

● **Board of Directors**
Water Planning and Stewardship Committee

September 11, 2007 Board Meeting

Revised 8-4

Subject

Adopt criteria for conveyance options in implementation of Long Term Delta Plan

Description

Overview In June 2007, Metropolitan's Board approved a Delta Action Plan that provides a framework for actions to build a sustainable Delta and reduce conflicts between water supply conveyance and the environment (**Attachment 1**). Additional detailed information on potential near-, mid-, and long-term actions, and their water supply planning implications, were provided in written and oral reports to the Board in July and August 2007.

The approved Delta Action Plan also established a process where staff would provide monthly updates to the Board on Delta-related processes and would seek board direction on key issues including: Bay-Delta legislation; administrative decision processes; and legal and regulatory decisions.

This board letter requests further board direction on key conveyance components being discussed in the Governor's Delta Vision Process and the Bay-Delta Conservation Plan. Other near-term actions previously brought before the Board are summarized below.

Near-Term Actions. Recent action by the California Department of Water Resources and U.S. Bureau of Reclamation to curtail pumping of the State Water Project and Central Valley Project from the Delta to protect Delta smelt underscores the incompatibility of how water is conveyed to California's economy and protection of in-Delta native fisheries. While the shutdown was temporary, the underlying need to protect Delta smelt and other fisheries is likely to challenge Metropolitan and other Delta export users with more prolonged water supply curtailments and potentially serious economic consequences throughout the state prior to the implementation of a long-term solution. The following is a set of near-term actions previously brought before the Board that staff is moving forward on:

- **Post-Event Emergency Response Plan.** Analyses from the Delta Risk Management Study state there is a significant risk of levee collapse from an earthquake or flood in the Delta. Consistent with April 2007 board direction regarding implementing a Post-Event Strategy, efforts are being made to secure state approval and funding for a Delta Levees Emergency Preparedness and Response Plan, including pre-placement of rock and material in key locations throughout the Delta.
- **Real-Time Operations and Monitoring.** Current operations of the state and federal pumping plants in the Delta rely heavily on prescriptive flows and water quality standards to assist in maintaining a viable ecosystem for fisheries. However, these standards do not take into account the natural variability of runoff patterns, tidal cycles, temperature and other factors that significantly affect fish migration and consequently salvage of fish at the state and federal pumping plants. In an effort to minimize fish salvage, efforts are being made to fund and implement real-time fish monitoring/tracking along with integrated, real-time operations of the Delta Cross Channel and Sacramento and San Joaquin River flows.
- **Temporary & Reversible Eco-Crescent/Middle River Corridor.** In addition to the real-time operations and monitoring, additional near-term, stop-gap efforts are being further analyzed to turn a portion of the estuary from a habitat area with conflict for smelt into a safe haven, away from the north-to-south movement of water supplies to the Bay Area, Central Valley and Southern California. This effort would include a series of temporary and removable rock barriers with tidal-gates, located strategically on four waterways in the

southern Delta, to create a physical separation between the flows for water supply and the nearby rearing habitat for smelt. These temporary structures would only be in place and operated from February through June when Delta smelt enter the Delta to spawn and rear. This project would include funding for real-time monitoring and operation of these gates, and assessments would be made to ascertain whether a more permanent structure should be constructed later as part of a more comprehensive Delta Vision.

Long-Term Delta Vision Alternatives. In addition to the ongoing effort to resolve near-term issues, two efforts are in progress to develop long-term solutions to resource management conflicts within the Sacramento-San Joaquin Bay Delta system: the Bay-Delta Conservation Plan (BDCP) and the Governor's Delta Vision process. The BDCP is a voluntary effort initiated by water user representatives and state/federal fishery regulatory agencies to develop a conservation plan that will serve as the basis for long-term federal and state endangered species act operational permits for the SWP and CVP. The Governor's Delta Vision process is an effort to develop a specific long-term alternative for addressing Delta resource conflicts and a strategic plan for implementation.

As initially reported to the Board at its workshop in July 2007, four alternatives are under discussion by the Governor's Delta Vision Stakeholder Coordination Group, which advises the Blue Ribbon Task Force. These alternatives include:

1. Existing Delta (with fortified levees)
2. Eco-Crescent/Middle River Corridor Conveyance
3. Dual-Intake Facility (Eco-Crescent + Isolated Conveyance Facility)
4. Fully Isolated Facility

On August 4, 2007, the Delta Vision Stakeholder Coordination Group submitted a report to the Blue Ribbon Committee that narrowed the list of recommended alternatives for further analysis to the Eco-Crescent/Middle River Corridor Conveyance and the Dual-Intake Facility. In addition to these alternatives, the Governor's Blue Ribbon Task Force has received a number of other alternatives from various groups and individuals. The Task Force has begun narrowing down the alternatives and intends to select a Delta Vision to move forward in its Phase I Report to the Governor's cabinet-level Delta Vision Committee. The Phase I Report is due on January 1, 2008,¹ and will include a vision for sustainable management of the Delta's multiple uses, resources and ecosystem.

Phase II of the Governor's Delta Vision effort includes development of a Strategic Plan to drive implementation of a Vision, addressing related governance, funding and system management issues relative to that Vision.

Proposed Direction on Delta Vision Alternatives. In August, the four alternatives listed above were reviewed with the Board. Each alternative was evaluated with feasibility-level modeling of water supply and water quality impacts, and quantitative information regarding environmental enhancement and costs. The alternatives were also compared to the Metropolitan Board principles (April 2006) relating to development of a long-term Delta Vision.

Although Metropolitan staff is continuing to participate in the collaborative BDCP and Delta Vision efforts to further analyze the pros and cons of these alternatives, after a review of existing analyses and board policies, staff proposes the Board adopt the following criteria to further clarify Metropolitan's position on the water supply conveyance element of the long-term solution:

1. Provide water supply reliability. Conveyance options need to provide water supply reliability consistent with DWR's most recent State Water Project Reliability Report (2005).
2. Improve Export Water Quality. Conveyance options should reduce bromide and dissolved organic carbon concentrations. Existing in-Delta intakes cause direct conflict between the need to reduce organic carbon to meet stricter urban drinking water standards, and the need to increase carbon to promote a healthy food web for fish.

¹ The Delta Vision Committee is comprised of the Secretary of Resources as Chair, and the Secretaries of Business, Transportation & Housing, Food & Agriculture, and Cal-EPA; and the President of the California Public Utilities Commission.

3. Allow Flexible Pumping Operations in a Dynamic Fishery Environment. Water supply conveyance options should allow the greatest flexibility in meeting water demands by taking water where and when it is least harmful to migrating salmon and in-Delta fish species. All options should reduce the inherent conflict between fisheries and water conveyance.
4. Enhance Delta Ecosystem Fishery Habitat Throughout Delta. Conveyance options should provide the ability to restore fishery habitat throughout the entire Delta (~~not just in partial areas~~) and minimize disruption to tidal food web processes, and provide for fluctuating salinity levels.
5. Reduce Seismic Risks. Conveyance options should provide significant reductions in risks to export water supplies from seismic-induced levee failure and flooding.
6. Reduce Climate Change Risks. Conveyance options should reduce long-term risks from salinity intrusion associated with rising sea levels. Intake locations should be able to withstand an estimated 1- to 3-foot sea-level rise in the next 100 years.

Future Recommendations. As outlined in Metropolitan's Delta Action Plan, staff will seek board direction on other key issues including funding for environmental restoration, governance and financing issues, levee improvements, potential infrastructure or floodway corridors, sizing and location of an isolated facility component, potential legislation, and other key components of the Governor's overall Delta Vision.

Policy

By Minute Item 45753, dated May 11, 2004, and Minute Item 46637, dated April 11, 2006, the Board adopted a set of Delta policy principles to ensure a solid foundation for development of future Metropolitan positions and to provide guidance to Metropolitan staff.

By Minute Item 47135, dated May 25, 2007, the Board supported, in principle, the proposed Delta Action Plan, as set forth in the letter signed by the General Manager.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because the proposed action involves continuing administrative activities such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines). For future, and not yet known, proposed projects, the appropriate lead agencies will be responsible for complying with all applicable federal and state environmental laws and regulations.

The CEQA determination is: Determine that the proposed action is not subject to the provisions of CEQA pursuant to Sections 15378(b)(2) and 15061(b)(3) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and conveyance criteria, as described in this board letter, for water supply conveyance options in a long-term Delta Vision.

Fiscal Impact: None

Business Analysis: The recommended conveyance criteria would be beneficial in reducing conflict while enhancing the Delta ecosystem, water quality, and water supply reliability. It would also reduce longer-term risks associated with seismic-induced flooding and sea-level rise.

Option #2

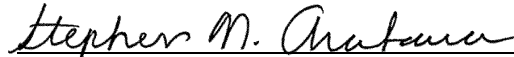
Do not adopt conveyance criteria.

Fiscal Impact: None

Business Analysis: Metropolitan's ability to influence conveyance criteria will be significantly reduced. Criteria established by others may not meet Metropolitan's water supply and financial interests.

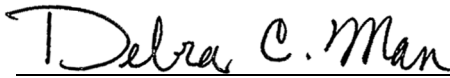
Staff Recommendation

Option #1



Stephen N. Arakawa
Manager, Water Resource Management

9/7/2007
Date



for Jeffrey Kightlinger
General Manager

9/7/2007
Date

Attachment 1 – Metropolitan Water District Delta Action Plan

BLA #5548

METROPOLITAN WATER DISTRICT DELTA ACTION PLAN

I. Overview

The Delta is the hub of California's water supply and is critically important to the entire state. The Delta is in a state of ecological crisis and is not sustainable unless action is taken. Building a sustainable Delta will require significant investment and will take decades. The Delta Action Plan must prioritize immediate short-term actions to stabilize the Delta while an ultimate solution is selected, and mid-term steps to maintain the Delta while the long-term solution is implemented. By 2020, California should have a long-term solution for the Delta in place that can be adjusted and adaptively managed to deal with the coming changes from climate change and California's continued population growth.

II. Short-Term Action Plan

The Governor's Delta Vision Process calls for a recommendation from the Delta Vision Blue Ribbon Task Force to be made by January 2008. SB 27 (Simitian, et al.) urges the Task Force to make its recommendation based on the findings of the Public Policy Institute of California Delta Report for legislation to be enacted in 2008. While 2008 will be the year for selecting a course of action on the Delta, actions must be taken over the next 18 months to stabilize the current situation. These actions include the following: securing state and federal Endangered Species Acts take authorization; emergency preparedness steps to prepare for possibility of catastrophic failure in the event of earthquake or flood; actions to enhance habitat for Delta smelt and other pelagic species; completion of the Bay-Delta Conservation Plan (BDCP); and actions to begin work on ecosystem restoration projects that will help species regardless of which ultimate solution is selected (e.g., marsh restoration, island rebuilding.)

III. Mid-Term Action Plan

Upon selection and enactment of an ultimate Delta solution, it will likely take ten years or more to complete environmental documentation and construct new facilities. During this period, it will be necessary to maintain the stabilization process of the Delta through the following actions: continue implementation of the BDCP projects; continue with selected habitat and fishery improvements to improve Delta native species; begin implementing flood control protections, including bypasses and levee improvements; finalize site selection and environmental documentation for new storage projects; implement new governance structures for managing the Delta; and undertake implementation of the long-term Delta solution.

IV. Long-Term Action Plan

The Long-Term Action Plan must take a global, comprehensive approach to the fundamental issues and conflicts in the Delta to result in a truly sustainable Delta. A piecemeal approach cannot satisfy the many stakeholders that have an interest in the Delta and will fail; there must be a holistic approach that deals with all issues simultaneously. In dealing with the basic issues of the Delta, solutions must address the physical changes required, as well as the financing and governance. There are three basic elements that must be addressed: Delta ecosystem restoration; water supply conveyance; and flood control protection and storage development.

A. Delta Ecosystem Restoration – A complete Delta restoration plan must address land use, growth, agriculture, water usage and conveyance, and the aquatic and land habitat of the Delta through the following elements:

- **Bay-Delta Conservation Plan** – The BDCP is a subset of Delta restoration primarily focused on the aquatic environment of the Delta and will address fishery issues.

- **Habitat Land Acquisition and Restoration** – A portion of the Delta will need to be restored to native marsh habitat for protection of aquatic and terrestrial species.
- **Sustainable Agriculture** – Programs will be needed to maintain sustainable agriculture within the Delta in ways that limit oxidization of soils, rebuild Delta islands, limit carbon production, improve water quality and provide habitat opportunities.
- **Governance** – Management of Delta restoration will require a governance structure such as a conservancy or special district that has financing and land use powers and can manage a program within multiple counties.
- **Financing** – Costs of restoration must be shared by multiple parties with water exporters and other utilities helping finance the BDCP, the state paying for broad public benefits, developers within the Delta area paying for development rights, etc.

B. Water Supply Infrastructure – The current practice of using Delta channels and levees for water conveyance is not sustainable. Delta species require fluctuating salinity levels that will be harmful to drinking water quality. The levees are unstable and pose a constant threat of collapse. In addition, global warming threatens water supply with rising sea levels and increased flooding. Either new Delta conveyance infrastructure must be constructed or there will be significant reductions in Delta exports requiring new water facility development elsewhere to replace lost water supplies. Important elements of this needed infrastructure include:

- **Isolated Facility** – If water supply is to be maintained, that water must be separated from Delta water supplies through construction of an isolated facility either in or around the Delta. The three isolated facility alternatives in the PPIC Report must be analyzed to determine which performs best for water supply reliability, is cost-effective, protects against earthquakes and floods, provides water quality, deals with rising sea levels and allows for Delta salinity fluctuation for native species protection.
- **Eco-Delta/Reduced Exports** – If an isolated facility is not constructed, the PPIC Report recommends that a fluctuating salinity Delta be achieved primarily through a reduction in water exports. This approach must be thoroughly analyzed to determine the economic consequences of loss in water supply, whether reduced exports will actually protect species, and identify additional water supply facilities that would be required.
- **Governance** – Management of the State Water Project should be given to a separate agency tasked with the single mission of managing and operating the Project. This would separate the utility function from the Department of Water Resources thereby removing conflicts within DWR in its role of operating a utility for certain contractors while providing state-wide water planning. Appropriate forms of such an independent agency include a special district or a joint powers authority. This new entity would continue to be regulated by state and federal agencies and all applicable laws.
- **Financing** – State and federal water contractors should pay for the operation and management of the water supply projects, including construction of new water infrastructure such as an isolated facility. A state decision to reduce exports should be financed by the state including payment for lost agriculture lands and financing for replacement of water supplies.