate the relative environmental values of ecosystem and water quality benefits separately, since a composite score may not provide an accurate picture.

The logistics of how the applications will be presented to the Commission are still being determined. Staff will provide the Commission with a review of each application. A ranking method may be employed with each category being ranked separately. Return on public investment is also very important and must be incorporated in the ranking. Commissioner Curtin noted that there are many variables upon which potential projects can be judged, but public benefits are the key factor. Commissioner Orth stated that the language in the statute, regarding expected return on public investment provides clear instruction as to how the Commission should select projects. Return on investment should be the first ranking criteria; application of relative environmental values would follow.

Stephen Hatchett, Consulting Economist with CH2M Hill, reminded the Commission that that the return on investment (ROI), while important, should not be the only consideration to determine magnitude of public benefits. One way to calculate ROI is to compare quantified magnitude of public benefits to the amount of public money that is being invested. Another way to calculate ROI would be to take those figures and put them put it into a broader context, incorporating other values and then deciding as a body what their returns are. Whatever method is chosen needs to be conveyed to the project applicants so that they can incorporate it into their applications.

Commissioner Quintero pointed out that the Commission's criteria should emphasize net public benefits. Commission Legal Counsel Maureen King stated that the statute does have language that addresses net improvement. Ms. Marr added that staff has been working on a list of evaluation criteria. That document will be discussed during the August Stakeholder Advisory Committee and Commission meetings. Each criterion will be entered into a decision support tool that the Commission can use to weigh the ramifications of different decisions. Commissioner Quintero stated that the overarching effects of a project on the state water system should be included in the criteria, if it is not already.

Chairman Byrne asked if the ecosystem and water quality priorities and relative environmental values will be factored into the quantification of public benefits. Ms. Billington noted that staff will try to quantify all of the public benefits, but must incorporate priorities and comparative analysis on the ecosystem and water quality benefits. It will be a two-step process, beginning with a quantification of all of the public benefits. There is an array of evaluation criteria, one of which would be the magnitude of public benefits, another of which would be priorities and relative environmental values. The question of how to determine the impact of a project on the state water system still remains.

The definition of “measurable improvements to the Delta ecosystem or its tributaries” was the next item discussed. Staff has determined that the ecosystem improvements must be quantifiable and must be associated with the storage project. Commissioner Curtin asked for clarification about what might be considered an improvement. Ms. Billington said improvements could include changed timing of flows and improved temperatures. Ms. Billington noted that projects do not have to be in the physical boundaries of the Delta to provide benefits to the Delta or its tributaries.

Commissioner Del Bosque asked if applicants will quantify the public benefits of their projects and if those calculations will be reviewed during the technical review process. Ms. Billington answered that the reviewers and technical team will provide the Commission with assessments of the accuracy of information provided by the applicants.

The Commission discussed whether mitigation and land or habitat purchases may meet the eligibility criteria for Delta ecosystem improvements. Ms. Marr said that proponents must prove that improvements from habitat areas not directly connected to the storage project are still associated with the project. Mitigation actions are not benefits to the Delta. Commissioner Byrne stated that it may be stretching the language of the statute to focus on applications that do not fit a more traditional understanding of improvements to the Delta. Ms. Marr added that this topic was informally discussed by the Stakeholder Advisory Committee. The individuals who participated in the conversation do not believe that storage projects with actions for Delta benefits tacked on should qualify. She also stated that the responsibility is on the applicant to make sure their project achieves the evaluation criteria.

Marguerite Patil, representing Contra Costa Water District, stated that there a lot of applicants contemplating groundwater projects, but they may not know how to ensure the kinds of benefits that the statute requires. It is a control and institutional issue. She suggested the Commission reach out to the Metropolitan Water District of Southern California on this issue.

Commissioner Del Bosque suggested the Commission discuss definition of improvements to the state water system at a future meeting.

Mr. Hatchett provided an overview of how public benefits can be quantified. He asked the Commission to consider whether they should employ a prescriptive approach, or allow for a more flexible approach to quantifying benefits. Mr. Hatchett described how quantifying benefits meets the requirements of the statute including public benefits ratios, cost effectiveness and return on public investment.

Mr. Hatchett provided a step-by-step framework for how public benefits can be quantified and allocated. The steps include: defining future conditions with and without project, calculating the physical changes associated with the project, estimating economic value of physical benefits, comparing benefits to costs, and allocating costs to public and non-public benefits categories. Next, he provided examples of the types of information that applicants would be asked to provide

regarding their public benefits. He also explained the avoided-cost method of monetizing benefits.

The calculations of benefits vary based on the nature of the benefit. A direct physical action will be easier to quantify than an action that is designed to have an indirect or peripheral benefit. The applicant will be asked to provide the value of the benefits and a cost of alternative action; the quantified economic benefit should be lesser of the two.

Commissioner Byrne asked how an applicant would approach the process if they are dedicating water for unspecified environmental purposes. Mr. Hatchett replied that the calculation will be easier to do if the goal is more specific, but that they can still make estimates.

Commissioner Quintero asked if the quantification methods will vary between surface water projects and groundwater projects. Mr. Hatchett replied that at this time there is not a clear answer.

Commissioner Daniels expressed concern about selecting projects based on assigned monetary values, and asked if it would be a better idea to utilize monetary quantification later in the selection and funding process. Mr. Hatchett responded that the statute suggests that quantification in common units must occur for the Commission to judge certain aspects of a project. Applicants will be encouraged to make the best calculations they can, and are allowed to delineate individual costs based on their projected accuracy. That way the Commission will know ahead of time which figures are certain and which may change, and can adjust their decision as they see fit.

Commissioner Quintero suggested using units of water as a common denominator. Mr. Hatchett replied that per-unit calculations may work for some benefits but not others, such as recreation and flood control. Commissioner Curtin added that some projects serve multiple purposes, which also complicates the per-unit calculation.

Mr. Hatchett then discussed common assumptions for project analysis. Common assumptions are a set of requirements and recommendations that will be provided to project applicants. Their purpose is to ensure consistency in applications so that projects can be compared. Staff is preparing physical and economic common assumptions.

Physical common assumptions may include hydrology and climate change, Delta conditions, surface water and groundwater operations and quality, riverine conditions, hydrodynamics, aquatic and terrestrial resources, energy, recreation resources, and others to be determined as they arise. Economic common assumptions may include discount rate, planning horizon, current and future dollar projections, construction contingencies, future population levels, real energy costs, and unit values of water. At the Stakeholder Advisory Committee meeting scheduled for August 5, staff will ask the stakeholders for their input on how flexible or prescriptive the requirements for common assumptions should be and what they should include.

Mr. Hatchett noted that staff has developed some common values for recreation benefits. Commissioner Daniels expressed concern that recreation benefits exist beyond what can be easily monetized. Mr. Hatchett said staff will provide unit values for some benefits, but those will not apply universally. Some benefits may be monetized well, but applicants may choose not to monetize some benefits, and the Commission can review that information to make decisions. Ms. Marr added that applications will include physical benefits if they cannot be monetized. Commissioner Daniels requested that staff ask the Stakeholder Advisory Committee if this method of quantifying recreational benefits is an issue. Mr. Hatchett pointed out that the unit valuables will be available to applicants, but not required.

Commissioner Curtin stated that it may be difficult for groundwater storage projects to have recreation benefits, but it is possible. For example, a recharge basin can just as easily double as a lake for boating and fishing. Ms. Patil agreed, stating that it may be difficult to value the benefit, but it is easy to value the cost it took to provide that benefit. Recreation is not, by its nature, a money-making investment, but incorporating recreation into the public benefits as a peripheral perk is still a good way to maximize the benefits. Commissioner Herrera stated that the Commission has a unique opportunity to promote recreation for people who need it, and should be incentivizing it.

Mr. Hatchett provided an example of a hypothetical groundwater project and described some of the benefits that it could provide. For example, an applicant with a conjunctive use project with ecosystem benefits, might state that their project would increase above-ground water supply for ecosystem improvement, increased stream flow, or reduced Delta reliance. If an applicant claimed that their project includes water quality benefits, they could include the economic benefits that would come from improved quality of groundwater, improved aquifer water quality, or reduced costs associated with water treatment or salinity damage repair.

In a conceptual conjunctive use project, an applicant may want to create something that does not exist, as opposed to improving or restoring something that already does. For example, they may want to construct a groundwater pumping and recharge mechanism that would divert flow into recharge or in-lieu storage and promote the use of stored groundwater instead of river diversions. In this case, the additional flows in the river may promote fish populations.

Mr. Hatchett provided examples of how a cost/benefit analysis would be performed on conceptual conjunctive use project and a conceptual surface storage project, breaking down some possible project components and their per-unit costs and weighing them against the projected benefit. The statute does not specifically require this method of analysis, but Mr. Hatchett recommended using it as a simple way to determine if the project's benefits will exceed its costs. He concluded by stating that cost allocation is a necessary step to determine a public funding share based on public benefits. The Commission will need to rank potential projects based on the expected return for public investment; conventional cost allocation methods are preferred, but can be adjusted to provide cost shares that meet WSIP requirements.

Over the upcoming months, staff will be developing unit-values of water using economic models and water transfer price information; completing work for economic common assumptions, methods, and metrics; revising their tool and methods report; and incorporating final quantification methods into their draft regulations.

Commissioner Byrne asked how unit values will be determined. Mr. Hatchett responded that unit values of water will largely be based on statistical analysis and historical water transfer. Staff does not intend to create unit values for fish or waterfowl, because the values would be too specific to particular species or locations. There are other units that cannot be measured, such as flood flow mitigation; in this case, you must measure the actual cost of flood damage and not the hypothetical cost of what flood mitigation was able to prevent.

Ms. Patil stated that water transfers have historically been used as a metric to value water but are not always reliable. Currently, water transfers are not possible because water is not being moved through the Delta. The value of water may be site-specific so the Commission may want to allow for flexibility. Mr. Del Bosque added that the location of the water source impacts its value. Mr. Quintero noted that water districts have a good sense of what recycled water costs in their areas. Costs should also be related to the value of the service that water will provide. The Commission concluded that more discussion was needed to determine how flexible or prescriptive the methods for economic quantification should be.

5. Consideration of Items for the Next California Water Commission Meeting

The next meeting will be held on Wednesday, August 19 in Los Angeles. There will be a SGMA update, an update on critically over-drafted groundwater basins, and updates on the program and administrative activities and stakeholder process for the WSIP. There will also be an issue working session featuring a discussion of common and preferred assumptions, management and monitoring of public benefits, project selection criteria/metrics, options for integration study, decision-making tools, and applying priorities and relative values in the application review process.

Chairman Byrne adjourned the meeting at 11:03 a.m.