

# SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

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**TO:** Commissioners and Alternates

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**SUBJECT: Staff Recommendation on Save the Bay's Report on Financing Bay Wetland Restoration**  
(For Commission consideration on October 4, 2007)

## Recommendation Summary

The staff recommends that the Commission endorse the three following policy recommendations in Save the Bay's report, *Greening the Bay: Financing Wetland Restoration in San Francisco Bay*: (1) establish a regional special district to oversee Bay wetland restoration funding; (2) target state and local resource bonds and other public sources to provide significant funds for Bay restoration; and (3) work with the San Francisco Bay Area congressional delegation to make adequate funding available for the San Francisco Bay National Wildlife Refuge Complex. These recommendations are consistent with the Commission's laws and policies regarding wetland restoration. The staff further recommends that any priority-setting and funding mechanism for wetland restoration in the Bay Area should be governed by representatives from the Bay region.

## Staff Recommendation

At the September 6, 2007 Commission meeting, David Lewis, Executive Director of Save the Bay, presented a briefing on Save the Bay's report, *Greening the Bay: Financing Wetland Restoration in San Francisco Bay* (attached). At that meeting, the Commission directed the staff to evaluate the Save the Bay report so the Commission could determine whether to support its recommendations.

**Summary of *Greening the Bay*.** Save the Bay's report, *Greening the Bay*, identifies unreliable funding as the major obstacle to achieving regional goals for restoring and enhancing tidal wetlands around the Bay. The report tallies the total projected cost of restoration projects on the 36,176 acres of land already acquired for conversion to tidal wetlands, identifies political and institutional challenges to obtaining sufficient funding, and presents specific policy recommendations to address these challenges.



Making San Francisco Bay Better

In its report, Save the Bay cites the 1999 *Baylands Ecosystem Habitat Goals*, a blueprint developed by the Bay Area scientific community that calls for expanding Bay tidal wetlands by approximately 65,000 acres to achieve a goal of 100,000 acres of wetlands. The Commission refers to the *Habitat Goals* report in its *San Francisco Bay Plan* (Bay Plan) Tidal Marshes and Tidal Flats Policy No. 4, in which it endorses the recommendation to restore 65,000 acres of land diked from the Bay to tidal action (see Bay Plan Policies below).

Save the Bay argues that, in addition to providing habitat benefits, tidal wetlands contribute to the Bay Area community by filtering pollutants, providing flood control and dredging cost savings, generating recreation and tourism opportunities and revenue, sequestering carbon and slowing shoreline erosion.

*Greening the Bay* estimates that fully restoring tidal wetlands over the next fifty years on the 36,176 acres of land already acquired will cost about \$1.43 billion. Approximately \$370 million has already been dedicated to wetland restoration around the Bay. This cost estimate does not include the future cost of purchasing and restoring the additional 22,912 acres needed to reach the 100,000-acre goal.

The report states that \$1.43 billion is equivalent to \$4 annually over 50 years for each Bay Area resident. In 2006, Save the Bay retained EMC Research to conduct a poll on public attitudes regarding paying taxes for wetlands restoration. The poll found that 83 percent of Bay Area residents would be willing to pay \$10 per year in taxes or fees to restore wetlands that would result in cleaner Bay water, provide flood control benefits, enlarge the San Francisco Bay National Wildlife Refuge and increase shoreline public access. This indicates the potential for obtaining the needed funds from local taxpayers, according to Save the Bay.

Save the Bay notes that over 80 percent of the estimated expense is a one-time investment for planning, construction and monitoring of the restoration projects. The remaining amount is for operations and maintenance, security, public access facilities and protecting infrastructure at restored marshes.

The report identifies several challenges to securing funds. Save the Bay notes that state and federal government resources agencies, e.g., the California Department of Fish and Game and the U.S. Fish and Wildlife Service, own most of the restorable land, but they are not receiving adequate funding to implement restoration. The local and regional funding mechanisms supporting Bay wetland restoration are limited. Inconsistent budgeting and reporting systems among projects make it difficult to provide a comprehensive accounting of Bay restoration investments and results; regionwide project coordination and accountability is needed to strengthen requests for additional support. The report also states that government agencies, environmental organizations, cities and counties, and other stakeholders do not advocate with one voice for shared Bay restoration priorities.

The staff has not independently verified Save the Bay's cost estimate of \$1.43 billion over 50 years to achieve restoration of tidal wetlands on the 36,176 acres of land already acquired for that purpose. The total is based on cost projections provided by project managers and may underestimate the actual costs. As the report states, "every agency crafts budgets differently. Some agencies and projects lack complete budgets and timelines...." However, there is no question that there is a need for substantial funds to restore Bay wetlands. Any funding initiative would include detailed analyses of the projected costs and proposed funding mechanisms.

**Policy Recommendations.** The report makes three policy recommendations:

1. Establish a regional special district to oversee Bay wetland restoration funding.
2. Target state and local resource bonds and other public sources to provide significant funds for Bay restoration.
3. The San Francisco Bay Area congressional delegation should make full funding of the San Francisco Bay National Wildlife Refuge Complex a high priority, so the nation's largest urban wildlife refuge can meet its increasing land management and restoration responsibilities.

**Recommendation No. 1.** Save the Bay urges that a regional Bay special district “be established immediately to explore, promote and coordinate local and regional public fundraising mechanisms, and to develop priorities and sequencing for allocating funds.” While there are several ways for a special district to obtain funding, *Greening the Bay* states that “[a] promising option would be for the district to establish benefit assessments in communities adjacent to all or parts of the Bay.”

Save the Bay suggests that “[i]t would be efficient and appropriate to establish this special district with the California Coastal Conservancy’s San Francisco Bay Area Conservancy Program serving as the foundation...The Conservancy could gain [the] authority [to raise and collect funds as a special district] through entering into a joint powers authority with other jurisdictions, through state legislation or through a public vote.”

If Bay Area voters were to vote for such a large amount of money dedicated for Bay restoration, it is prudent to expect that residents would expect that the region would be able to determine how the funding would be spent. Such regional governance could be implemented as part of the mechanism for establishing the special district.

**Recommendation No. 2.** Save the Bay recommends that “future statewide natural resource bonds provide significantly more funding for San Francisco Bay restoration...” and that “local and regional entities consider raising funds to enhance their Bay shoreline, provide public access for their residents and create vital habitat.” The report notes that while the Bay Area supported the four recent state bond acts that provide funding for environmental restoration, only about 1 per cent of funding from these bonds has been invested to date in Bay restoration projects.

**Recommendation No. 3.** Save the Bay recommends that greater federal funding be provided to the San Francisco Bay National Wildlife Refuge complex because, “funding...has not kept pace with the massive increase in its size and land management needs...” and “[t]his funding shortfall threatens the Refuge Complex’s ability to manage large, priority restoration projects within its boundaries....”

**Bay Plan Policies.** The Bay Plan describes the important ecosystem and community benefits that wetlands provide, notes the significant loss of the Bay’s tidal marshes and tidal flats and encourages the use of public funds to acquire and restore tidal wetlands. The Bay Plan also describes the Commission’s participation in the Long Term Management Strategy (LTMS) for dredging, including the beneficial reuse of dredged material in wetland restoration. The Bay Plan encourages the use of public funds to defray the additional cost of transporting dredged material to restoration sites.

Tidal Marshes and Tidal Flats Finding d. describes the wide range of benefits that wetlands provide:

*Wetlands can alter and moderate flood flows, recharge groundwater, maintain stream flows, reduce and prevent shoreline erosion by minimizing wave energy, and improve water quality by filtering surface runoff from surrounding lands. In addition, they trap sediments, thereby reducing the amount deposited in channels. Wetlands plants help absorb available nitrogen, atmospheric sulfur, carbon dioxide and methane. Wetlands also are important habitat for the Bay's aquatic and upland plant and animal populations, serve as a primary link in the ecosystem's food chain, ensure the continued diversity of plant and animal communities, are an essential feeding and resting place for migratory birds on the Pacific Flyway, and provide needed and important open space and recreational opportunities in the Bay Area.*

Tidal Marshes and Tidal Flats Finding i. describes the role of tidal marshes in the Bay's food web:

*Tidal marshes are an interconnected and essential part of the Bay's food web. Decomposed plant and animal material and seeds from tidal marshes wash onto surrounding tidal flats and into subtidal areas, providing food for numerous animals, such as the Northern pintail. In addition, tidal marshes provide habitat for insects, crabs and small fish, which in turn, are food for larger animals, such as the salt marsh song sparrow, harbor seal and great blue heron.*

Tidal Marshes and Tidal Flats Finding j. describes the role of mudflats in the food web:

*Mudflats comprise the largest area of tidal flat areas and support an extensive community of invertebrate aquatic organisms, e.g., diatoms, worms and shellfish, fish that feed during higher tides, and plants such as algae and occasionally eelgrass. Shorebirds feed on tidal flats.*

The Bay Plan, in Tidal Marshes and Tidal Flats Finding h. and Finding j, also acknowledges that much of the Bay's historic tidal wetlands have been lost, including 80 percent of tidal marshes and 40 percent of tidal flats.

The Bay Plan encourages public acquisition of land for Bay wetland restoration and places emphasis on restoring diked areas to tidal action. Bay Plan Tidal Marshes and Tidal Flats Policy No. Four states:

*Where and whenever possible, former tidal marshes and tidal flats that have been diked from the Bay should be restored to tidal action in order to replace lost historic wetlands or should be managed to provide important Bay habitat functions, such as resting, foraging and breeding habitat for fish, other aquatic organisms and wildlife. As recommended in the Baylands Ecosystem Habitat Goals report, around 65,000 acres of area diked from the Bay should be restored to tidal action. Further, local government land use and tax policies should not lead to the conversion of these restorable lands to uses that would preclude or deter potential restoration. The public should make every effort to acquire these lands from willing sellers for the purpose of restoration.*

Bay Plan Managed Wetland Policy No. 2 states:

*If...the owner of any managed wetland desires to withdraw any of the marshes from their present uses, the public should make every effort to buy these lands, breach the existing dikes, and reopen these areas to the Bay. This type of purchase should have a high priority for any public funds available, because opening managed wetlands to the Bay represents man's last substantial opportunity to enlarge the Bay rather than shrink it.*

In addition, the Bay Plan's dredging policies encourage the reuse of dredged material in wetland restoration projects, as appropriate, and support efforts to fund the additional costs associated with transporting dredged material to project sites.

Dredging Finding h. states, in part:

*In the past, only small amounts of dredged material have been disposed at upland and diked baylands around the Bay. Fortunately, more reuse options are becoming available for dredged material disposal. These sites include Hamilton Wetlands Project in Marin County with a capacity of over 10 million cubic yards and the Montezuma Wetlands Project in Solano County with a capacity of 17 million cubic yards. Inclusion of the adja-*

*cent Bel Marin Keys parcel would likely more than double the capacity of the Hamilton project. Dredged material could be used at these sites to restore thousands of acres of wetlands.*

Dredging Policy No. 10 states:

*Interested agencies and parties are encouraged to explore and find solutions for the additional costs incurred by transporting dredged material to nontidal and ocean disposal sites, either by general funds contributed by ports and other relevant parties, dredging applicants or otherwise.*

Dredging Policy No. 12 states:

*The Commission should continue to participate in the LTMS, the Dredged Material Management Office, and other initiatives...[including] funding additional costs of transporting dredged materials to nontidal and ocean disposal sites.*

**Conclusion.** The staff concludes that the Bay Plan and Marsh Plan policies support the use of public funds for acquisition and restoration of Bay tidal wetlands. The Commission's policies place emphasis on acquiring land, but staff agrees with Save the Bay's assessment that, thanks to recent successes in achieving major land acquisitions, funding for restoration and management is also critically needed.

Therefore, the staff recommends that the Commission endorse the concepts put forth in *Greening the Bay's* three policy recommendations in order to help implement the Bay Plan policies regarding wetland restoration. With regard to establishing a regional Bay special district, the staff recommends that any regional priority-setting and funding mechanism be predicated on governance by representatives from the Bay Area.