

Governance and Financing of the Bay Delta Conservation Plan

LEGISLATIVE ANALYST'S OFFICE

Presented to:
Senate Natural Resources and Water Committee
Hon. Fran Pavley, Chair
and
Senate Governance and Finance Committee
Hon. Lois Wolk, Chair





Overview of the Bay Delta Conservation Plan (BDCP)

- Coequal Goals for the Delta.*** The BDCP is a proposal intended to help achieve the “coequal goals” of improving the reliability of the state’s water system and enhancing the Delta ecosystem, while preserving the Delta as an evolving place. Specifically, BDCP is a Natural Community Conservation Plan (NCCP) that will provide wildlife agencies with the necessary information to issue new endangered species act permits for the operation of the State Water Project (SWP) and Central Valley Project (CVP) for the next 50 years.
- Measures for Species Recovery.*** A NCCP must implement activities that will contribute to recovery of the species covered by the plan. Such measures described in BDCP include: (1) adding two tunnels underneath the Delta to take water from the Sacramento River to the existing pumping plants in the south Delta and (2) ecosystem restoration projects, such as acquiring and improving roughly 147,000 acres of habitat for protected species and improving water quality.
- Adaptive Management.*** The BDCP includes an “adaptive management” process that monitors environmental conditions, evaluates which measures succeed in helping species recover, and then adjusts them in the future based on that evaluation.
- Other State Efforts in the Delta.*** Many state programs are also intended to help achieve the coequal goals, as well as other state goals in the Delta. The Delta Reform Act of 2009 created the Delta Stewardship Council (DSC) to direct efforts across state agencies and to resolve the lack of accountability and authority that hindered previous efforts in the Delta. The act requires DSC to (1) develop a legally enforceable Delta Plan to set the overall direction for state policy in the Delta for the next 50 years and (2) incorporate BDCP into that plan if it meets NCCP requirements.



Proposed BDCP Governance Structure

- The BDCP proposes five groups that will together be responsible for ensuring that the plan is implemented, including:
- **Authorized Entity Group.** Composed of agencies that will receive permits under BDCP, which includes state and federal water supply agencies, and could include water contractors. Responsibilities include overall program oversight, deciding how the SWP and CVP will be operated, and approving changes to the species recovery measures (with the Permit Oversight Group). The group will also define the scope of responsibilities for the Implementation Office (discussed below), evaluate its performance, and select the office's program manager.
 - **Permit Oversight Group.** Composed of state and federal wildlife agencies that issue permits under the Endangered Species Act and NCCP Act. Responsibilities include monitoring compliance with the conditions of the permits, which can be revoked by the group if those conditions are violated.
 - **Implementation Office.** Composed of staff from the Department of Water Resources (DWR), water contractors, or other agencies with relevant experience. Responsibilities include administering funding for plan implementation, coordinating activities with other Delta programs, and ensuring that species recovery measures are carried out by numerous other state and federal agencies. However, the Implementation Office does not have statutory authority to direct the activities of these agencies.
 - **Adaptive Management Team.** Composed of representatives from the Authorized Entity Group, the Permit Oversight Group, water contractors, DSC's Delta Science Program, and the state and federal programs that coordinate scientific activity in the Delta. Responsibilities include administering the adaptive management program and proposing changes to species recovery measures.



Proposed BDCP Governance Structure

(Continued)

- **Stakeholder Council.** Composed of the Authorized Entity Group, the Permit Oversight Group, water contractors, DSC, other Delta programs, regulatory agencies, and county governments. Could also include nongovernmental organizations that represent various interests in the Delta. Will advise BDCP on implementation and other related issues.

- Resolving Conflicts Among Groups.** Certain decisions, such as approving changes to species recovery measures, would be jointly made by the Authorized Entity Group and the Permit Oversight Group. In cases of disagreement, either group can request that the decision be elevated to higher levels within state and federal government (such as the federal Secretary of the Interior and the Governor). Otherwise, the agency with direct authority over the activity will make the decision.



Governance— Issues for Legislative Consideration

- ☑ ***Unclear Lines of Authority and Accountability.*** Several audits found that past Delta efforts have been hindered by the lack of authority on the part of overseeing entities and stated that the involvement of many agencies without a clear lead results in limited accountability. Because the Implementation Office does not have statutory authority over other agencies, similar issues could arise from BDCP's proposed governance structure.

- ☑ ***Integration With Other Delta Processes Unclear.*** Many programs in the Delta may affect BDCP actions and vice versa. For example, the changes in water operations could affect the success of other Delta programs. Thus, it will be important to integrate BDCP with other Delta programs. However, it is currently unclear how such integration will be achieved and to what extent the DSC will have authority over BDCP. In addition, there is potential for inefficiencies because the Delta Reform Act requires DSC to perform many of the same activities that BDCP proposes to pursue, such as an adaptive management program.

- ☑ ***Potential Difficulty in Making Decisions.*** Elevating decisions when the Permit Oversight Group and the Authorized Entity Group disagree could slow decision making as multiple levels of government are consulted. In addition, the Adaptive Management Team must reach consensus before proposing changes to species recovery measures. However, scientific consensus has rarely occurred in the Delta.



Governance— Issues for Legislative Consideration (*Continued*)

- ☑ ***Unclear Balance Between Coequal Goals.*** The BDCP appears to give significant authority over certain aspects of BDCP (such as identifying potential changes to water project operations) to water supply agencies, while the authority of fish and wildlife agencies is less clear. For example, the Delta Reform Act requires BDCP to integrate fish and wildlife agencies into the real-time decisions on water operations, but BDCP does not specify to what extent the Permit Oversight Group will be involved in those decisions. Thus, the extent to which BDCP will balance the coequal goals is unclear.

- ☑ ***Limited Accountability to Legislature.*** Under the proposed BDCP, its implementation would be carried out with limited legislative oversight. For example, the Stakeholder Council would not include a representative of the Legislature. In addition, key BDCP positions (such as the program manager for the Implementation Office) would not be approved by the Legislature. Thus it could be difficult for the Legislature to hold BDCP accountable for its progress on the coequal goals.

- ☑ ***Legislature Could Specify Delta Governance Structure.*** The Legislature could take actions to ensure that BDCP operates effectively by clarifying certain aspects of the governance structure. For example, the Legislature could give the Implementation Office statutory authority over other agencies, transfer some responsibilities for implementation to DSC (which currently has some regulatory authority over other agencies), or grant additional authority to DSC to exercise oversight over BDCP implementation (such as by requiring DSC approval of changes to species recovery measures).



BDCP Cost Estimates and Funding Sources

- Expenditures to Date.** Since 2006-07, a total of \$176 million has been spent on planning activities related to BDCP (as of June 2013). Funding for these activities has come from the state and federal water “contractors” south of the Delta that receive water from the SWP and CVP, under a series of funding agreements with DWR and the United States Bureau of Reclamation.
- Estimated Future Costs.** The BDCP estimates that the total cost of BDCP over the 50-year term of the permits that authorize its operation is \$24.7 billion. This estimate does not include financing costs, such as interest payments. About two-thirds of this total comes from the construction and operation of the tunnels.
- Cost Assumptions Generally Reasonable.** In general, BDCP’s various cost assumptions, such as those related to tunneling costs, project management, and discount rates appear reasonable. However, as we discuss later, certain cost assumptions could be improved.
- Potential Funding Sources Identified.** As required by state law, BDCP lists potential funding sources that exceed the total costs. As discussed later, the availability of some of these sources may be uncertain.
- Contractors to Fund Conveyance.** The BDCP states that the contractors will fund all of the construction and operations of the tunnels and associated legally required mitigation by charging their ratepayers. The current water supply contracts signed by the contractors and DWR contain terms that ensure that contractors fully fund the costs of SWP, which in the future could include the tunnels.



BDCP Cost Estimates and Funding Sources (Continued)

- State and Federal Governments to Primarily Fund Ecosystem Restoration.*** The BDCP expects 90 percent of the costs of ecosystem restoration and program administration to be shared by the state and federal governments. Most state funding is anticipated to be provided by future water bonds, including a bond currently scheduled for the November 2014 ballot. Federal funding is expected to be provided almost exclusively by congressional appropriations with a small amount expected from an existing surcharge on CVP water users.



Cost Estimates— Issues for Legislative Consideration

- ☑ ***Potentially Greater Land Costs.*** Based on historical land value data, BDCP estimates that land acquisition costs will exceed over \$1 billion. However, land prices could increase significantly as demand for land increases due to the implementation of BDCP, potentially resulting in higher land acquisition costs.
- ☑ ***Potential for Cost Overruns.*** Based on our review of various studies of cost overruns on large and complex infrastructure projects, we find that actual construction costs can differ significantly from estimates. One specific study that examined 33 bridge and tunnel projects (mostly in Europe and North America) found that the actual cost of these projects exceeded estimates by 34 percent on average. On the other hand, some research indicates that water projects experience fewer overruns than transportation projects.
- ☑ ***Cost Estimates Do Not Capture Potential Range of Costs.*** Because the estimates depend on many assumptions and the potential for overruns, the single cost estimate provided by BDCP does not fully capture the range of potential costs. In order to provide more useful information to the Legislature and public, BDCP could estimate each cost component using a range of assumptions that vary based on costs of historical projects and use those data to present a low, midpoint, and high cost estimate.
- ☑ ***Unclear Whether Benefits of Tunnels Will Outweigh Costs.*** According to BDCP, the benefits of the tunnels are 35 percent to 40 percent greater than the costs to the water users that will fund them. However, two factors could affect whether the project has net benefits. First, the cost of the project could be higher from cost overruns. Second, the benefits could be lower than estimated because of lower-than-anticipated water demand or costs of alternative supplies.



Cost Estimates— Issues for Legislative Consideration *(Continued)*

- ☑ ***Ensure All Procurement Methods Are Considered.*** A variety of procurement methods could be used to design and construct the tunnels, such as “design-bid-build,” where separate contractors are responsible for design and construction of the infrastructure project, and “design-build,” where a single contractor is responsible for both the design and construction. Considering the advantages and disadvantages of all procurement methods could help ensure that BDCP chooses the method that best ensures the successful and timely completion of the project.



Funding Sources— Issues for Legislative Consideration

- ☑ ***Contract Terms That Protect State Are Not Guaranteed.*** As noted above, the current contracts between DWR and the water contractors contain terms that ensure that contractors pay the full cost of SWP and protect the state from risk. However, the contracts for water supply will have to be renegotiated in order to fund the tunnels and there is no guarantee that these terms will be continued.

- ☑ ***Some Funding Sources for Ecosystem Restoration Uncertain.*** As discussed above, BDCP relies on future bond measures to fund the state share of ecosystem restoration, but it is unclear if and when voters will approve them. If bond funds are not available in the near future and no additional funding sources are identified, some ecosystem restoration may not be funded, including the early actions needed before the tunnels begin operation.

- ☑ ***Funding Needs for Ecosystem Restoration Could Be Higher Than Planned.*** It is possible that the proposed ecosystem restoration activities will be inadequate to offset potential negative impacts on the ecosystem from new conveyance (such as greater take of certain species as a result of increased pumping). In addition, BDCP states that state and federal governments could be asked to fund additional activities in order to offset some uncertainty surrounding water exports. This could mean that the public may pay for additional restoration in order to allow additional pumping.



Funding Sources— Issues for Legislative Consideration *(Continued)*

- Potential for Additional Public Liability if Species Do Not Recover.*** The Delta is negatively affected by many factors and activities that originate in other parts of the state, such as the discharges of pollutants and water diversions north of Delta. If such factors put species in danger of extinction, the state and federal endangered species acts would require some entity to take actions to protect them, such as by providing additional habitat restoration. Under federal regulatory guidelines, the costs of any necessary restoration actions beyond those specified in permits are to be paid for primarily by the state and federal governments.

- Potential Legislative Actions.*** In the future, the Legislature will be asked to appropriate funding for ecosystem restoration activities. The Legislature also has the opportunity to provide direction on how BDCP will be funded in order to ensure that all species recovery measures are implemented. For example, the Legislature could designate other entities as a backstop in case state or federal funding for ecosystem restoration is not available. The Legislature could also adopt policies to control factors outside of the Delta that have a negative effect on species, which would help reduce the potential need for additional funding for ecosystem restoration.