



March 20, 2013

Attention: Imported Water Committee

Bay Delta Alternatives. (Discussion)

Background

The Bay Delta Conservation Plan (BDCP) is a process for obtaining permits under the state and federal Endangered Species Act to allow the construction of a new conveyance system in the Sacramento/San Joaquin River Delta. Last February, California Natural Resource Agency released an administrative draft of the BDCP, which proposed a set of twin tunnels with a combined capacity of 15,000 cubic feet per second under the Delta. Following concerns raised by fishery agencies, in July, the Resources Agency reduced the size of the facility to be analyzed to 9,000 cfs. The state and federal agencies have agreed to a “decision tree” process, which would not provide any assurance of the project yield until after it has been built and placed into operation.

In January, the Natural Resources Defense Council (NRDC) advanced a proposed alternative concept that would utilize a “portfolio-based” approach to the BDCP. Staff briefed the Imported Water Committee on NRDC’s Portfolio-Based Conceptual Alternative. The portfolio alternative includes a smaller export facility, increased local supply development, levee improvements, and south of Delta storage (See Attachment 1). NRDC urged state and federal officials to study the approach as a stand-alone alternative in the BDCP. Since NRDC announced its alternative concept, a number of agencies and elected officials, including the Water Authority, have asked state and federal officials to evaluate the portfolio alternative (See Attachment 2).

Discussion

The Water Authority has been a strong advocate for a sustainable Bay Delta solution, actively engaging in Bay Delta issues at the MWD board and other forums, including the Legislature, where it lobbied for passage of the 2009 comprehensive Bay Delta bill package. The Water Authority has consistently advocated for a “right-size” solution in the Delta that is also supported by a broad range of stakeholders in order to reduce challenges to implementation. In late 2011, the Water Authority invited a number of Bay-Delta stakeholders to present to the Imported Water Committee to share their perspectives and viewpoints on the proposals to address to co-equal goals of water supply reliability and ecosystem restoration. Representatives from the following organization spoke:

- Contra Costa County Supervisor Hon. Mary Nejedly Piepho;
- Delta Protection Commission Executive Director Mike Machado;
- Delta Stewardship Council Chair Phil Isenberg ;
- Environmental Defense Fund California Water Legislative Director Cynthia Koehler;
- Metropolitan Water District of Southern California Assistant General Manager Roger Patterson;
- North Delta Water Agency Manager Melinda Terry;
- State and Federal Water Contractors Authority Executive Director Bryon Buck;
- State Water Resources Control Board Executive Director Tom Howard, and;

- Westlands Water District Chief Deputy General Manager Jason Peltier.

In February 2012, the Water Authority board adopted Delta Policy Principles to guide staff on the evaluation of the BDCP and other projects and actions relating to the Bay Delta solution (See Attachment 3).

More recently, the California Natural Resources Agency released its latest timeline for releasing an administrative draft of the BDCP, which will occur in three stages, each followed by a public meeting (See Attachment 4 for timeline).

To provide additional insight on the BDCP and the portfolio alternative, representatives from the following organizations have been invited to address the committee board: Department of Water Resources, NRDC, California Farm Water Alliance and the Alameda County Water District, a State Water Project Contractor.

Prepared by: Debbie S. Discar-Espe, Senior Water Resources Specialist

Reviewed by: Amy I. Chen, MWD Program Director

Attachments:

1. Portfolio Based Alternative
2. Supporters of analyzing the Portfolio Alternative, March 2013
3. Water Authority Board adopted Delta Policy Principles
4. BDCP Administration Draft Release schedule

January 16, 2013



The Honorable Ken Salazar
Secretary
U. S. Department of the Interior
1849 C Street, N. W.
Washington, DC 20240

The Honorable John Laird
Secretary
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dr. Jerry Meral
Deputy Secretary
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

The Honorable Michael L. Connor
Commissioner
U. S. Department of the Interior
1849 C Street, N. W.
Washington, DC 20240

Dear Secretary Salazar, Secretary Laird, Deputy Secretary Meral,
and Commissioner Connor:

We are writing to you in advance of the planned release of the public review draft of the Bay Delta Conservation Plan (BDCP), out of a deep concern over the status of this effort. We are united in a desire for a successful project that can be supported by project proponents, Delta stakeholders, and the public. That chance for success is substantially diminished as a result of the alternatives analysis that we have seen thus far. Up to now, the BDCP process has been strongly focused on advancing a large capacity conveyance which, along with the suite of associated conservation measures, will be burdened with large uncertainties and for which a solid business case has not yet been made. These unquantified risks include impacts on listed species, impacts on the Delta landform, hydrology and water quality, open-ended costs to direct water users and to the public, political controversy, and potentially lengthy litigation.

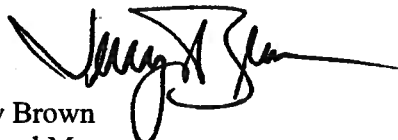
Secretary Salazar, Secretary Laird, Deputy Secretary Meral,
and Commissioner Connor
January 16, 2013
Page 2

Absent so far has been a portfolio-based alternative that features a smaller conveyance facility with additional, complementary investments in local water supply sources, regional coordination, south of Delta storage, levee improvements, and habitat restoration (see attachment) as advanced in the coalition letter sent by other organizations today. We believe that it is critical to evaluate in detail a conveyance as small as 3,000 cfs, as it would provide considerable water supply benefits to the export community while better protecting broader interests in the Delta. Such a facility would also realize significant financial savings in comparison with a larger conveyance facility, face fewer legal and political challenges, and potentially be completed sooner. With accompanying investments in proven, cost-effective regional water strategies, this approach could increase export area water supplies and reduce the vulnerability of water supplies and Delta infrastructure to disruption from earthquakes and other disasters. We urge that this conceptual alternative be seriously considered in the BDCP process, including the required CEQA/NEPA analyses and the Clean Water Act Section 404 alternatives analysis.

A portfolio approach could produce superior benefits at a similar or lower cost to water users and the public, and at reduced levels of environmental impacts. It has the potential to be consistent with the best available science and, as a result, may be more readily permittable and capable of delivering benefits more rapidly. It would appear that a solid business case can be made for such an alternative; in any event, the business case must be made before any project proceeds.

We fully appreciate the magnitude of the challenges facing the Delta, and urge a comprehensive solution that is both affordable and science-based. We recognize the enormous effort you have undertaken toward this end, and hope that this conceptual alternative will continue to advance the discussion.

Sincerely,



Jerry Brown
General Manager
Contra Costa Water District



Maureen A. Stapleton
General Manager
San Diego County Water Authority

Secretary Salazar, Secretary Laird, Deputy Secretary Meral,
and Commissioner Connor
January 16, 2013
Page 3



Michael P. Carlin
Deputy General Manager
San Francisco Public Utilities Commission



Walter L. Wadlow
General Manager
Alameda County Water District



Alexander R. Coate
General Manager
East Bay Municipal Utility District



Mark Watton
General Manager
Otay Water District



Bob Filner
Mayor
City of San Diego

Attachment



Secretary Ken Salazar
Department of the Interior
1849 C St, N.W.
Washington DC 20240

Secretary John Laird
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Commissioner Michael Connor
Bureau of Reclamation
1849 C Street NW
Washington DC 20240

Deputy Secretary Jerry Meral
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

January 16, 2013

Re: A Portfolio-Based Conceptual Alternative for BDCP

Dear Secretary Salazar, Secretary Laird, Deputy Secretary Meral and Commissioner Connor,

We represent a coalition of business and environmental organizations. We are writing to request that the attached conceptual alternative be considered in the BDCP process, including as a stand-alone alternative in the required CEQA/NEPA analyses and Clean Water Act Section 404 alternatives analysis. Our constituents believe strongly in the need for a science-based, cost-effective BDCP plan to help achieve the co-equal goals of restoring the Bay-Delta ecosystem and salmon fishery, and improving water supply reliability for California. None of us believes that the status quo in the Delta is acceptable.

Although many stakeholders have recommended that BDCP consider certain elements that are included in the attached document, we thought it would be most helpful at this point in the BDCP process to offer a *package* of actions and investments that, taken together, represent an alternative that could attract support from a diverse coalition of interests. This is a conceptual alternative, not a proposed BDCP preferred project. We believe that analysis of this alternative will assist BDCP in developing the most cost-effective, environmentally beneficial final BDCP project with the best chance of implementation.

At the heart of the conceptual alternative are two simple principles. First, BDCP must be grounded in the best available science regarding ecosystem management. This approach is essential to designing a successful, long-term plan for a water supply system and ecosystem as complex and dynamic as the Bay-Delta. This approach is also essential to ensure that the BDCP plan can meet legal requirements and receive permits. We applaud Governor Brown and Secretary Salazar for emphasizing their commitment to a science-based approach to BDCP in their July 25, 2012 announcement.

The second core principle is that the BDCP make fiscal sense. The final BDCP plan must be both affordable and financeable or it will ultimately fail. We believe it is imperative at this point in the BDCP process to avoid the economics and financing issues that plagued CALFED and contributed to its eventual failure.

This conceptual alternative was also developed with two practical realities in mind. First, the conceptual alternative has been developed based on the reality that many California water suppliers are looking closer to home to meet their long-term water supply needs and are planning to reduce their demand for water imported from the Bay-Delta. The second reality is that cities and water agencies, as well as federal, state and local budgets are facing significant financial constraints. We believe that it is critically important to balance the timing and need for investments in the Delta with a strategy that also advances continued water agency investments in local water supply development.

This “portfolio-based” approach reflects the real world desire of water suppliers and the public to evaluate the relative benefits of investments both within and outside of the Delta, and is consistent with the increased discussion in BDCP, over the past six months, of South of Delta water supply alternatives.

One of the cornerstones of the conceptual alternative is a proposal to evaluate a 3,000 cfs, single-bore North Delta diversion facility. This facility would produce significant financial savings, in comparison with a larger conveyance facility, while still providing water reliability benefits. In fact, we believe it could produce greater overall benefits at a lower cost, with some of the savings invested in local water supply sources, new South of Delta storage, levee improvements and habitat restoration. For example, investments in proven, cost-effective local water supply strategies can both increase export area water supplies and reduce the risk of disruption from earthquakes and other disasters. Southern California 2010 Urban Water Management Plans have already identified 1.2 MAF of potential additional local supply projects, only a small fraction of which have been factored into Delta planning.

Many of these local investments could provide significant, broad and long-term benefits. For example, a relatively small investment (in comparison with the cost of a new Delta facility) in Delta levees would provide significant water supply benefits beyond those achievable by the BDCP as currently conceived. The BDCP currently anticipates that, even with a large facility, on average, approximately half of the water exported from the Delta would still be pumped by the South Delta facilities (with more than three quarters of exported water pumped from the

South Delta in critically dry years). Therefore, reducing the vulnerability of Delta levees would provide significant water supply reliability benefits for South of Delta water users, particularly in dry years. Such an investment, in combination with local and public funds, would provide additional local benefits in the Delta. We believe that BDCP should include such “win-win” opportunities to collaborate with in-Delta interests.

It is essential not to delay an evaluation of the likely yield of a new Delta facility. The conceptual alternative also calls for the careful analysis of the best science available today regarding water project operations with a new facility. In particular, this approach calls for the analysis of an operations proposal developed by state and federal biologists to conserve and manage a full range of covered Delta fish species, including consideration of the need to protect upstream fisheries resources. We understand that state and federal biologists have undertaken an extensive effort to prepare such an operational scenario. The signatories to this letter have not endorsed these proposed operations. Rather, given that this operational scenario represents an important effort by state and federal biologists, it should be analyzed in the BDCP EIR/EIS, the Effects Analysis and the 404 analysis.

This conceptual alternative includes initial cost estimates that suggest that this approach could provide superior environmental results, increased water supply and greater reliability at a reduced cost. By expanding benefits and lowering costs, this portfolio approach could assist with project financing. We encourage BDCP to include this approach in its analysis of economics and financing issues, and to refine the cost estimates included in this conceptual alternative.

We sincerely believe that this conceptual alternative has the potential to produce superior benefits at a similar or lower cost to water users and the public. Because it is based on the best available science, we believe it would be more readily permissible. It also promises to deliver benefits more rapidly. And, finally, we believe that this approach will be helpful in attracting broader support for BDCP, both within and outside of the Delta.

We request that this conceptual alternative be analyzed as a stand-alone alternative in BDCP’s environmental documents. In addition, we recommend that BDCP use this portfolio approach to compare the potential benefits and impacts of multiple alternatives, including a full range of different conveyance facility capacities. Such comparisons are needed so decision-makers can fully understand the choices they face and can select the optimum portfolio of actions that will best serve the state.

Thank you for your hard work to design an effective plan to meet the challenges we face in the Delta. We hope that this conceptual alternative will continue to advance the discussion. We look forward to an opportunity to discuss the conceptual alternative with you, including how it may best be incorporated into BDCP's analysis.

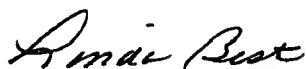
Sincerely,



Barry Nelson, Senior Policy Analyst
Natural Resources Defense Council



Tony Bernhardt
Environmental Entrepreneurs



Linda Best, President and CEO
Contra Costa Council



Gary Bobker, Program Director
The Bay Institute



Kim Delfino, California Program Director
Defenders of Wildlife



Jonas Minton, Water Policy Advisor
Planning and Conservation League

A Portfolio-Based BDCP Conceptual Alternative

The eight components described below represent a conceptual alternative, not a proposed BDCP project. The analysis of this alternative is intended to assist BDCP in developing the most cost-effective and environmentally beneficial final BDCP project that can be implemented and produce benefits rapidly. Variations on the approaches below should be analyzed as well, including a full range of conveyance capacities.

Guiding Principles

Science-Based Ecosystem Management: Credible, proven science will determine ecosystem improvements and water management, using on-the-ground results as the central driver of decision-making.

Water Supply Reliability: The BDCP can contribute to improved water supply reliability by reducing the physical vulnerability of Delta water supplies and embracing a portfolio approach that recognizes that water suppliers and the public have a broad range of options both in and outside of the Delta to meet their water needs and improve reliability.

A Strong Business Case: A strong business case is central to the success and financial viability of the BDCP. Sound economic principles and cost-benefit analysis must inform water supply improvements so that water ratepayers understand that the benefits they will receive from the project are reasonably proportional to what they are being asked to pay.

Water Quality: Delta water quality will be strongly influenced by the final BDCP plan, with potential impacts and benefits to export water users, local municipalities, Delta residents, Delta farmers and the ecosystem.

Conceptual Elements of a Diversified Portfolio Approach

New Conveyance Facility: Focus BDCP analysis on one 3,000 cfs North Delta intake facility and a single tunnel sized for 3,000 cfs gravity flow. This smaller facility would lower BDCP costs, improve reliability and reduce opposition. If implementation proves successful in meeting biological goals and objectives, a second phase could be constructed subsequently, but would not be permitted at this time.

Project Operations: Analyze, as a starting point for analysis of future SWP and CVP operations, the best science available today. In particular, analyze the operations proposal developed by state and federal biologists to conserve and manage a full range of covered Delta fish species, including consideration of the need to protect upstream fisheries resources.¹ Project operations should utilize a “big gulp, little sip” approach that increases exports in wet years – when water is available in excess of environmental needs

¹ *The work of state and federal agency biologists to produce a science-based operational scenario is summarized on pages 1-16 of this BDCP presentation - http://www.essexpartnership.com/wp-content/uploads/2012/11/BDCP_CS5_Update_NGO-Meeting_11_14_12v3.pdf*

– and reduces diversions in average and drier years, particularly during key periods such as the spring and fall. Such an operations proposal has been developed over the past year by state and federal fish agency biologists. This is an important agency analysis that should be subjected to additional refinement in an open, transparent process, utilizing independent external peer reviewers. It is essential not to delay a detailed analysis of the likely yield of a new facility based on the best available science.

Estimated Water Exports: ~ 4 - 4.3 MAF/ year (2025). This is an initial estimate of average exports. BDCP has not yet modeled a 3,000 cfs facility with additional South of Delta storage and the agency-developed operational scenario included in this proposal.

Reduced Reliance on the Delta through Investments in South of Delta Water Supplies: DWR, many Urban Water Management Plans and other analyses have concluded that local water supply tools including conservation, water recycling, and other approaches, can provide reliable, sustainable and plentiful new sources of supply that will also be cost-effective over the long run. These sources can also be provided rapidly through additional investments. There is approximately as much new water available from these new water supply sources as is currently exported from the Delta.

This conceptual alternative proposes a smaller capital investment in a Delta facility, in comparison with the current BDCP preliminary project, and investment of savings in local water supply projects. For analytical purposes, this alternative includes a \$2 billion investment in water recycling (at a capital cost of approximately \$6,430 - 6,470 per AF of permanent water recycling capacity) and a \$3 billion investment in urban conservation (at an initial/capital cost of \$3,230-4,860 per AF).² Urban stormwater capture, groundwater cleanup, and conjunctive use should be included as cost-effective methods for generating future new sources of water, and would also be important elements of a large-scale effort to invest in new local water sources. Additional cost-effective savings can also be obtained from investments in agricultural conservation.³

Estimated Yield: 926,000 - 1,245,000 acre-feet of permanent water supply. (309,000 – 311,000 acre-feet from water recycling and 617,000 - 934,000 acre-feet from urban efficiency.)

Improved Water Agency Integration: The principles of integrated regional water management planning should form the foundation for improving cooperation and integration among Bay Area, Central Valley, and Southern California water agencies to

² See attachment for additional detail regarding cost and yield estimates. Note that these are initial/capital costs, not annual per-acre-foot unit costs. A comprehensive BDCP analysis should also address operations and maintenance costs of a full range of alternative investments.

³ The Department of Water Resources Draft Bulletin 160-2009 <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm> (Volume 2, Chapter 2, page 2-13) states that agricultural water conservation costs range from \$35-\$900 per AF. Because of the width of this cost range, agricultural conservation is not included in the conceptual cost and yield numbers above. A final BDCP portfolio proposal should, however, include agricultural water use efficiency investments.

provide improved water supply reliability and quality benefits. Increasing integration and cooperation among these agencies could produce substantial potential benefits and cost-savings. For example, more than a dozen significant water agencies serve the Bay Area. Improved physical connections and increased cooperation among these agencies could reduce risks related to earthquakes and localized drought conditions, facilitate wastewater recycling, and utilize existing infrastructure more efficiently.

In Southern California, additional benefits could be obtained, for example, by facilitating water management agreements and programs among agencies with the potential to construct water recycling facilities and agencies that have groundwater storage resources. The Metropolitan Water District could operate its system to facilitate innovative and cost-effective water management programs between agencies in Southern California and elsewhere in the state. Southern California groundwater agencies could allow water from Southern California surface storage facilities to be managed conjunctively with regional groundwater storage facilities. This could, in essence, create new surface storage capacity at the far lower cost associated with groundwater storage. This approach could help take advantage of the supplies available during “big gulp” opportunities in the Delta. Similar potential benefits may exist through increased integration and cooperation in the agricultural sector.

In all of these opportunities it is imperative that program costs be clearly identified and allocated to the water suppliers that benefit. In this way, each public water supplier is able to account to the public it serves that their water ratepayer dollars are being spent wisely, according to law and in a manner that provides clear benefits.

New South of Delta Surface and/or Groundwater Storage: Include up to 1 MAF⁴ of new South of Delta storage, with funding allocated through competitive bidding to evaluate proposed surface, groundwater and conjunctive use projects. Investments should be focused on projects that can be completed quickly and that are most cost-effective. Additional South of Delta storage⁵ can allow for greater water exports in wetter years. As discussed above, surface storage south of the Delta could be used conjunctively with groundwater facilities to store wet-year exports for future dry years. This increase in storage capacity must be accompanied by new Delta operations that ensure that the new storage will be operated to implement “big gulp, little sip” operations.

Levee Improvements: Improve existing levees and build setback levees as part of habitat restoration. A \$1 billion additional investment could improve Delta levees to protect life, property, and important infrastructure, and also upgrade key levees including the eight western Delta islands to a higher standard with improved stability and resilience

⁴ This 1 MAF storage target is based on limited BDCP modeling and may be revised based on further analysis.

⁵ As used in this proposal, South of Delta storage is defined as storage integrated into the existing SWP and CVP Delta export system, including surface and groundwater storage in the Bay Area, the west side of the San Joaquin Valley, Kern County and Southern California. It includes storage controlled by the CVP, the SWP, MWD, Kern County Water Agency and other regional and local agencies.

in the face of seismic risk. Upgrading these key levees would provide significant water reliability benefits and would be an appropriate use of exporter funds.

Regardless of the size of a Delta facility, maintaining and improving Delta levees is critical to ensuring the physical reliability of Delta exports. Even with new conveyance, the CVP and SWP will continue to rely on water exports from the South Delta, particularly in drier years. With a 9,000 cfs facility, exports from the South Delta would constitute approximately 50 percent of total exports. In critically dry years, BDCP currently anticipates that 75 percent of total exports would be diverted from the South Delta.⁶ Therefore, the benefits of this proposed investment in levee improvements would be particularly significant in dry years. BDCP does not currently include a strategy to reduce the physical vulnerability of the portion of Delta exports that would continue to rely on the Delta levee system.

East Bay Municipal Utility District, Contra Costa Water District and Delta landowners currently contribute to the maintenance of the levees upon which they rely. An analogous investment by export agencies would produce significant reliability benefits. For example, with average exports of 4 MAF/y, a contribution of \$8/AF would produce \$480 million to help improve Delta levees over the coming 15 years. Public funds for levee improvements are appropriate to protect Delta residents and infrastructure of regional and state importance (e.g. highways). Additional local contributions may be required.

Delta Floodplain and Tidal Marsh Habitat Restoration: Implement a large scale, approximately 40,000 acre habitat restoration program to benefit Delta fish and wildlife species, to provide a broad range of ecosystem functions and to be integrated with Delta flood management improvements. There is strong scientific evidence that floodplain habitat restoration, combined with adequate flows, can benefit salmon and other species. However, agency “red flag” memos and the National Research Council review of the existing biological opinions concluded that floodplain restoration cannot substitute for required ecosystem flows. Restoration of tidal marsh habitat, also a desirable activity, nonetheless, has far greater uncertainty associated with it, regarding benefits for many covered species, in comparison with the likely benefits of floodplain restoration. Tidal marsh restoration should be included in the BDCP plan as a complement to flow augmentation and floodplain restoration, as it is more likely to benefit some covered fish species in combination with these elements. Habitat restoration, particularly tidal marsh restoration, should in any case be implemented within an adaptive management framework. Existing CVP and SWP mitigation responsibilities, as well as new mitigation responsibilities associated with a new Delta facility, will be paid for by water exporters, while public funding should be focused on conservation benefits that go beyond

⁶ BDCP Draft Effects Analysis, April 13, 2012. Tables C.A-24 and C.A-27 from Appendix 5.C - Attachment C-A, which can be found on p. C.A. 83 and C.A. 92 at this link: http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/BDCP_Effects_Analysis_-_Appendix_5_C_Attachment_C_A_-_CALSIM_and_DSM2_Results_4-13-12.sflb.ashx

mitigation. This proposal is focused on the coming 15-20 years. Long-term restoration efforts are likely to require additional funding.

Integrating Science into Delta Management: Increase the integration of the best available science into all aspects of Delta and related resource management. The Delta is a complex and highly dynamic system. During the past decade, an expanded investment in science has improved our understanding of this ecosystem. With ongoing investments, that understanding will continue to improve. A long-term investment in science and a program to integrate new scientific results into ongoing management are essential to long-term success. Therefore, BDCP should include the following:

- External independent scientific review at critical points, with clear mechanisms to incorporate peer review results.
- Quantified performance objectives, such as SMART⁷ biological objectives and criteria for ecosystem restoration and water operations.
- Governance and adaptive management processes designed to ensure that goals and objectives are achieved, to obtain the best available science over time, and to ensure that scientific results are fully integrated into on-the-ground management.
- Carefully designed roles for the state and federal projects, as well as other stakeholders, to ensure a reliance on objective science.

This science-based approach is not anticipated to result in large increases in project costs. In fact, this approach would increase the cost-effectiveness of BDCP efforts, and should result in savings.

Affording, and Paying for the Portfolio-Based Conceptual Alternative

Our organizations strongly support an analytically-based beneficiary pays approach to BDCP financing. We believe that the analysis of this portfolio approach will assist BDCP in developing detailed cost allocations and in attracting additional funding partners. It will also help reduce pressure for public funds and ensure that such funds are spent effectively and appropriately.

Preliminary cost estimates indicate that this conceptual alternative is less expensive than the current preliminary preferred BDCP project. In addition, some of the investments in this portfolio alternative, such as levee and local water supply investments, are likely to be necessary even with a large Delta facility. Therefore, the actual cost difference between these two different approaches may be larger than indicated here.

This conceptual alternative is more financially viable than the preliminary preferred 9,000 cfs Delta facility project. That project, pegged at \$14 billion or more, is proposed to be paid for by water exporters. Proposed habitat restoration could cost up to an

⁷ SMART objectives are those that are specific, measurable, achievable, relevant to the goal and timebound.

PORTFOLIO-BASED BDCP CONCEPTUAL ALTERNATIVE

January 16, 2013

Page 6

additional \$4 billion, raising the total capital cost of the current approach to approximately \$18 billion. By reducing the size of the project to a 3,000 cfs, single-bore facility, many billions of dollars can be freed up to invest in more local supply development and the water exporter shares of the other conceptual alternative components.

The water code requires water users to pay for a new Delta facility.⁸ The public share of this conceptual alternative could be funded in part by a reduced water bond. The increased benefits and reduced cost of this approach can assist BDCP in attracting increased funding from beneficiaries, reducing the pressure on the water bond. We believe that the diversified portfolio approach in this conceptual alternative could assist in the effort to develop a broadly supported and effective new water bond.

Estimated Cost Summary

Conceptual Portfolio Component	Estimated Cost	Source of Funding
New 3,000 cfs North Delta Facility	~ \$5-\$7 billion ⁹	Export water agencies
Local Supply Development	\$5 billion	Local water agencies and cost share per state Integrated Regional Water Management Program (IRWMP)
Improved Water Agency Integration	TBD (may be funded through local supply funds described above)	Water agencies and cost share per state IRWMP
New South of Delta Surface and/or Groundwater Storage	~\$1.2 billion ¹⁰	Exporters or local water agencies, and public cost share per IRWMP
Levee Improvements	\$1 billion	Public, water exporters and other beneficiaries and Delta community
Delta Floodplain and Tidal Marsh Habitat Restoration	\$1.7 billion	Export agencies and public
Integrating Science into Delta Management	TBD	Public and water agencies
Total Conceptual Alternative Cost	~\$14 to \$16 billion	

⁸ California Water Code Section 85089

⁹ A BDCP July 1, 2010 presentation estimated the capital cost of a 3,000 cfs facility with 2 18-foot diameter tunnels at \$7.2 billion. Using a single tunnel would reduce costs significantly.

¹⁰ See attachment for details regarding cost estimates.

Total Conceptual Alternative Water Supply Benefits

~ 4.9-5.5 MAF/YR.

Delta exports: ~ 4-4.3 MAF/Y.

New South of Delta sources: ~ .93-1.2 MAF/Y

Support for Analysis of Portfolio Alternative

Urban Water Providers

- 1/16/13 Alameda County Water District
- 1/16/13 City of San Diego
- 1/16/13 Contra Costa Water District
- 1/16/13 East Bay Municipal Utility District
- 1/16/13 Otay Water District
- 1/16/13 San Diego County Water Authority
- 1/16/13 San Francisco Public Utilities Commission

Environmental Groups

- 1/16/13 Defenders of Wildlife
- 1/16/13 Natural Resources Defense Council
- 1/16/13 Planning and Conservation League
- 1/16/13 The Bay Institute

Business Groups

- 1/16/13 Contra Costa Council
- 1/16/13 Environmental Entrepreneurs
- 1/22/13 San Diego Regional Economic Development Corporation

Elected officials

- 1/15/13 San Diego Mayor Bob Filner
- 1/16/13 Congressman George Miller
- 1/17/13 Contra Costa County Supervisor Mary Piepho
- 1/17/13 Contra Costa County Supervisor Karen Mitchoff
- 1/18/13 Congressman John Garamendi
- 1/18/13 Congresswoman Doris Matsui
- 1/18/13 Congressman Jerry McNerney
- 1/18/13 Congressman Mike Thompson
- 1/12/13 Contra Costa County Board of Supervisors (Board of Supervisors Vote 2/12/13)

Delta Protection Commission

Newspaper Editorials

- 1/20/13 San Diego Union Tribune
- 1/23/13 Merced Sun Star
- 1/24/13 Sacramento Bee
- 2/7/13 Chico News and Review



February 15, 2012

Attention: Imported Water Committee

Adopt Delta Policy Principles. (Action)

Staff recommendation

Adopt Delta Policy Principles to guide staff in evaluating Bay-Delta initiatives and the Water Authority's advocacy to ensure a successful implementation of a Delta solution.

Alternatives

1. Modify one or more draft principles.
2. Do not adopt Delta Policy Principles.

Fiscal impact

None.

Background

The Sacramento-San Joaquin Bay Delta is an important water supply source for Southern California. Metropolitan Water District (MWD) purchases water from the Department of Water Resources through its State Water Project (SWP) contract. MWD is the SWP's largest customer, providing more than 50 percent of its revenues. As such, MWD is the principle source of revenue under the current SWP as it will be for any proposed Bay Delta solution. As the largest steady purchaser of MWD water, the Water Authority has a vital interest in assuring that any Bay Delta solution is financially sustainable. The Water Authority has advocated for a number of changes in the MWD rate structure, including securing take-or-pay contracts with its member agencies or other firm commitments to pay the fixed costs of a Delta conveyance project.

Discussion

The Water Authority has been a strong advocate for a sustainable Bay Delta solution. The Water Authority actively engages in Bay Delta issues at the MWD board and other forums including the State Capitol, where it lobbied for passage of the 2009 comprehensive Bay Delta bill package. The 2009 bill package approved as state policy the co-equal status of restoring the Delta ecosystem and creating a more reliable water supply for California. Recently, the Water Authority held two Bay-Delta workshops receiving input from stakeholders on their views of the issues and a Bay Delta solution. The Water Authority also participates directly on three Bay Delta Conservation Plan (BDCP) working groups on Conveyance, Governance and Finance.

The Water Authority has consistently advocated for a "right-size" solution in the Delta that is also supported by a broad range of stakeholders in order to reduce challenges to implementation. A central point of the Water Authority's advocacy position in determining the "right size" of a Bay

Imported Water Committee

February 15, 2012

Page 2 of 4

Delta solution is clear commitments to pay through take-or-pay contracts or legal equivalent to pay the fixed costs of a project.

The Delta Policy Principles will help guide staff as they evaluate the BDCP and other projects and actions relating to the Bay Delta solution. Draft principles were presented to this committee for review last month; the attached recommended principles reflect comments received on the prior draft.

Prepared by: Debbie S. Discar-Espe, Senior Water Resources Specialist

Reviewed by: Jeff Volberg, Government Relations Manager
Amy I. Chen, MWD Program Chief

Approved by: Dennis A. Cushman, Assistant General Manager

Attachment: Delta Policy Principles

San Diego County Water Authority Delta Policy Principles

The San Diego County Water Authority Board of Directors supports a Bay Delta solution that will meet the co-equal goals and provide San Diego County with a reliable, high-quality supply of affordable, imported water consistent with the Water Authority's Urban Water Management Plan and Regional Facilities Optimization and Master Plan. The adopted policy principles will guide staff in evaluating projects and actions concerning the Bay-Delta.

Water Supply Reliability

- Continue to support the co-equal goals of water supply reliability and environmental restoration embodied in the 2009 Delta bill package.
- Support deliberative processes that are designed to ensure a meaningful dialogue with all stakeholders in order to reduce future conflicts and challenges to implementation of a Bay Delta solution.
- Provide regulatory certainty and predictable supplies to help meet California's water needs in the long-term.
- Encourage a Bay Delta solution that acknowledges, integrates and supports the development of water resources at the local level including water use efficiency, seawater and brackish water desalination, groundwater storage and conjunctive use, and recycled water including direct and indirect potable reuse.
- Improve the ability of water-users to divert water from the Delta during wet periods, when impacts on fish and ecosystem are lower and water quality is higher.
- Encourage the development of a statewide water transfer market that will improve water management.
- Support improved coordination of Central Valley Project and State Water Project (SWP) operations.

Ecosystem Restoration

- Restore the Bay-Delta ecosystem consistent with the requirements established under the state Natural Community Conservation Plan and the federal Habitat Conservation Plan, taking into account all factors that have degraded Bay-Delta habitat and wildlife.
- Work with all stakeholders to ensure a meaningful dialogue and that ecosystem restoration issues are addressed in an open and transparent process.

Finance and Funding

- Encourage and support a Bay Delta solution and facilities that are cost-effective when compared with other water supply development options for meeting Southern California's water needs.
- Require the total cost of any Bay Delta solution be identified before financing and funding decisions are made. The total cost must include the cost of facilities, mitigation and required or negotiated ecosystem restoration.
- Allocate costs of the Bay-Delta solution to stakeholders in proportion to benefits they receive.

- Seek and support independent financial analyses of Bay-Delta solution including the ability of all parties to pay their proportional costs.
- Require a firm commitment and funding stream by all parties to pay for the fixed costs associated with the proportional benefits they will receive from a Bay Delta solution, through take-or-pay contracts or legal equivalent.
- Condition financial support on provisions allowing access to any water conveyance or storage facilities that are included in the Bay Delta solution.
- Support the use of public funds to support specific projects and actions with identified costs that protect and restore the environment and provide broad-based public benefits.
- Oppose water user fees to fund ecosystem restoration and other public purpose, non-water-supply improvements in the Delta that benefit the public at large.

Facilities

- Require independent technical analysis of proposed key elements of the Bay-Delta solution, including forecasting future urban and agricultural demands and size and cost of any proposed conveyance facility, to ensure the solution realistically matches statewide needs.
- Support “right-sized” facilities to match firm commitments to pay for the Bay Delta solution.
- Allow access to all SWP facilities to facilitate water transfers.

Governance

- Support continued state ownership and operation of the SWP as a public resource.
- Support improved efficiency and transparency of all SWP operations.
- Oppose any transfer of operational control of the SWP or any of its facilities to MWD, the State Water Project Contractors, Central Valley Project Contractors, the State and Federal Contractors Water Agency, any entity comprised of MWD or other water project contractors, or any other special interest group.

Draft BDCP Availability (source: <http://baydeltaconservationplan.com/BDCPPlanningProcess/KeyAnnouncements.aspx>)

Beginning Thursday, March 14, the California Natural Resources Agency plans to release a preliminary draft of the Bay Delta Conservation Plan. A public review draft plan and formal comment period will be announced later this year.

The preliminary draft chapters will be available for viewing on the day of the release on the BDCP website. The release will occur in three stages and each release will be followed by a public meeting. The anticipated schedule is as follows:

STAGE 1

March 14 BDCP release:

Chapter 1: Introduction

Chapter 2: Existing Ecological Conditions

Chapter 3: Conservation Strategy

Chapter 4: Covered Activities and Associated Federal Actions

March 20 Public Meeting on Chapters 1-4

Ramada Inn, West Sacramento, 1:30-4:30 p.m.

STAGE 2

March 27 BDCP release:

Chapter 5: Effects Analysis

Chapter 6: Plan Implementation

Chapter 7: Implementation Structure

April 4 Public Meeting on Chapters 5-7

STAGE 3

Week of April 22 release:

Chapter 8: Implementation Costs and Funding Sources

Chapter 9: Alternatives to Take

Chapter 10: Integration of Independent Science into BDCP

Chapter 11: List of Preparers

Chapter 12: Glossary

Week of April 29 Public Meeting on Chapters 8-12