

# SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

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September 28, 2007

**TO:** Commissioners and Alternates

**FROM:** Will Travis, Executive Director (415/352-3653 travis@bcdc.ca.gov)  
Caitlin Sweeney, Senior Planner (415/352-3643 caitlins@bcdc.ca.gov)

**SUBJECT: Final Recommendation for Proposed Bay Plan Amendment No. 1-07 Concerning Update of the Bay Plan Managed Wetlands Findings, Policies and Map Designations; and Proposed Marsh Plan Amendment No. 1-07 Concerning Update of the Marsh Plan Findings and Policies Regarding Managed Wetlands**  
(For Commission consideration on October 4, 2007)

## Final Recommendations

The staff recommends that the Commission adopt the attached Resolution No. 07-05 that would:

1. Amend the *San Francisco Bay Plan* Managed Wetlands findings and policies as identified in the "Final Recommended Changes to Bay Plan Findings and Policies" section, pp. 3-6;
2. Amend the managed wetlands designations as identified in the "Final Recommended Changed to Bay Plan Maps" section, p. 6, and identified in attached Resolution 07-05, Figures 1 and 2; and
3. Amend the *Suisun Marsh Protection Plan* findings and policies regarding managed wetlands as identified in the "Final Recommended Changes to Marsh Plan Findings and Policies" section pp. 7-14.

An affirmative vote of two-thirds of the Commission membership (18 members) is required to amend the Bay Plan and the Marsh Plan.

## Background

Managed wetlands are diked wetland habitats that are managed for wildlife, primarily migratory waterfowl. In the San Francisco Bay, the Suisun Marsh has the greatest amount of managed wetland acreage, totaling almost 51,000 acres, although other areas of the Bay have small amounts of this habitat type. Managed wetlands are located in private waterfowl hunting clubs and on publicly-owned wildlife management areas and refuges. Fresh to brackish tidal water taken from streams or tidal sloughs is delivered to managed wetlands through tide gates and along water conveyance channels to irrigate wetland areas and leach salts from the soil of the flooded areas to enable plants favored by waterfowl to grow. Specific management objec-



tives determine the timing, duration, depth, and extent of water ponding and drainage in a managed wetland, as well as vegetation management practices. Managed wetlands provide a variety of recreational opportunities and provide valuable habitat for migratory waterfowl as well as for resident shorebirds and wildlife.

Managed wetlands are part of the San Francisco Bay Conservation and Development Commission's (Commission) jurisdiction. The *San Francisco Bay Plan* (Bay Plan) and the *Suisun Marsh Protection Plan* (Marsh Plan) findings and policies guide the Commission in its consideration of whether or not to authorize a development or change in use of these habitat areas if proposed. In 2005, the Bay Plan policy section entitled "Salt Ponds and Other Managed Wetlands" was divided into two separate sections – one for salt ponds and one for managed wetlands. The Salt Pond section was updated, but update of the managed wetlands section was postponed. Because the Bay Plan findings and policies pertaining to managed wetlands have not been updated since the Bay Plan's inception in 1968, and the findings and policies of the Marsh Plan have not been reviewed or updated since the Marsh Plan was adopted in 1976, they are out-of-date and in need of being amended in light of new scientific ecological information and new approaches to management of these areas.

The amendment to the Bay Plan findings and policies pertaining to managed wetlands is the only update relating to wetlands which remains to be completed in the suite of Bay Plan wetland policies (tidal marshes and tidal flats, subtidal areas, salt ponds and managed wetlands), as defined in the Commission's Bay Plan update work program. Commission consideration of proposed amendments to the Bay Plan and Marsh Plan pertaining to managed wetlands is listed as a priority objective in the Commission's federally-approved coastal management program strategy, and is included as an objective in the Commission's current adopted Strategic Plan.

On August 3, 2007 a staff report and preliminary recommendation outlining the proposed amendments to the Bay Plan and Marsh Plan was sent to the Commission and public for review. A public hearing to consider the proposed language changes occurred on September 6, 2007.

This final staff recommendation includes some changes to the preliminary staff recommendation that incorporate the written and oral comments of Commissioners and the public. The changes to the findings and policies and the staff's reasoning for those changes are discussed in the section "Final Recommended Changes to Bay Plan Findings and Policies" starting on Page 3 and the section "Final Recommended Changes to Marsh Plan Findings and Policies" starting on Page 7. Final proposed changes to the Bay Plan Maps are also described in the section "Final Recommended Changes to Bay Plan Maps" starting of Page 6 and illustrated in Figures 1 and 2 at the end of attached Resolution No. 07-05. Responses to Commission and public comments, both written and oral, are found in the section "Response to Comments" starting on Page 15.

#### **Final Recommended Changes to Bay Plan Findings and Policies**

The underlined language is new language staff proposed adding to the findings and policies in its preliminary recommendation. The language in *italics* staff proposes to add to the findings and policies based on Commissioners' and public comments. The language with single ~~striketrough~~ was recommended by staff to be deleted in its preliminary recommendation and continues to be recommended for deletion, and the language with double ~~striketrough~~ staff proposes to delete based on Commissioner and public comments. Also included is a staff analysis of the reasons for the final proposed changes.

### Findings and Policies Concerning Managed Wetlands Around the Bay

Findings	Staff Analysis
<p>a. <del>More than 50,000 acres of managed marshland, adjacent to the Bay but diked off from it, are maintained as duck hunting preserves, game refuges, and occasionally as farming areas. In most of these areas, tide gates permit occasional intakes of Bay water. Managed wetlands are areas of historical tidal marshes that have been diked off from the Bay and are managed for wildlife, primarily waterfowl. Managing water intake, circulation and draining is the primary means to promote diverse managed wetland vegetation and wildlife habitats. In the San Francisco Bay, approximately 53,000 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and <del>on</del> publicly-owned wildlife management areas and refuges. In the Suisun Marsh, privately-owned managed wetlands account for about 35,300 acres, and about 15,400 acres are publicly owned. Less than 2,000 acres currently exist outside of Suisun Marsh (located in the North Bay), of which approximately 650 acres are privately owned.</del></p>	<p>A minor editorial change is proposed.</p>
<p>b. <del>The diked marshlands are as important to wildlife as the tidal marshes. Substantial further diminution would result in a proportionate reduction in the amount of wildlife the Bay system can support. Managed wetlands are a unique resource for waterfowl and other wildlife. Managed wetlands provide cover and foraging opportunities for wintering waterfowl, and cover, foraging and nesting opportunities for resident waterfowl. Managed wetlands also provide habitat for a diversity of other resident and migratory species including other waterbirds, shorebirds, amphibians, and mammals. Managed wetlands can protect upland areas by retaining flood waters and also provide an opportunity for needed space for adjacent wetlands to migrate landward as sea levels rise. Managed wetlands also provide for a variety of recreational opportunities including hunting, fishing, wildlife viewing, and hiking, and contribute to the open space character of the Bay.</del></p>	<p>No additional changes are proposed.</p>
<p>e. <del>Managed wetlands provide some of the open space character of the Bay.</del></p>	<p>No additional changes are proposed.</p>
<p>c. <del>Privately-owned managed wetlands no longer viable as waterfowl hunting areas provide an opportunity for public purchase and enhancement and management for multiple species by providing for a range of resting, foraging and breeding needs.</del></p>	<p>No additional changes are proposed.</p>

Findings	Staff Analysis
<p>d. <u>Managed wetlands offer a significant opportunity for restoration of tidal action to former areas of the Bay. Increased tidal influence associated with the removal or breaching of levees can: (1) support the establishment of new subtidal, tidal flat and tidal marsh habitat; (2) benefit Bay water quality; (3) improve the health of the Bay's aquatic food web by re-connecting existing subtidal areas to tidal marsh habitat, where much of the Bay's nutrient-rich plant life is located; and (4) increase resting, foraging and breeding opportunities for numerous fish, other aquatic organisms and wildlife species dependent upon subtidal, tidal flat and tidal marsh habitats. However, restoration of managed wetlands may also result in changes in ecosystem function, including the displacement of wildlife species due to loss of habitat.</u></p>	<p>No additional changes are proposed.</p>

Policies	Staff Analysis
<p>1. <del>As long as is economically feasible, The continued operation and maintenance of managed wetlands for waterfowl hunting, as game refuges, or for waterfowl food production should be maintained in their present use encouraged. Accordingly, Property tax policy should assure that rising property taxes do not force conversion of the managed wetlands to urban development.</del></p>	<p>No additional changes are proposed.</p>
<p>2. <del>If, despite these provisions, the owner of any managed wetland desires to withdraws any of the marshes-wetlands from their present use, the public should make every effort to buy these lands, breach the existing dikes, and reopen these areas to the Bay and enhance, restore or convert these areas to tidal or subtidal or wetland habitat, or retain, enhance and manage these areas as diked wetland habitat for the benefit of multiple species.</del> 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.</p>	<p>This policy should be revised to more clearly describe the options for restoration and enhancement of managed wetlands.</p>

Policies	Staff Analysis
<p><u>3. Any project for the restoration, enhancement or conversion of managed wetlands to subtidal or wetland habitat should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and provisions for long-term maintenance and management needs. Design and evaluation of the project should include an analysis of:</u></p> <ul style="list-style-type: none"> <li>a. <u>The anticipated habitat type that would result from managed wetland conversion or restoration, and the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife;</u></li> <li>b. <u>Potential fill activities, including the use of fill material such as sediments dredged from the Bay and rock, to assist restoration objectives;</u></li> <li>c. <u>Flood management measures;</u></li> <li>d. <u>Mosquito abatement measures;</u></li> <li>e. <u>Measures to control non-native species;</u></li> <li>f. <u>Opportunities for a diversity of public access and recreational activities, and;</u></li> <li>g. <u>Water quality protection measures that may include monitoring for constituents of concern, such as methylmercury.</u></li> </ul>	<p>No additional changes are proposed.</p>
<p><u>43. If the public funds do not permit purchase does not acquire for habitat restoration, enhancement or conversion purposes of all the marshes managed wetland proposed for withdrawal from their present uses use for waterfowl hunting, and if some of the marshes managed wetland are is therefore proposed for to be development or used for purposes other than waterfowl hunting, consideration of the development should be guided by the following criteria:</u></p> <ul style="list-style-type: none"> <li>ea. <u>Recognizing the potential for managed wetlands to contribute to the moderation of the Bay Area climate, the alleviation of air pollution and the open space character of the Bay, and to maximize potential habitat values, development of any of the marshes managed wetlands should provide for retaining substantial the maximum amounts of open water water surface area, consistent with the project, and should be in accord with the Bay Plan policies for non-priority uses of the shoreline. Water surface area retained can include a variety of subtidal and wetland habitat types including diked areas managed for wildlife or restoration of managed wetlands to tidal action;</u></li> </ul>	<p>No additional changes are proposed.</p>

Policies	Staff Analysis
<p>Policy 4, Cont.</p> <p>b. <u>Development should provide for substantial the maximum public access to the Bay, consistent with the project while avoiding significant adverse effects on wildlife; and</u></p> <p><del>ac. Just as dedication of streets, parks, etc., is customary in the planned unit development and subdivision laws of many local governments, An appropriate means of permanent dedication of some of the retained water surface area marsh areas as open water can and should be required as part of any development.</del></p> <p><del>b. Depending on the amount of marsh area to be dedicated as open water, the public may wish to purchase additional areas. Plans to purchase any marshes should give first consideration to the priorities in paragraph a. above.</del></p> <p><del>d. Managed wetlands no longer used as duck clubs may be developed for mariculture to allow an economic use of the land which does not require filling.</del></p>	
<p>4. Study should be given to acquisition of "development rights" to the diked wetlands, to continue them in their present uses.</p>	<p>No additional changes are proposed.</p>

#### Final Recommended Changes to Bay Plan Maps

As part of the Bay Plan amendment process, the staff preliminarily recommends amendments to the Bay Plan Maps to correct an error. Specifically, there is an existing area that meets the Commission's defined managed wetland jurisdiction (Government Code Section 66610(d)) that is not shown on the Plan Maps and is therefore proposed for addition.

The proposed corrections to the Plan Maps are illustrated in Figures 1 and 2 in attached Resolution 07-05. Once approval by the Commission has occurred, the proposed changes shown in Figures 1 and 2 will be standardized and included on the Plan Maps.

No changes have been made to staff's preliminary recommended changes to the Bay Plan maps.

#### Final Recommended Changes to Marsh Plan Findings and Policies

The underlined language is new language staff proposed adding to the findings and policies in its preliminary recommendation. The language in *italics* staff proposes to add to the findings and policies based on Commissioners' and public comments. The language with single ~~striketrough~~ was recommended by staff to be deleted in its preliminary recommendation and continues to be recommended for deletion, and the language with double ~~striketrough~~ staff proposes to delete based on Commissioner and public comments. Also included is a staff analysis of the reasons for the final proposed changes.

## Environment

Findings	Staff Analysis
<p>5. <u>In the Suisun Marsh, about 50,700 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and on publicly-owned wildlife management areas and refuges.</u> Because of their extent, location and the use of management techniques to encourage production of preferred waterfowl food plants, managed wetlands of the Suisun Marsh are a vital component of the wintering habitat for waterfowl migrating south on the Pacific Flyway, <u>and also provide cover, foraging and nesting opportunities for resident waterfowl.</u> Managed wetlands also provide habitat for a diversity of other resident and migratory species, <u>including other waterbirds, shorebirds, raptors, amphibians, and mammals.</u> Managed wetlands can protect upland areas by retaining flood waters and also provide an opportunity for needed space for adjacent wetlands to migrate landward as sea levels rise. <u>The major types of management practiced by the duck clubs and the Department of Fish and Game in the Marsh are natural food plant production, permanent ponding, grain production and grazing.</u> These management practices also produce good habitat for many species of wildlife, <u>including birds of prey, water associated birds, amphibians, and mammals.</u></p>	<p>No additional changes are proposed.</p>
Policies	Staff Analysis
<p>2. The Marsh waterways, managed wetlands, tidal marshes, seasonal marshes, and lowland grasslands are critical habitats for marsh-related wildlife and are essential to the integrity of the Suisun Marsh. Therefore, these habitats deserve special protection.</p>	<p>No changes are proposed.</p>

## Water Supply and Quality

Findings	Staff Analysis
<p>4. <u>Water quality, at the levels required in existing salinity standards, in the Suisun Marsh is presently adequate to support the desired waterfowl food plants, such as <del>watergrass</del>, alkali bulrush, brass buttons, and fat hen.</u> If the waters of the bays and sloughs were to become substantially more saline, and if the more saline water were used to flood the managed wetlands, then the soils of the managed wetlands and the tidal marsh will become more saline. This will limit the distribution and abundance of important waterfowl food plants and ultimately reduce the <u>wetland diversity and the capability of the Marsh to support wintering waterfowl.</u></p>	<p>The finding should be further revised to delete the previous additional listing of watergrass. Though watergrass is a popular food plant that is supported in many managed wetlands, due to the salinity gradient in the Marsh watergrass cannot be consistently supported throughout the entire Marsh.</p>

### Utilities, Facilities and Transportation

Findings	Staff Analysis
<p>3. Because of the high water table and impervious clay soils in the wetlands, <del>septic tanks systems used by duck waterfowl hunting clubs do not function properly</del> <u>may be outdated</u>. The Solano County <del>Health Department of Resource Management</del> <u>has found determined</u> that waste from some <del>duck waterfowl hunting club septic tanks systems</del> is reaching ground and surface water in the Marsh. The <del>Health Department of Resource Management</del> <u>is initiating a program to inspect private sewage disposal systems in the Marsh to locate malfunctioning septic tanks and responds to public complaints regarding existing systems and requires all remodeled and newly constructed duck waterfowl hunting clubs to install sewage holding tanks only and to have the tanks pumped out by an approved service agent.</u></p>	<p>No additional changes are proposed.</p>
Policies	Staff Analysis
<p>5. Because <del>septic tanks systems do</del> <u>may not function properly</u> in the wetland area, the Solano County Department of <del>Public Health Resource Management</del> <u>should institute a program continue to work with landowners to phase out existing septic tanks systems in the wetlands and require new systems that would properly dispose of wastes as required by the Solano County <del>Health Department of Resource Management</del> and the Regional Water Quality Control Board.</u></p>	<p>No additional changes are proposed.</p>

### Recreation and Access

Findings	Staff Analysis
<p>2. <u>Market hunting of waterfowl began in the Suisun Marsh in the late 1850s, and the first private waterfowl sport hunting clubs were established in the early 1880s. Demand for hunting opportunities has resulted in the protection from urban development of tens of thousands of acres of marsh habitat. Generations of hunting club owners and members have worked to maintain the area's habitat value and to protect the natural resources of the Marsh. Today, waterfowl hunting is the major recreational activity in the Suisun Marsh, occurring from late October until late January each year, though</u> <del>The private duck waterfowl hunting clubs and public wildlife areas of the marsh are also used for a wide variety of other recreational activities, particularly duck including upland game hunting, and fishing-, dog training, boating, hiking, photography, education, nature study, and wildlife viewing.</del></p>	<p>No additional changes are proposed.</p>

Findings	Staff Analysis
<p>4. <u>Duck hunting is the major recreational activity in the Suisun Marsh, occurring from late October until late January each year. To reduce waterfowl hunter crowding on the public wildlife areas and to improve hunting conditions and hunter success, the Department of Fish and Game, which manages the public Grizzly Island Wildlife Area, has reduced the number of waterfowl hunters allowed daily to hunt on Grizzly and Joice Island Units. In addition, half of the Joice Island Unit has been closed to hunting to provide a refuge area for waterfowl. Approximately 15,400 acres of managed wetlands are publicly owned in the Suisun Marsh. Public wildlife areas of the Suisun Marsh are managed to meet multiple objectives, including enhancing wildlife habitat, as well as providing public recreational opportunities such as waterfowl hunting, fishing, wildlife viewing and hiking. Over time, waterfowl hunting on public lands has decreased while other types of recreation (including fishing and nonconsumptive recreational uses, such as wildlife viewing) have greatly increased.</u></p>	<p>No additional changes are proposed.</p>
<p>5. <u>Fishing accounts for nearly as much recreational use of the Marsh as duck waterfowl hunting. The Joice Island Unit provides maintained parking areas, litter cans and restrooms to accommodate fishing use. Public boat launches exist at Suisun City and Belden's Landing. Island Slough and Grizzly Island Wildlife Area both provide public fishing piers. Fishing is also allowed at unimproved sites in much of the publicly owned areas of the Marsh. However, most public fishing occurs in areas that are unimproved and not maintained. This Fishing at unimproved sites is accessed primarily on foot from designated parking areas. may result in environmental damage, such as rutting of land by automobiles or levee destruction, from overuse. In addition, sSome frequently used fishing sites are may be dangerous because they are located on narrow roads and place fisherman in close proximity to passing automobiles.</u></p>	<p>No additional changes are proposed.</p>
Policies	Staff Analysis
<p>1. <u>Continued recreational use of privately-owned managed wetlands should be encouraged. Additional land should be acquired within the Suisun Marsh to provide for increased public duck hunting recreational use and additional refuge areas for waterfowl during the hunting season. Acquisition priority should be given to those lands not now operated as managed wetlands.</u></p>	<p>No additional changes are proposed.</p>

Policies	Staff Analysis
<p><del>2. The Fish and Game Commission and the Department of Fish and Game have the ultimate responsibility and authority for management of the fish and wildlife resources of California and the Suisun Marsh. Lands acquired with State funds for the purpose of enhancing and managing wildlife habitat and providing related recreation use should be administered and managed by the Department of Fish and Game.</del></p>	<p>No additional changes are proposed.</p>
<p><del>32. Land should also be purchased for public recreation and access to the Marsh for such uses as fishing boat launching and nature study. These areas should be located on the outer portions of the Marsh near the population centers and easily accessible from existing roads. Improvements for public use should be consistent with protection of wildlife resources.</del></p>	<p>No additional changes are proposed.</p>
<p><del>43. Public agencies acquiring land in the marsh for public access and recreational use should provide for a balance of recreational needs by expanding and diversifying opportunities for activities such as bird watching, picnicking, hiking, and nature study.</del></p>	<p>No additional changes are proposed.</p>
<p><del>54. Agencies administering land acquired for public access and recreational use should be responsible for maintaining the areas and controlling their use. Signing on roads leading into the Marsh and maintained litter receptacles at major public use areas should be provided by the appropriate local or State agency to prevent littering and vandalism to public and private property.</del></p>	<p>No additional changes are proposed.</p>
<p><del>65. Recreational activities that could result in adverse impacts on the environment or aesthetic qualities of the Suisun Marsh should not be permitted. Levels of use should also be monitored to insure that their intensity is compatible with other recreation activities and with protection of the Marsh environment. For example, boat speeds and excessive noise should be controlled and activities such as water skiing and naval training exercises should be kept at an acceptable level.</del></p>	<p>No additional changes are proposed.</p>

## Land Use and Marsh Management

Findings	Staff Analysis
<p>2. The managed wetlands are a unique resource for waterfowl and other Marsh wildlife, and their value as such is increased substantially by the management programs used by <del>the duck waterfowl hunting clubs and the Department of Fish and Game</del> public agencies to enhance the habitat through the encouragement of preferred food plant species. <del>The major types of management practiced in the Marsh are natural food plant production, permanent ponds, grain production and grazed lands.</del> However, <del>water control management problems</del> <u>challenges</u> exist on many <del>duck clubs</del> <u>managed wetland units, including: due to inadequate water distribution and levee systems</u> <u>water quality concerns (such as salinity); effective water circulation, conveyance and drainage due to subsided land; restrictions resulting from endangered species protection;</u> and <u>ongoing exterior levee system integrity and maintenance issues.</u></p>	<p>Minor editorial revisions are proposed.</p>
<p>3. <i>Individual management plans were developed for each waterfowl hunting club in the 1980s, and were reviewed by the California Department of Fish and Game and certified by the San Francisco Bay Conservation and Development Commission. The management plans include site information on each club's infrastructure, a water management schedule, and a discussion of management activities needed to accomplish the schedule. Land managers can conduct ongoing management activities described in the plans, such as maintenance, repairs, and enhancements, without having to apply for separate permits from the Commission for each activity.</i></p>	<p>A new finding should be added to acknowledge the role of individual management plans.</p>
<p>4. <i>The Suisun Marsh contains approximately 230 miles of levees, many of which have been constructed over time largely using material dredged from adjacent waterways and were not constructed to meet flood protection standards. Consequences of levee failure may include: risks to life; damage to residences, businesses, utilities, and transportation infrastructure; loss of recreational opportunities; changes in water quality conditions; loss of managed wetlands values and functions, and changes in ecosystem conditions. Appropriate methods of levee repair and maintenance can both protect managed wetlands and neighboring properties as well as avoid adverse impacts to wildlife habitat both on and adjacent to levees.</i></p>	<p>A new finding should be added to address the importance of levee system integrity, and to acknowledge the importance of using repair and management methods that accomplish dual goals of avoiding adverse effects on resources as well as protecting property.</p>
<p>Existing Findings 3 – 12 renumbered as Findings 5 - 14</p>	<p>The remaining findings in the Land Use and Marsh Management section should be renumbered.</p>

Policies	Staff Analysis
<p>1. The managed wetlands, tidal marshes, lowland grasslands and seasonal marshes should be included in a primary management area. Within the primary management area existing uses should continue and both land and water areas should be protected and managed to enhance the quality and diversity of the habitats.</p>	<p>No revisions are proposed.</p>
<p>2. Agriculture within the primary management area should be limited to activities compatible with, or intended for, the maintenance or improvement of wildlife habitat. These include extensive agricultural uses such as grain production and grazing. Intensive agricultural activities, involving removal or persistent plowing of natural vegetation and maintenance of fallow land during part of the year, should not be permitted. Grain production should be confined to the Grizzly Island Wildlife Area and relatively small, well-suited areas of some of the large <del>duck</del> waterfowl hunting clubs. Grazing should be used to control vegetation on <del>duck</del> waterfowl hunting clubs where plant cover is sub-optimum for waterfowl use and should be discouraged on those <del>clubs</del> <u>properties</u> where there is already a good mixture of preferred waterfowl food plants. Grazing pressures should not exceed sound range management practices.</p>	<p>No additional revisions are proposed.</p>
<p>4. The water management schedules <u>originally</u> developed by the U.S.D.A. Soil Conservation Service and the California Department of Fish and Game and ratified by the Solano County Mosquito Abatement District <i>should be modified as necessary</i> <del>have been modified</del> in response to new biological, technical and management challenges. <del>These new ratified</del> <u>Modified water schedules should include provisions for adaptive management (systematic process for evaluating and improving strategies) to better address management challenges and should be used to the maximum extent possible in the managed wetlands. Individual club management plans should include the most current water management schedules and management approaches. These</u> <del>these</del> schedules provides the most desirable habitat for waterfowl as well as many other types of marsh wildlife, and <del>will</del> <u>may</u> also result in <del>good</del> <u>mosquito control</u> a significant reduction of vector production if properly managed.</p>	<p>This policy should be further revised to clarify the status of the water management schedules and to reflect the role of individual management plans.</p>
<p>5. In order to improve the efficiency of water control management in the Marsh, the Suisun Resource Conservation District should be empowered to develop and enforce regulations establishing sound water management practices on all privately-owned managed wetlands within the primary management area.</p>	<p>No revisions are proposed.</p>

Policies	Staff Analysis
6. The Suisun Resource Conservation District should be empowered to improve and maintain exterior levee systems as well as other water control facilities on the privately-owned managed wetlands within the primary management area.	No revisions are proposed.
7. Burning in the primary management area is a valuable management tool. However, it should be kept to a minimum to prevent uncontrolled fires which may destroy beneficial plant species and damage peat leaves, and to minimize air pollution.	No revisions are proposed.
8. <del>Permanent ponding, which provides only marginal wildlife benefits should be practiced only in the following situations provide shelter and food for resident and migratory wildlife species, including waterfowl broods, molting waterfowl, pelicans and shorebirds. :(a) in deep ponds that are difficult to drain and manage as seasonally flooded marshes; (b) in limited shallow areas where habitat diversity is desired; (c) in areas of high salinity concentrations. Permanent ponds should maintain high circulation rates and, where necessary, should be drained every three to five years to reset the vegetative composition. To control mosquitos production, the water levels in permanent ponds should be kept constant, and the water should be circulated. Permanent ponds should not be maintained if</del> <u>Water salinity levels exceeding 17mS/cm due to potential toxicity may be toxic to ducklings and should be considered when managing permanent ponds.</u>	The policy should be further revised to clarify that both the need to drain permanent ponds and potential impacts of higher salinity levels should be analyzed on a case-by-case basis.
13. Where feasible, historic marshes should be returned to wetland status, either as tidal marshes or managed wetlands. If, in the future, some of the managed wetlands are no longer needed for private waterfowl hunting, they should <del>also</del> be restored as <del>tidal marshes to tidal or subtidal habitat, or retained as diked wetland habitat and enhanced and managed or converted to subtidal or wetland habitat</del> <u>for the benefit of multiple species.</u> Sound practices consistent with Marsh preservation recommended by the Solano County Mosquito Abatement District to control mosquitoes should be followed during and after marsh restoration.	The policy should be revised to more clearly describe the options for restoration and enhancement of managed wetlands.

Policies	Staff Analysis
<p><u>14. Ongoing management activities, such as maintenance, repairs and enhancements, that are undertaken on managed wetlands in accordance with certified individual management plans should continue to be allowed without the need for further authorization from the Commission. On those managed wetlands no longer needed for private waterfowl hunting, <del>Any</del> project for the restoration, enhancement or conversion of managed wetlands to subtidal or wetland habitat should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and provisions for long-term maintenance and management needs. Design and evaluation of the project should include an analysis of:</u></p> <ul style="list-style-type: none"> <li>a. <u>The anticipated habitat type that would result from managed wetland conversion or restoration, and the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife;</u></li> <li>b. <u>Potential fill activities, including the use of fill material such as sediments dredged from the Bay and rock, to assist restoration objectives;</u></li> <li>c. <u>Flood management measures;</u></li> <li>d. <u>Mosquito abatement measures;</u></li> <li>e. <u>Measures to control non-native species;</u></li> <li>f. <u>Opportunities for a diversity of public access and recreational activities, and;</u></li> <li>g. <u>Water quality protection measures that may include monitoring for constituents of concern, such as methylmercury.</u></li> </ul>	<p>The policy should be revised to clarify the original intent of the proposed policy. To accomplish this, language should be added to make it explicitly clear that those activities that are covered by an individual management plan do not need individual permits from BCDC.</p>
<p><del>15</del>16. Riparian vegetation in the immediate Suisun Marsh watershed should be preserved, due to its importance in the maintenance of water quality and its value as Marsh-related wildlife habitat. Stream modification should only be permitted if it is proved necessary to ensure the protection of life and existing structures from floods and only the minimum amount of modification necessary should be allowed.</p>	<p>No additional revisions are proposed.</p>
<p><del>16</del>17. State and federal agencies and the Solano County Mosquito Abatement District should continue and expand their research efforts on marsh management with the objective of improving wildlife habitat, preserving rare and endangered species and controlling mosquitoes. These agencies and the Suisun Resource Conservation District should periodically conduct joint reviews of marsh management programs to ensure that they are compatible with one another and consistent with the policies of the Suisun Marsh Protection Plan.</p>	<p>No additional revisions are proposed.</p>

**Response to Comments**

No comments have been received on the Environmental Assessment pertaining to the proposed Bay Plan amendment.

Written and oral comments have been received on the proposed changes to the Bay Plan and Marsh Plan findings and policies. The first portion of this section focuses on staff response to written comments received after the August 3, 2007 mailing of the Preliminary Staff Recommendation and Staff Background Report, while the next portion of this section addresses staff response to oral comments received during the public hearing of September 6, 2007. Throughout this section comment letters precede staff response.

ROBERT L. BEAN  
10 ESCALON DRIVE  
MILL VALLEY, CALIFORNIA 94941

TELEPHONE 415-389-0938  
FAX 415-383-6248

August 28, 2007

BCDC  
50 California Street, Suite 2600  
San Francisco, CA 94111

RECEIVED  
AUG 30 2007

Re: Preliminary Recommendations for Managed Wetland Policy Update  
SAN FRANCISCO BAY CONSERVATION & DEVELOPMENT COMMISSION

Ladies and Gentlemen:

I am writing to you as a Suisun Marsh landowner with substantial levee exposure to Grizzly Bay. I believe any BCDC policy update that involves managed wetlands that fails to recognize the importance of levee integrity, irrespective of jurisdiction, is deficient.

1 Your staff report very appropriately discusses this matter in both Chapter 3 (page 23) and Chapter 5 (page 36). The only suggestion I would make to this report in that specific area is to include a discussion of the added hazard created by the timing of water releases into the rivers serving the Delta. Clearly this has contributed to the flooding many of the owners in the Suisun Marsh have experienced in past years (i.e. 1998 and the winters of 2005 and 2006).

2 I believe the policy update currently under your consideration should have a section on the importance of maintaining the integrity of the exterior levees surrounding managed wetlands. While it is recognized that BCDC does not have jurisdiction over these exterior levees, its importance is absolutely critical to the continued existence of managed wetlands. This policy update should acknowledge their importance and set forth policy issues that deal with BCDC coordination with other agencies, participation in joint endeavors that address the threat to these wetlands by levee failures, the responsibility of property owners to maintain these levees, requisite financial support by responsible governmental agencies, etc.

Please incorporate this suggestion in the public hearing to be held in San Francisco on September 6, 2007. I would welcome any response to this suggestion.

Sincerely,



Cc: Steve Chappell—SRCD  
Jim Edgar—Grizzly West Reclamation District #2136  
Matt Connelly—Island Club  
Frank Johnson—Cal Farms

**Robert L. Bean. August 28, 2007.** Staff response, below, corresponds to Robert Bean's comment letter dated August 28, 2007.

1. As suggested, the background report will be revised to include a discussion of the relationship between the timing of water releases into the rivers of the Delta and the risk of flooding in the Suisun Marsh.
2. The staff agrees that levee integrity and maintenance is a critical issue in the Suisun Marsh. It should be noted that the Commission does have jurisdiction over the exterior levees surrounded managed wetlands. The staff has proposed adding a finding in the Marsh Plan to outline the consequences of levee failure and further emphasize the importance of properly maintaining the levees. Further, the staff agrees that Commission coordination with other agencies is important. For dredging projects in particular, the Commission has partnered with the San Francisco Bay Regional Water Quality Control Board (RWQCB), State Lands Commission (SLC), the San Francisco District U.S. Army Corps of Engineers (COE), and the U.S. Environmental Protection Agency (EPA) to establish the Dredged Material Management Office (DMMO). The goal of the DMMO is to increase efficiency and coordination between the member agencies and to foster a comprehensive and consolidated approach to processing dredging applications. Applicants using the DMMO fill out one application form, which the agencies then jointly review at bi-weekly meetings before issuing their respective authorizations.

interest in seeing the project succeed. As you know, employees of public agencies are not readily able to make immediate decisions without the consent of many people within their departments.

In my experience, there seems to be a fear of reprisals brought on by emotional and unpredictable public and private influences. This, at times, is a function of survival for the public agencies and their employees. Technicalities created by the approval process make the act of conducting actual work a triumph of persistence rather than a labor of love.

Unfortunately, it seems that ambivalence supersedes the need to manage the wetlands. In many instances a "no" vote translates into less trouble for the public employee. The landowner and the environment suffer, as a result of the deteriorating habitat. If a decision is made to proceed with enhancements and someone raises concerns, there are usually consequences that public employees seem to wish to avoid. The management plan approval process makes it too easy to criticize landowners and public employees if they actually make decisions and move forward with a restoration or habitat improvement plan. Thus, making no decision tends to insulate decision makers from reprisals.

I am frustrated by the difficulties involved with the process in place. We are not offered the opportunity to dredge to protect the managed wetlands unless there is an emergency. By the time the emergency occurs, it is too late to save the fragile environment we are trying to protect. The wetlands suffer from irreparable harm due to saltwater intrusion and no one seems to care. They are more concerned with disturbing sediment than protecting some of the most precious habitat in the United States.

1

Our property has been flooded several times in the past two years. Each time, I see the real effects on the environment. Critical habitat is lost and endangered species are killed due to a lack of preemptive proactive management programs. We are unable to conduct proper maintenance of our levee system because of the bureaucracies involved. The permitting, or I should say, the un-permitting of dredging to elevate our levees is the cause of many of our problems.

I know that this letter will not in and of itself move you to change the convoluted policies of your agency, but I implore you to consider the policies you intend to implement and reduce the bureaucracy by consolidating the approval process and eliminating the steps for work to be done. Most landowners are not going to hurt the environment. The fact is, by hurting the environment they would be hurting their reasons for owning their property. What you are creating is a frustration that translates into an unwillingness to contribute to the management of the environment and the eventual deterioration of some of the only brackish water, managed wetlands in the United States.

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2

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3

In policy change 14, you added new policy guidelines for any property to be enhanced as a managed wetland or restored to tidal wetlands. I am not a proponent of tidal wetlands as a long-term goal for the Suisun Marsh. If, as a landowner, I wish to convert some or all of my property to tidal wetlands, I am sure that there would be many opposed and many others in favor of the conversion. Here lies the problem. No one can agree and anyone can stop the action by protesting the process or making it so cumbersome that a landowner or public agency gives up or fails to fund the project. Either way, the wishes and rights of the landowner are compromised.

There have been many studies done by people in academia who claim to know the Suisun Marsh. Each study finds conclusions that seem to advantage one group at the expense of another, only to have each advocacy group conduct additional studies to prove a different outcome that supports their particular view. I have found value in some of their theories but I also recognize their failings. The academics are commissioned to provide information. They don't have the passion to create the habitat or maintain it. A landowner who cares about his property is the only one who will conduct the positive improvements necessary to improve the habitat.

Some academics will argue that tidal is a better use for the Marsh. Others will disagree. One thing I have learned is that most Biologist who study the Marsh borrow from past studies and fail to consider the overall impact manage wetlands have on the environment. It is clear to me by watching the birds and mammals on my property, that tidal wetlands offer them nothing. We are talking about two entirely different environmental habitats. Managed wetlands are of critical nature to the environment and are increasingly scarce. Tidal wetlands offer a homogenous stratum with an unattractive esthetic value. They may propagate fish and create an incubator of life, but they are far less environmentally pleasing to mammals and birds.

I appeal to you to reconsider your new requirements to have additional evaluation processes in place before enhancing existing wetlands or before tidal wetlands are created. I do not choose to take this step with my property, but I certainly do not wish to encumber others who may wish to convert their properties. Your new policies call for "long term and short term goals". This is another way of saying, "if anyone objects to changing your land, then you can't do it".

Slowly but surely, you are taking our land and the environment we are trying to protect away from us. Everyone knows we can't develop our properties. It is becoming increasingly difficult to maintain our properties because we can't adequately maintain our levees. If we can't keep the property because we can't put dredge material on the levees and we can't convert the property to tidal because the regulation make it too expensive and too cumbersome, then what is left for the landowner? You are taking away all of the possible uses for our property.

I know you are trying to do the right thing, but can't you see that what you are creating will have a deafening effect on the land. If you and your department wish to truly help the environment, rather than creating more bureaucracy at the cost of taxpayers and landowners, will you alleviate the burdens of regulation and make it easier for landowners to improve their properties or convert them to tidal. I do not propose to eliminate all the protections in place. I propose you consolidate the regulatory requirements, eliminate the myriad of agencies involved, and streamline the approvals for manage wetlands to be managed and the levees to be fixed with dredged materials. It is easy to justify your job and the existence of your agency if you create more regulation. The hard part of owning property in the Suisun Marsh is to watch the land that you love be taken from you by government regulation.

Please, do not add Policy 14 to your bay plan amendment. Please simplify the permitting process and resolve the interagency conflicts so that landowners can dredge to build their levees and the managed wetlands can be managed.

Sincerely,  
Brian Geary, Landowner Property 902, Suisun Marsh, District 2130.  
216 Lasso Circle  
San Ramon Ca 94583  
(925) 708-2601

**Brian Geary. August 30, 2007.** Staff response, below, corresponds to Brain Geary's comment letter sent via e-mail dated August 30, 2007.

1. The Commission's existing laws and policies support the goal of landowners to enhance and preserve the environment, and the staff's preliminary recommendation included language emphasizing the stewardship role landowners have played. It is not the staff's intention to add more requirements that would further burden landowners and, in fact, the proposed revisions to the policies do not in any way change the existing underlying permit requirements. Most maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission) and thus the landowner would not need any additional permits from the Commission for these activities. In addition, the individual management plans are being revised and one of the objectives of the revision process is to create management plans that better support the landowners' capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals. In response to comments, the staff has proposed adding additional language to the Marsh Plan to describe the role of the individual management plans. Further, the staff has proposed further revisions to the Marsh Plan to make it explicitly clear that those activities covered by an individual management plan do not need individual permits from the Commission.
2. The Commission's laws and policies do not restrict dredging for repair of managed wetland levees to emergency situations. In fact, many dredging sites in the Suisun Marsh are described in the Suisun Resource Conservation District's component of the Suisun Marsh Local Protection Program (LPP), and thus dredging activities at those sites that are consistent with the LPP do not require a permit from the Commission. If the proposed dredging site is not covered in the LPP, it does require a permit from the Commission and would be analyzed for consistency with the Commission's applicable laws and policies. The staff understands the challenges associated with multiple agencies with overlapping jurisdictions and authorities. For dredging projects in particular, the Commission has partnered with the San Francisco Bay Regional Water Quality Control Board (RWQCB), State Lands Commission (SLC), the San Francisco District U.S. Army Corps of Engineers (COE), and the U.S. Environmental Protection Agency (EPA) to operate the Dredged Material Management Office (DMMO). The goal of the DMMO is to increase efficiency and coordination between the member agencies and to foster a comprehensive and consolidated approach to handling dredged material management issues. Applicants using the DMMO fill out one application form, which the agencies then jointly review at bi-weekly meetings before issuing their respective authorizations.
3. The Suisun Marsh Plan currently supports protecting existing uses of managed wetlands (Policy 1 in the Land Use and Marsh Management section) as well as supporting the restoration to tidal action of managed wetlands that are no longer needed for waterfowl hunting (Policy 13 in the Land Use and Marsh Management section). The staff has not proposed any deviations from the original intent of these policies. The staff agrees, however, that there are many unknowns regarding the restoration of managed wetlands to tidal marsh and has therefore proposed (in the preliminary recommendation) an additional policy to outline those issues that should be addressed as part of a managed wetland restoration or enhancement project. Please note that Policy 14 specifically requires an analysis of the "anticipated habitat type that would result" and "the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife." The staff

agrees that there may be habitat “tradeoffs” when restoring managed wetlands to tidal action and that those potential tradeoffs require a thorough analysis. Finally, in response to comments, the staff has proposed further additions to the proposed policy (Policy 14 in the Land Use and Marsh Management section) to make it explicitly clear that established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals activities that are covered by a certified individual management plan do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

**Subject: Preliminary Recommendation for Proposed Suisun Marsh Plan****Date:** Tuesday, September 4, 2007 12:21 PM**From:** Krause, Kevin M. <KKrause@nrce.com>**To:** caitlins@bcdd.ca.gov, travis@bcdd.ca.gov**Cc:** SRCD@SuisunRCD.org**Conversation:** Preliminary Recommendation for Proposed Suisun Marsh Plan

Sirs and Madams-

Regarding the Managed Wetlands Policy Update, I would like to express my opinions and concerns regarding proposed changes, most especially as they pertain to the potential infringement of control of the land by the property owners. Most specifically, policy change # 14, and any and all references to the potential for increased pressure on landowners to convert diked and managed wetlands to tidally-influenced habitat. Please consider our concerns as landowners, stewards of the land and as conservation-minded sportspeople who seem to bear more and more responsibility for reporting and bureaucracy-driven record keeping. Our vested interest as landowners to continue to maximize the variety, health and utilization of these ecosystems are directly and inversely proportional to the number and degree of impediments represented by these requirements. Coupled with poor levee maintenance over the years these requirements as described in change # 14 may well prove too difficult to administer for many landowners, and a "throw the hands up in the air" laissez-faire attitude will most probably be the result, and only serve to diminish proactive managing of these critical habitats.

I am not exaggerating when I say that the amount of habitat enhancement and wildlife ecosystems improvement that our club, # 906, Wreck Slough Rod and Gun Club have made over the last five years, which was both aggressive and expensive, would most probably not have been completed had policy change # 14 been in place. Our stewardship of that land has been compromised by three (3) catastrophic flood events in that time frame, and I truly feel that we would not have spent the many, many hours and the very large sums of money making these very important and positive changes had we been saddled with additional reporting and external constraints.

Respectfully submitted,

Kevin Krause  
Wreck Slough Rod and Gun Club, parcel # 906  
Van Sickle Island  
510-772-2946

**Kevin Krause. September 4, 2007.** Staff response, below, corresponds to Kevin Krause's comment letter sent via e-mail dated September 4, 2007.

1. It is not the staff's intent to increase the pressure on landowners to convert diked and managed wetlands to tidal habitat. The Suisun Marsh Plan currently supports protecting existing uses of managed wetlands (Policy 1 in the Land Use and Marsh Management section) as well as supporting the restoration to tidal action of managed wetlands that are no longer needed for waterfowl hunting (Policy 13 in the Land Use and Marsh Management section). The staff has not proposed any deviations from the original intent of these policies.
2. Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In addition, the individual management plans are in the process of being revised and one of the objectives of the revision process is to create management plans that better support the landowners capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals. In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

**Subject: Managed wetlands #702****Date:** Wednesday, September 5, 2007 8:25 PM**From:** George Boero <gboero@sbcglobal.net>**To:** caitlins@bcdcc.ca.gov**Cc:** Steve Chappell SChappell@SuisunRCD.org**Conversation:** Managed wetlands #702

September, 5, 2007

Dear Ms Sweeney,

Thank you for your request of comments on the Managed Wetlands Staff Report and your telephone conversation on 9-4-07.

1 These policies are very important to us and we are very concerned landowners managing wetlands. We appreciate your support of dredging, levee repair and other management practices in the marsh. We also think it is very important to control adverse effects on the marsh in secondary areas, such as dumps, windmills and runoff issues.

2 Item#14 should not pertain to enhancement or adaptive management practices on managed wetlands. But should pertain to tidal conversions, including effects on neighboring properties. The science and practices of tidal restorations are not proved entities.

3 Item#4. The existing salinity standards are not presently adequate to grow watergrass in the western marsh. With more diversions (possible new peripheral canal), sea level rise, and other compromises on western marsh standards and maintenance, the salinity standards may not be adequate to grow desired waterfowl plants.

4 I would like more time to review this important report and talk to other land owners. Please send me 5 additional copies to distribute to other members.

Sincerely,

George Boero

Morrow Island Land Co #702

14255 Sycamore Ave.

San Martin, CA 95046

**George Boero. September 5, 2007.** Staff response, below, corresponds to George Boero's comment letter sent via e-mail dated September 5, 2007.

1. Comment noted.
2. Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.
3. The staff has revised Finding 4 in the Water Supply and Quality section to delete reference to watergrass, as watergrass is not consistently supported throughout the entire Marsh.
4. During the public hearing, the period of time for written public comment was extended for two weeks to September 20, 2007, and the staff mailed Mr. Boero five additional copies of the documents as requested.

**Subject: Staff Report Prelim Recommendations for Marsh Plan****Date:** Wednesday, September 5, 2007 1:10 PM**From:** Jack Schafer <jschafer@sanjuan.edu>**To:** travis@bcddc.ca.gov, caitlins@bcddc.ca.gov**Conversation:** Staff Report Prelim Recommendations for Marsh Plan

Dear Staff Members,

**Section 14:** Without repeating the proposed language and the history of the Suisun Marsh, parts **a-g of Section 14** are problematic to any landowner and habitat manager in the Suisun Marsh. Please remove this language if not the entire section.

All other language changes appear to be appropriate.

**An observation:** Over the years, increasing boat traffic on waterways is eroding levees with uncontrolled wave action. Posting of speed limits to help protect levees in the Suisun Marsh is essential to levee maintenance.

Sincerely,  
Jack Schafer  
Owner 619/620  
RD 2112  
4576 Minnesota Avenue  
Fair Oaks CA 95628  
(916)966-9851

**Jack Schafer. September 5, 2007.** Staff response, below, corresponds to Jack Schafer's comment letter sent via e-mail dated September 5, 2007.

1. Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.
2. Comment noted. Existing Policy 6 in the Recreation and Access section of the Marsh Plan states, with regard to ensuring recreational activities do not result in adverse impacts on the Marsh, that "For example, boat speeds and excessive noise should be controlled...."

September 6, 2007

Commissioner Randolph, Chair  
 San Francisco Bay Conservation and Development Commission  
 50 California Street, Suite 2600  
 San Francisco, CA 94111

Subject: Proposed Amendment to the Suisun Marsh Protection Plan  
 Finding and Policies Managed Wetlands

Dear Chairman Randolph,

1 The Suisun Resource Conservation District (SRCD) appreciates the opportunity to provide comments on the proposed amendments to the Suisun Marsh Protection Plan (the Plan) Finding and Policies for Managed Wetlands in Suisun Marsh. It has been a pleasure to work with Ms. Caitlin Sweeney and other BCDC staff on drafting these proposed revisions. BCDC staff worked closely with SRCD to discuss and incorporate SRCD concerns in the preparation of this initial draft of the document.

The proposed amendments to the Plan modernize and clarify existing policies to reflect changes in the current scientific state of knowledge, changes in public and private ownership, and modification in historic wetland management objectives. The SRCD is supportive of the proposed draft amendments to the Plan, with the exception of the addition of the new Policy #14, under Land Use and Marsh Management, page 13.

2 The proposed Policy #14 requires significant new requirements for physical and scientific monitoring, analysis and project design to be applied to proven managed wetland enhancement activities. This Policy considers established managed wetland enhancement activities in the same scientific uncertainty as conversion of existing diked managed wetlands to tidal and sub-tidal habitats. This seems significantly inappropriate because significant scientific studies, on the ground experience, and a legacy of wetland stewardship have developed proven managed wetland restoration and enhancement activities that produce very predictable outcomes and beneficial habitat improvements. Suisun Marsh landowners have been managing these diked wetlands and enhancing the wetland values and functions for the past 100 years. These activities have been appropriate under the existing Suisun Marsh Protection Plan for more than thirty years, but now will require significant oversight and BCDC staff review. These proposed requirements on managed wetland enhancement activities will serve as a disincentive for landowners to continue enhancement of managed wetlands because of additional expense and time added to normal wetland operations and management.



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 Account Clerk

**SUISUN RESOURCE  
 CONSERVATION DISTRICT**  
 2544 Grizzly Island Road  
 Suisun, CA 94585-9539  
 (707) 425-9302  
 (707) 425-4402 FAX  
 SRCD@SuisunRCD.org

The SRCD could support these types of permitting requirements for large tidal restoration projects in Suisun, which propose the conversion of existing managed wetlands habitats to tidal and sub-tidal habitats because, in contrast to proven diked managed wetland management, the scientific uncertainty and unknown trajectory of site development warrants careful planning and a commitment to make sure that desired restoration objectives are achieved and maintained. Tidal restoration will negatively impact existing managed wetlands at the restoration site, projects can potentially increase flood risk to adjacent properties, sediment availability is unknown in Suisun, and modification of existing salinity gradients and tide stage may occur.

3 The SRCD has encouraged Suisun Marsh landowners to review and provide comments to BCDC on these proposed amendments to the Plan's Finding and Policies. Based upon landowner inquiries and questions, SRCD anticipates that additional comment letters will be forthcoming and requests that the public comment period be extended for 2 weeks to accommodate these landowner contributions.

Thank you for the opportunity to participate in this process.

Sincerely,



Steven Chappell,  
Executive Director

cc: SRCD Board of Directors  
California Dept. of Fish and Game  
Ms. Caitlin Sweeney, BCDC Senior Planner

**Steven Chappell. Suisun Resource Conservation District. September 6, 2007.** Staff response, below, corresponds to Steven Chappell's comment letter dated September 5, 2007.

1. Comment noted.
2. Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In addition, the individual management plans are in the process of being revised and one of the objectives of the revision process is to create management plans that better support the landowners capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals.

In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

3. During the public hearing on September 6, 2007, the period for written public comment was extended for two weeks to September 20, 2007.

**Subject: BCDC proposal update**

**Date:** Friday, September 7, 2007 11:17 AM

**From:** JOHNSON, FRANK <FrankJohnson@allstate.com>

**To:** caitlins@bcdc.ca.gov

**Cc:** schappell@suisunrcd.org

**Conversation:** BCDC proposal update

Caitlin Sweeney, your policy #14 appears to be a bit out of control. I currently manage approximately 2500 acres [six waterfowl hunting clubs] in the Suisun Marsh. I either recommend or personally do myself many projects on each of these properties. For example, the normal, annual task of spraying phragmites, disking it & manipulating the water to promote viable waterfowl habitat for all six properties would require an administrative assistant just to handle the paper work. Of the six properties there will be 30 to 50 small areas to be disked at different benches to improve their habitat. There will be different long & short term biological & physical goals for each project depending on the elevation of the property and the water strategy used for each. To be in compliance would be so cumbersome that the end result may be that fewer and fewer projects would be under taken.

Frank Johnson  
owner #'s 425 & 426

\*\*\*\*\*

The Company reserves the right to review all e-mail. Your sending of e-mail is consent for the Company to review the content of your e-mail. Communicating via e-mail does not constitute an offer of coverage. Eligibility requirements and coverages can vary by state. Allstate coverages are subject to the policy terms, conditions, and exclusions detailed in the insurance contract issued at purchase. Quotations on insurance are provided as estimates and are not an insurance contract.

**Frank Johnson. September 7, 2007.** Staff response, below, corresponds to Frank Johnson's comment letter sent via e-mail dated September 7, 2007.

Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In addition, the individual management plans are in the process of being revised and one of the objectives of the revision process is to create management plans that better support the landowners capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals.

In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

September 16, 2007

**RECEIVED**  
SEP 17 2007

Ms. Caitlin Sweeney  
San Francisco Bay Conservation and Development Commission  
50 California Street, Suite 2600  
San Francisco, California 94111

SAN FRANCISCO BAY CONSERVATION  
& DEVELOPMENT COMMISSION

RE: Public Hearing on Proposed Bay Plan Amendment No. 1-07 Concerning Update of the *San Francisco Bay Plan* Managed Wetland Findings, Policies and Map Designations; and Proposed Marsh Plan Amendment No. 1-07 Concerning Update of the *Suisun Marsh Protection Plan* Findings and Policies Regarding Managed Wetlands.

Dear Ms. Sweeney:

I am reviewing the BCDC Draft Minutes from the September 6, 2007, Commission Meeting and have a few and questions and requests:

A. Page 3, Number 8 on the agenda was a Public Hearing Concerning:

1

1. Proposed Bay Plan Amendment No. 1-07 Update of the San Francisco Bay Plan Managed Wetland Findings, Policies and Map Designations and
2. Proposed Marsh Plan Amendment No. 1-07 Concerning Update of the Suisun Marsh Protection Plan Findings and Policies Regarding Managed Wetlands.
  - Is a copy of each of these proposed reports posted on BCDC's website?
  - Could you send me a copy of each of these proposed reports? Or
  - Can I come to your office to read the proposed reports and make a copy of each of them?

2

B. Page 6, second paragraph, states you referred the Commission to the Preliminary Staff recommendation for the exact proposed wording changes. I would like a copy of the Preliminary Staff Recommendations and the Staff Background Report "Managed Wetlands" if that is different from the Preliminary Staff Recommendation.

3

C. Page 4, paragraph 7 states that the Suisun Marsh Local Protection Program is composed of 5 components administered by Solano County, the Solano County Mosquito Abatement District, the City of Fairfield, the City of Suisun and the Suisun Resource Conservation District.

- Are the five components the same thing as the five sections mentioned on page 7, paragraph 4, namely the:
  - Environment, water supply and quality, utilities, facilities, and transportation, recreation and access, and land use and marsh development or are the five components something else??? If something else, what are they and can you send me a copy?

4

D. Page 7, paragraph 7 – Is there a management plan approved by BCDC on file for my duck club? My club was originally club 80 prior to renumbering.

5

E. Page 7, paragraph 8 – When was the background report and preliminary recommendations reviewed by the CAC? Can you send me a copy of their comments and recommendation?

6

F. Please place me on the mailing list for all documents, comments, revisions, public hearing notices, etc. for these two documents:

- Proposed Bay Plan Amendment No. 1-07 - Update of the San Francisco Bay Plan Managed Wetland Findings, Policies and Map Designations and
- Proposed Marsh Plan Amendment No. 1-07 Concerning Update of the Suisun Marsh Protection Plan Findings and Policies Regarding Managed Wetlands.

I will be at home tomorrow morning until 11 a.m. if you want to call me and discuss the answers to my questions.

Thanks you for your assistance.

Sincerely,



June Guidotti  
3703 Scally Road  
Suisun, California 94585  
phone: 707-631-9365  
fax: 707-429-5054

**June Guidotti. September 16, 2007.** Staff response, below, corresponds to June Guidotti's comment letter dated September 16, 2007 addressed to Caitlin Sweeney.

1. A copy of the reports are posted on BCDC's website. In addition, the staff mailed Ms. Guidotti copies of the reports prior to the public hearing.
2. The Preliminary Staff Recommendation was mailed to Ms. Guidotti with the Staff Background Report prior to the public hearing.
3. Within the Suisun Marsh Local Protection Program (or LPP), Solano County, the Solano County Mosquito Abatement District, the City of Fairfield, the City of Suisun City, and the Suisun Resource Conservation District each administer a separate "component" which guide the management of land uses and activities in the portion of the Marsh within their jurisdictions. The five "sections" mentioned in the minutes reflect separate policy sections of the Suisun Marsh Protection Plan.
4. BCDC does not have a management plan on file for this land area. It is likely that the area is not considered a duck club under the McAteer-Petris Act or the Suisun Marsh Preservation Act, and therefore does not need to prepare an individual management plan for the management of the area for waterfowl hunting.
5. The Background Report and Preliminary Recommendations were reviewed by the Citizens Advisory Committee (CAC) prior to the mailing of the documents to the public and Commission on August 3, 2007. The comments of the CAC are part of the public record and may be reviewed.
6. Ms. Guidotti is on the mailing list for all items relating to the managed wetlands policy amendment process.

September 16, 2007

Mr. Will Travis, Executive Director  
San Francisco Bay Conservation and Development Commission  
50 California Street, Ste. 2600  
San Francisco, CA 94111

**RE: Tidal Restoration of Emmington Road and Comments on Proposed Bay Plan Amendment No. 1-07 Concerning Update of the *San Francisco Bay Plan* Managed Wetland Findings, Policies and Map Designations; and Proposed Marsh Plan Amendment No. 1-07 Concerning Update of the *Suisun Marsh Protection Plan* Findings and Policies Regarding Managed Wetlands.**

Dear Mr. Travis and Commissioners:

It is my understanding that amendments to the San Francisco Bay Plan, as well the Suisun Marsh Protection Plan, are moving forward and BCDC will be soon considering strategies for the future of the Suisun Marsh, including provisions for tidal restoration.

According to Report 8 titled "Suisun Marsh and Upland Resource Management" dated September 1976 p. 3:

"1. Tidal Marshes

The tidal marshes in the Suisun Marsh occur on the edges of bays and sloughs, outside the levees, where they are subjected to the daily tides. The tidal marshes are important to many animals that live in this habitat as well as others that depend on the daily tidal rhythm to make food organisms available. For example, the salt harvest mouse, an endangered species, inhabits the pickleweed vegetation of tidal marshes. The Californian clapper rail, another endangered species, feeds primarily on organisms exposed in the tidal marshes at low tide, as do several other water-associated bird species. At high tides, on the other hand, many small animals seek refuge at the top of the vegetation cover, where they become prey to numerous species of raptors. Large quantities of detritus and invertebrates are pulled from tidal marshes by retreating tides which deposit them on adjacent mudflats, where they provide food for many shorebirds."

In addition, Report 8 on page 16 states:

"6. Restoration of marshes.

Several areas around the Suisun Marsh are historic marshlands that could be restored to wetland status. Since most of the Suisun Marsh is managed primarily for waterfowl or used for agriculture or grazing, the tidal marsh habitat is in comparatively short supply. Reclaimed tidal marsh area would provide acreage that can be managed for water-related avifauna and other non-game wildlife, as well as a sanctuary for hunted waterfowl. Reclamation could also create further opportunities for public enjoyment of the Marsh.

On the other hand, managed wetlands are in short supply relative to the demand from duck hunters and they support a greater diversity of wildlife species than tidal marshes. It may be desirable to restore some of the historic marshes as managed wetlands.

***Reclamation programs to restore historic marshlands to either tidal marshes or managed wetlands should therefore be a major objective of the March management program [emphasis added].***

I am requesting that Emmington Road be put back to full tidal action for the historic marsh. The portion of Emmington Road at Station 9 is raised and is 4.5 feet under tidal action when certain levees are let out. Potrero Hills Lane acts as a dam and has significantly reduced the natural tidal circulation from Hill Slough onto adjacent properties. Additionally, coincident with high tides and storm events, the raised roadway and culvert under Potrero Hills access road (portion of the road across the closed Solano Garbage Company Landfill) appears to restrict the runoff from adjacent property back to Hill Slough. I agree with Mr. Joseph Peterson, Cal/Trans District Office Chief, Engineering Services II in his December 15, 2003, letter which states: ***"In my opinion, the portion of Potrero Hills Lane that crosses the historical marsh should have been placed on a bridge [emphasis added]"*** (Exhibit A).

In addition, I request that your agency review the contours and areas affected by the construction of a berm at the 4' elevation located on Solano Garbage Company property. The construction of this berm is backing up water and flooding 200 to 300-acres farmland, including a portion of my land, as well as Scally Road to the east. Flooding is significant during average intensity rainfall events, as the natural drainage pattern has been altered where the brackish water meets the fresh water, and Scally Road goes under 2-3 feet of water and becomes impassable. Agricultural landowners have been negatively impacted due to flooding and were not notified by any regulatory agency, Solano Garbage Company, or Potrero Hills Landfill on the amount of flooding to be expected post-construction of the berm.

Restoration of Emmington Road will reestablish the natural drainage that existed prior to the construction of the berm on the south end of the Solano Garbage Company property, and the construction of Potrero Hills Access Road and Potrero Hills Lane, as the tidal action used to go over the top of Emmington Road.

BCDC, Solano County Resource Management Department, Solano County Public Works, the Department of Fish and Game, the Regional Water Quality Control Board, SRCD, the Army Corps of Engineers and the Solano County Mosquito Abatement District need to reverse the mistake made by various regulatory agencies to the marsh when the berm and Potrero Hills Access Road and Potrero Hills Lane were constructed. Republic Services Inc., owner of Potrero Hills Access Road and a portion of Potrero Hills Lane, Mr. Jeffery Dittmer Potrero Hills Lane owner, Republic Services Inc., owner and operator of the Potrero Hills Landfill, and all counties and agencies that have disposed of solid waste, as well as those agencies whose waste has been beneficially reused (i.e., biosolids as alternative daily cover) at the Potrero Hill Landfill, be ordered to contribute to a fund for the construction of a bridge over the historic marsh in order to access the landfill property at the easement vested with BCDC by Charles Lamboree. In addition, BCDC should order the removal of all filled barriers to tidal action as well as the flap gate located under the Potrero Hills Access Road.

Finally, I request that BCDC stop allowing the degradation of the Suisun Marsh and act on the Appeal filed on behalf of the public against the expansion of the Potrero Hills Landfill. Not correcting the past mistake - the construction of Potrero Hills Access Road and Potrero Hills Lane - that resulted in a commercial road into the Marsh (see Exhibit B - Transcript of December 15, 1989 California Integrated Waste Management Board Meeting submitted in Public Appeal of Potrero Hills Landfill expansion), the loss of tidal action, and the flooding of farmland, and ignoring the impact of the unlined closed Solano Garbage Company Landfill with known

discharge to the Marsh are unacceptable. The poor decisions of the past are being perpetuated by Solano County as the LPP is ignored and illegal activities are allowed to occur unchallenged, unless I point them out, in the Marsh. In addition, BCDC is not enforcing current polices and is not disclosing the full text of proposed policies to the public.

Recent decisions by Solano County will result in new significant environmental and health impacts as evidenced by the reactivation of old high voltage power lines shut down 35 years ago due to flight pattern of wildlife (personal communication Barbara Kondylis). In addition, the installation of a new telephone line along the east side of Potrero Hills Access Road and Potrero Hills Lane when the paperwork stated the line would be installed along the west side of Potrero Hills Access Road and Potrero Hills Lane through the Primary Marsh in violation of Suisun Marsh Preservation Act, the Local Protection Plan and the McAteer-Petris Act and the San Francisco Bay Plan are illegal and do not conform to the policies as these lines are within one-quarter mile of the Suisun Marsh.

Thank you for the opportunity to comment on the proposed update of the San Francisco Bay Plan and the proposed update of the Suisun Marsh Protection Plan. I am requesting that the tidal marsh be restored and placed in the appropriate Plan. Please let me know if my request will be considered and included in the Suisun Marsh Protection plan.

Sincerely,

*June Guidotti and Family and for the Public*

June Guidotti  
3703 Scally Road  
Suisun, California 94585  
Phone: 707- 631-9365  
Fax: 707- 429-5054

Exhibit A – December 15, 2003 letter from Mr. Joseph Peterson, Cal/Trans District Office Chief, Engineering Services II to June Guidotti.

Exhibit B - Transcript of December 15, 1989 California Integrated Waste Management Board Meeting

Cc: BCDC Commissioners  
Jerry Brown, Attorney General  
Steve Chappell, SRCD  
Bud Tonnessen, Solano County Mosquito Abatement Program  
U.S. Army Corps of Engineers, San Francisco  
U.S. EPA, San Francisco  
U.S. Fish and Wildlife  
California Dept. of Fish and Game  
San Francisco Regional Water Quality Control Board  
Solano County Board of Supervisors  
Citizens Advisory Committee  
Ron Glas, Solano County Planning  
Mike Yankovich, Solano County Planning  
Brigitta Corsello, Resource Management Department

## DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE  
P. O. BOX 23660  
OAKLAND, CA 94623-0660  
PHONE (510) 286-6377  
FAX (510) 286-4882



*Flex your power!  
Be energy efficient!*

(EXHIBIT A)

December 15, 2003

Ms. June Guidotti  
3703 Scally Road  
Suisun, CA 94585

Dear Ms. Guidotti:

I appreciated the opportunity to meet with you on October 29, 2003 to discuss past flooding on your property located at 3703 Scally Road. The area in question is outside State right of way bounded by Kildeer Road and Potrero Hills Lane. Both of these roadways are Solano County facilities.

I agree with you that the extent of flooding as evidenced by the pictures you provided is most likely exacerbated by the small culvert beneath Potrero Hills Lane which currently acts as access to the Potrero Hills Landfill. This raised roadway essentially acts as a dam and has significantly reduced the natural tidal circulation from Hill Slough onto your property. Additionally, coincident with high tides and storm events, the raised roadway and culvert appear to restrict the runoff from your property back to Hill Slough. In my opinion, the portion of Potrero Hills Lane which crosses the historic tidal marsh should have been placed on a bridge.

Caltrans doesn't own, operate, or maintain the culvert beneath Potrero Hills Lane, therefore, we have no obligation or authority to address your flooding problem. If you have any questions regarding this issue please contact me at (510) 286-6377.

Sincerely,

*Joseph E. Peterson*  
JOSEPH E. PETERSON  
District Office Chief  
Engineering Services II

c: Hydraulics File

**June Guidotti. September 16, 2007.** Staff response, below, corresponds to June Guidotti's comment letter dated September 16, 2007 addressed to Will Travis.

The comments of Ms. Guidotti are regarding specific activities at specific sites in the Marsh, and not on the proposed revisions to the Marsh Plan findings and policies regarding managed wetlands. Therefore, the staff does not have a response to Ms. Guidotti's comments.

CAN CAN / GREENHEAD, INC.  
RECLAMATION DISTRICT NO. 2139

September 18, 2007

Commissioner Randolph, Chair  
San Francisco Bay Conservation and  
Development Commission  
50 California Street, Suite 2600  
San Francisco, CA 94111

RECEIVED  
SEP 19 2007

SAN FRANCISCO BAY CONSERVATION  
& DEVELOPMENT COMMISSION

Subject: Proposed Amendment to the Suisun Marsh Projection Plan Finding  
and Policies Managed Wetlands

Dear Chairman Randolph and Fellow Commissioners:

I recently attended Bay Conservation and Development Commission's September 6 meeting where the above referenced subject was addressed. I spoke briefly about my concerns, specifically with proposed Policy #14 which requires additional physical and specific monitoring, analysis and project design for work that already has well established and universally accepted methodology for managed wetland enhancement activities.

We have been successfully managing and enhancing our wetland properly for over 50 years. We have always kept our work permit current and have worked within the permit's guidelines and limitations to keep our property the best managed wetland possible. We do not believe it is necessary to add another layer of government oversight to our activities. To do so would be terribly redundant and wasteful.

Steven Chappell, Executive Director of Suisun Resource Conservation District wrote you a letter dated September 6, 2007 expressing his concerns, and we support his views completely. No one has more experience with and understands the Suisun Marsh and the regulatory hurdles government already places on wetland property owners better than Steve.

We respectfully urge you to strike Policy #14 from the plan or at least make significant changes which are consistent with Mr. Chappell's recommendations.

Thank you for your thoughtful consideration.

Sincerely,



Scott E. Bohannon  
Secretary Reclamation District No. 2139

cc: Bill Hatcher  
Steven Chappell

**Scott E. Bohannon. September 18, 2007.** Staff response, below, corresponds to Scott E. Bohannon's comment letter dated September 18, 2007.

Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In addition, the individual management plans are in the process of being revised and one of the objectives of the revision process is to create management plans that better support the landowners capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals.

In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

Brian Boero  
4231 Gregory Street  
Oakland, CA 94619

September 20, 2007

Ms. Caitlin Sweeney  
Senior Planner  
BCDC  
50 California Street, Suite 2600  
San Francisco, CA 94111

Dear Ms Sweeney:

Following are my comments on the proposed changes to the *San Francisco Bay Plan* and *Suisun Marsh Protection Plan*.

I am one of the landowners of Morrow Island Land Company in the Suisun Marsh. I have enjoyed hunting, fishing, hiking and simply being in the marsh since I was a child and have participated in many projects aimed at protecting and enhancing our managed wetland habitat.

I should say at the outset that I do not reflexively distrust or dismiss the efforts of your agency, DWR, DFG, USEPA and other government bodies that regulate the many competing interests at play in the marsh. At our property, we have had our share of frustrations with public agencies, but have also had much support.

From that perspective, I offer the two comments:

1 First, both your proposed policy changes and staff report reflect an underling assumption that tidal wetlands are inherently more valuable than managed wetlands. In Point D under the *Findings and Policies Concerning Managed Wetlands Around the Bay*, your proposed new language states: “*Managed wetlands offer a significant opportunity for restoration of tidal action to former areas of the Bay*” and proceeds to detail the benefits of removing or breaching levees.

Clinging to the vision of tidal marsh restoration is similar to the desire to restore the Hetch Hetchy Valley: Wonderful in theory, but costly and damaging in practice. Perhaps it *would* have been best if, 120 years ago, the farmers and hunters who drained and diked the marsh had left well enough alone. But they didn't. I would thus prefer to see the Bay

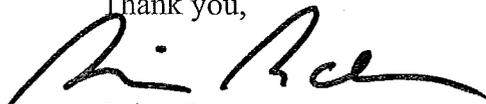
and Marsh plans reflect a clearer support for the present reality of marsh habitat rather than lofty long terms goals.

Further to this point, your staff report clearly notes the "Habitat composition tradeoffs" that must be made in any conversion from managed to tidal wetlands. Your example of the Clapper Rail versus the Salt Marsh Harvest Mouse is just the tip of the iceberg. What about the four-foot Gopher Snake I spotted on my walk through our property last week? Or the hundreds of Pelicans roosting along our interior levees this summer? I doubt that it is possible to truly calculate net environmental benefits in making a managed versus tidal decision. I therefore think it is unwise to stake out such a strong position in favor of restoring tidal action.

2 Second, the proposed addition of Section 14 to the *Marsh Plan* should be removed. As the current plan notes, landowners have been faithful stewards of the Marsh. These additional requirements will make it more difficult for us to continue in this role. Looking back at the many enhancements we have made to our property, I am unable to identify any benefit that would have come from providing the sort of analysis and documentation you propose to require. What is clear to me is that we would have struggled greatly to execute any of those projects if they were in place.

It is my hope that my children and grandchildren will be able to enjoy the marsh as I have. Your sincere, enthusiastic support of landowners is necessary to make that possible.

Thank you,



Brian Boero

Cc: Steve Chappell, SRCD

**Brian Boero. September 20, 2007.** Staff response, below, corresponds to Brian Boero's comment letter dated September 20, 2007.

1. It was not the staff's intent for the revised findings and policies to reflect an assumption that tidal wetlands are inherently more valuable than managed wetlands. The Suisun Marsh Plan currently supports protecting existing uses of managed wetlands (Policy 1 in the Land Use and Marsh Management section) as well as supporting the restoration to tidal action of managed wetlands that are *no longer needed* for waterfowl hunting (Policy 13 in the Land Use and Marsh Management section). The staff has not proposed any deviations from the original intent of these policies. As Mr. Boero notes, the staff background report acknowledges the potential tradeoffs that may result when restoring managed wetlands to tidal action. To help address potential tradeoffs, Proposed Policy 14 in the Land Use and Marsh Management section specifically requires an analysis of the "anticipated habitat type that would result" and "the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife."
2. Proposed Policy 14 under the "Land Use and Marsh Management" section of the Marsh Plan was not intended to apply to the established maintenance and enhancement activities waterfowl hunting club landowners undertake to meet their habitat and property protection goals. Rather, Policy 14 was intended to apply to lands no longer needed for waterfowl hunting purposes that are then proposed for restoration to tidal action or retention as diked pond habitat and enhanced and managed for multiple species. Further, if maintenance and enhancement activities on waterfowl hunting clubs are described in a club's individual management plan (certified by the Commission), the landowner would not need any additional permits from the Commission and Policy 14 would not apply. Management activities that are not pre-authorized and require a permit from the Commission are processed pursuant to the Commission's laws and policies, but wouldn't be subject to Policy 14 provided the activities are undertaken on an existing waterfowl hunting club. In addition, the individual management plans are in the process of being revised and one of the objectives of the revision process is to create management plans that better support the landowners capabilities to respond to changing conditions on their properties, i.e., plans that have adaptive management approaches built in to help landowners achieve their habitat enhancement and property protection goals.

In response to comments, the staff has proposed revisions to Policy 14 to clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.

Public Hearing Comments	Staff Response
Steve Chappell made comments consistent with the submitted letter (see above) dated September 4, 2007.	See staff response (above) to Steve Chappell's letter dated September 4, 2007.
Scott Bohannon made comments consistent with the submitted letter (see above) dated September 18, 2007.	See staff response (above) to Scott Bohannon's letter dated September 18, 2007.
George Tillotson agreed with the comment letters of Brian Geary and Steve Chappell. Mr. Tillotson asked for a streamlined regulatory process.	See staff response (above) to Brian Geary's letter dated August 30, 2007 and Steve Chappell's letter dated September 6, 2007.
Chair Randolph expressed the need for clarification of the terms "restoration" and "enhancement."	The staff has revised the findings and policies to more clearly define restoration and enhancement.
Commissioner Lundstrum asked staff to look carefully at the language in Policy 14 regarding what types of projects are included and what are exempt, and suggested that careful consideration be given to the language in the policy to avoid disincentives for partnerships with landowners.	The staff has revised Policy 14 clarify that activities that waterfowl club owners undertake when managing their lands for waterfowl habitat that are covered in certified management plans do not need individual permits from the Commission and, therefore, Policy 14 would not apply to those activities.
Commissioner Nelson suggested that enhancement of salt ponds is different than enhancement of managed wetlands and that a brigher line should be drawn between the salt pond policies and the managed wetland policies.	The staff has revised Policy 14 to more clearly define the types of activities that the policy applies to.
Commissioner Carruthers suggested clarifying the definition of restoration as it is used in the findings and policies, to avoid any confusion.	The staff has revised the findings and policies to more clearly define restoration and enhancement.
Commissioner Lai-Bitker stated concerns about levee system integrity in the Suisun Marsh.	The staff agrees that levee system integrity is a critical issue in the Marsh and has added a finding in the Marsh Plan outlining the issue.
Commissioner Carruthers suggested adding language to expand on the importance of levee system integrity in the Suisun Marsh.	The staff has added a finding in the Marsh Plan expanding on the importance of levee system integrity and appropriate maintenance and repair of levees.
Commissioner Kondylis directed staff to review and revise Policy 14 in response to public and Commissioner comments.	The staff has revised Policy 14 in Land Use and Environment section of the Marsh Plan in response to public and Commissioner comments.

# SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

50 California Street • Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • FAX: (415) 352-3606 • www.bcdc.ca.gov

## Resolution No. 07-05

### Adoption of Bay Plan Amendment No. 1-07 Revising the Bay Plan Managed Wetlands Findings and Policies and Map Designations

And

### Adoption of Marsh Plan Amendment No. 1-07 Revising Marsh Plan Findings and Policies Regarding Managed Wetlands

**Whereas**, Government Code Section 66652 states that “the Commission at any time may amend, repeal and adopt a new form of, all or part of the San Francisco Bay Plan” and that “such changes shall be consistent with findings and declarations of policy” contained in the McAteer-Petris Act; and

**Whereas**, the San Francisco Bay Plan (Bay Plan) findings and policies pertaining to managed wetlands and the Bay Plan Map designations have not been reviewed and comprehensively updated since the Bay Plan’s adoption in 1968; and

**Whereas**, Government Code Section 29201 states that “the Commission may amend the protection plan;” and

**Whereas**, the Suisun Marsh Protection Plan (Marsh Plan) findings and policies pertaining to managed wetlands have not been reviewed and comprehensively updated since the Marsh Plan’s adoption in 1976; and

**Whereas**, Managed wetlands are areas of historical tidal marshes that have been diked off from the Bay and are managed for wildlife, primarily waterfowl; and

**Whereas**, In the San Francisco Bay, approximately 53,000 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and on publicly-owned wildlife management areas and refuges; and

**Whereas**, Managed wetlands provide a variety of values to the Bay Area including providing habitat for waterfowl and a diversity of other wildlife, protecting upland areas by retaining flood waters and also providing an opportunity for needed space for adjacent wetlands to migrate landward as sea levels rise, a variety of recreational opportunities, and opportunities for habitat enhancement and restoration; and

**Whereas**, the San Francisco Bay Conservation and Development Commission: (1) on May 17, 2007, approved a Descriptive Notice of the proposed Bay Plan amendment; (2) on May 25, 2007, distributed the Descriptive Notice and notice of the public hearing to all agencies, organizations, and individuals interested in the proposed amendment; (3) held a public hearing on September 6, 2007 to receive public comments on the proposed amendment and preliminary recommendation and the period for public written comment was closed on September 20, 2007; (3) on September 28, 2007, distributed the final staff recommendation to all agencies, organizations, and individuals interested in the proposed amendment; and (4) on October 4, 2007, voted on the staff’s final recommendation; all in accord with the requirements and procedures set out in Government Code Section 66652 and the California Code of Regulations, Sections 11000, 11001, 11002, 11003, 11004 and 11005; and



**Whereas**, the San Francisco Bay Conservation and Development Commission has evaluated the environmental impact of revising the Bay Plan managed wetlands findings and policies as well as changes to the Bay Plan Map designations, and of revising the Marsh Plan findings and policies pertaining to managed wetlands, under the Commission's functional equivalency regulations authorized by Public Resources Code Section 21080.5, and finds that all avoidable significant adverse environmental impacts as a result of the amendments to the Bay Plan and Marsh Plan are reduced to a less than significant level and that, therefore, the revisions to the Bay Plan and Marsh Plan will have no significant environmental impact; and

**Whereas**, the amendment to the San Francisco Bay Plan managed wetlands findings and policies, changes to the Bay Plan Map designations, and the amendment to the Suisun Marsh Protection Plan findings and policies pertaining to managed wetlands enacted by this resolution is intended to be a revision in the Commission's coastal management program for the San Francisco Bay segment of the California coastal zone as approved by the U.S. Department of Commerce under the federal Coastal Zone Management Act of 1972, as amended; and

**Now, Therefore, Be it Resolved That**, the San Francisco Bay Conservation and Development Commission authorizes the Executive Director to make minor, non-substantive editorial changes to this Resolution, in particular to comply with the determinations of the Office of Administrative Law in its review of the Resolution under the California Administrative Procedures Act; and

**Be It Further Resolved That**, the San Francisco Bay Conservation and Development Commission hereby adopts Bay Plan Amendment No. 1-07 and Marsh Plan Amendment No. 1-07 which amend the Bay Plan and Marsh Plan as follows:

1. Amends the Bay Plan salt ponds and other managed wetlands findings and policies with the underlined language added and the language ~~struckthrough~~ deleted, as follows:

#### **Managed Wetlands**

#### **Findings and Policies Concerning Managed Wetlands Around the Bay**

#### **Findings**

a. More than 50,000 acres of managed marshland, adjacent to the Bay but diked off from it, are maintained as duck hunting preserves, game refuges, and occasionally as farming areas. In most of these areas, tide gates permit occasional intakes of Bay water. Managed wetlands are areas of historical tidal marshes that have been diked off from the Bay and are managed for wildlife, primarily waterfowl. Managing water intake, circulation and draining is the primary means to promote diverse managed wetland vegetation and wildlife habitats. In the San Francisco Bay, approximately 53,000 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and publicly-owned wildlife management areas and refuges. In the Suisun Marsh, privately-owned managed wetlands account for about 35,300 acres, and about 15,400 acres are publicly owned. Less than 2,000 acres currently exist outside of Suisun Marsh (located in the North Bay), of which approximately 650 acres are privately owned.

b. The diked marshlands are as important to wildlife as the tidal marshes. Substantial further diminution would result in a proportionate reduction in the amount of wildlife the Bay system can support. Managed wetlands are a unique resource for waterfowl and other wildlife. Managed wetlands provide cover and foraging opportunities for wintering waterfowl, and cover, foraging and nesting opportunities for resident waterfowl. Managed wetlands also provide habitat for a diversity of other resident and migratory species including other waterbirds, shorebirds, amphibians, and mammals. Managed wetlands can protect upland areas by retaining flood waters and also provide an

opportunity for needed space for adjacent wetlands to migrate landward as sea levels rise. Managed wetlands also provide for a variety of recreational opportunities including hunting, fishing, wildlife viewing, and hiking, and contribute to the open space character of the Bay.

e. ~~Managed wetlands provide some of the open space character of the Bay.~~

c. Privately-owned managed wetlands no longer viable as waterfowl hunting areas provide an opportunity for public purchase and enhancement and management for multiple species by providing for a range of resting, foraging and breeding needs.

d. Managed wetlands offer a significant opportunity for restoration of tidal action to former areas of the Bay. Increased tidal influence associated with the removal or breaching of levees can: (1) support the establishment of new subtidal, tidal flat and tidal marsh habitat; (2) benefit Bay water quality; (3) improve the health of the Bay's aquatic food web by re-connecting existing subtidal areas to tidal marsh habitat, where much of the Bay's nutrient-rich plant life is located; and (4) increase resting, foraging and breeding opportunities for numerous fish, other aquatic organisms and wildlife species dependent upon subtidal, tidal flat and tidal marsh habitats. However, restoration of managed wetlands may also result in changes in ecosystem function, including the displacement of wildlife species due to loss of habitat.

#### **Policies**

1. ~~As long as is economically feasible, The continued operation and maintenance of managed wetlands for waterfowl hunting, as game refuges, or for waterfowl food production should be maintained in their present use encouraged. Accordingly, P~~roperty tax policy should assure that rising property taxes do not force conversion of the managed wetlands to urban development.

2. ~~If, despite these provisions, the owner of any managed wetland desires to withdraws any of the marshes-wetlands from their present use, the public should make every effort to buy these lands, breach the existing dikes, and reopen these areas to the Bay and restore to tidal or subtidal habitat, or retain, enhance and manage these areas as diked wetland habitat for the benefit of multiple species. 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.~~

3. Any project for the restoration, enhancement or conversion of managed wetlands to subtidal or wetland habitat should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and provisions for long-term maintenance and management needs. Design and evaluation of the project should include an analysis of:

- a. The anticipated habitat type that would result from managed wetland conversion or restoration, and the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife;
- b. Potential fill activities, including the use of fill material such as sediments dredged from the Bay and rock, to assist restoration objectives;
- c. Flood management measures;
- d. Mosquito abatement measures;
- e. Measures to control non-native species;
- f. Opportunities for a diversity of public access and recreational activities, and;

- g. Water quality protection measures that may include monitoring for constituents of concern, such as methylmercury.

~~43. If the public funds do not permit purchase~~ does not acquire for habitat restoration, enhancement or conversion purposes of all the marshes managed wetland proposed for withdrawal from ~~their present uses~~ use for waterfowl hunting, and if some of the marshes managed wetland ~~are is therefore proposed for to be development or used for purposes other than waterfowl hunting,~~ consideration of the development should be guided by the following criteria:

- ea. Recognizing the potential for managed wetlands to contribute to the moderation of the Bay Area climate, the alleviation of air pollution and the open space character of the Bay, and to maximize potential habitat values, development of any of the marshes managed wetlands should provide for retaining substantial the maximum amounts of open water water surface area, consistent with the project, and should be in accord with the Bay Plan policies for non-priority uses of the shoreline. Water surface area retained can include a variety of subtidal and wetland habitat types including diked areas managed for wildlife or restoration of managed wetlands to tidal action;
- b. Development should provide for substantial the maximum public access to the Bay, consistent with the project while avoiding significant adverse effects on wildlife; and
- ac. ~~Just as dedication of streets, parks, etc., is customary in the planned unit development and subdivision laws of many local governments, An appropriate means of permanent dedication of some of the retained water surface area marsh areas as open water can and should be required as part of any development.~~
- b. ~~Depending on the amount of marsh area to be dedicated as open water, the public may wish to purchase additional areas. Plans to purchase any marshes should give first consideration to the priorities in paragraph a. above.~~
- d. ~~Managed wetlands no longer used as duck clubs may be developed for mariculture to allow an economic use of the land which does not require filling.~~

4. Study should be given to acquisition of "development rights" to the diked wetlands, to continue them in their present uses.

2. Amends the Bay Plan map designations as shown on attached Figures 1 and 2. Proposed corrections are explained on the Plan Maps in green text.

3. Amends the Marsh Plan findings and policies regarding managed wetlands with the underlined language added and the language ~~struckthrough~~ deleted, as follows:

## **Environment**

### **Findings**

5. In the Suisun Marsh, about 50,700 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and on publicly-owned wildlife management areas and refuges. Because of their extent, location and the use of management techniques to encourage production of preferred waterfowl food plants, managed wetlands of the Suisun Marsh are a vital component of the wintering habitat for waterfowl migrating south on the Pacific Flyway, and also provide cover, foraging and nesting opportunities for resident waterfowl. Managed wetlands also provide habitat for a diversity of other resident and migratory species, including other waterbirds, shorebirds, raptors, amphibians, and mammals. Managed wetlands can protect upland areas by retaining flood waters and also provide an opportunity for needed space for adjacent wetlands to

~~migrate landward as sea levels rise. The major types of management practiced by the duck clubs and the Department of Fish and Game in the Marsh are natural food plant production, permanent ponding, grain production and grazing. These management practices also produce good habitat for many species of wildlife, including birds of prey, water associated birds, amphibians, and mammals.~~

#### **Policies**

2. The Marsh waterways, managed wetlands, tidal marshes, seasonal marshes, and lowland grasslands are critical habitats for marsh-related wildlife and are essential to the integrity of the Suisun Marsh. Therefore, these habitats deserve special protection.

#### **Water Supply and Quality**

##### **Findings**

4. Water quality, at the levels required in existing salinity standards, in the Suisun Marsh is presently adequate to support the desired waterfowl food plants, such as alkali bulrush, brass buttons, and fat hen. If the waters of the bays and sloughs were to become substantially more saline, and if the more saline water were used to flood the managed wetlands, then the soils of the managed wetlands and the tidal marsh will become more saline. This will limit the distribution and abundance of important waterfowl food plants and ultimately reduce the wetland diversity and the capability of the Marsh to support wintering waterfowl.

#### **Utilities, Facilities and Transportation**

##### **Findings**

3. Because of the high water table and impervious clay soils in the wetlands, septic tanks systems used by duck waterfowl hunting clubs do not function properly may be outdated. The Solano County Health Department of Resource Management has found determined that waste from some duck waterfowl hunting club septic tanks systems is reaching ground and surface water in the Marsh. The Health Department of Resource Management is initiating a program to inspect private sewage disposal systems in the Marsh to locate malfunctioning septic tanks and responds to public complaints regarding existing systems and requires all remodeled and newly constructed duck waterfowl hunting clubs to install sewage holding tanks only and to have the tanks pumped out by an approved service agent.

##### **Policies**

5. Because septic tanks systems do may not function properly in the wetland area, the Solano County Department of Public Health Resource Management should institute a program continue to work with landowners to phase out existing septic tanks systems in the wetlands and require new systems that would properly dispose of wastes as required by the Solano County Health Department of Resource Management and the Regional Water Quality Control Board.

#### **Recreation and Access**

##### **Findings**

2. Market hunting of waterfowl began in the Suisun Marsh in the late 1850s, and the first private waterfowl sport hunting clubs were established in the early 1880s. Demand for hunting opportunities has resulted in the protection from urban development of tens of thousands of acres of marsh habitat. Generations of hunting club owners and members have worked to maintain the area's habitat value and to protect the natural resources of the Marsh. Today, waterfowl hunting is the major recreational activity in the Suisun

Marsh, occurring from late October until late January each year, though ~~the private duck~~ waterfowl hunting clubs and public wildlife areas of the marsh are also used for a wide variety of other recreational activities, particularly ~~duck~~ including upland game hunting, and fishing, dog training, boating, hiking, photography, education, nature study, and wildlife viewing.

4. Duck hunting is the major recreational activity in the Suisun Marsh, occurring from late October until late January each year. To reduce waterfowl hunter crowding on the public wildlife areas and to improve hunting conditions and hunter success, the Department of Fish and Game, which manages the public Grizzly Island Wildlife Area, has reduced the number of waterfowl hunters allowed daily to hunt on Grizzly and Joice Island Units. In addition, half of the Joice Island Unit has been closed to hunting to provide a refuge area for waterfowl. Approximately 15,400 acres of managed wetlands are publicly owned in the Suisun Marsh. Public wildlife areas of the Suisun Marsh are managed to meet multiple objectives, including enhancing wildlife habitat, as well as providing public recreational opportunities such as waterfowl hunting, fishing, wildlife viewing and hiking. Over time, waterfowl hunting on public lands has decreased while other types of recreation (including fishing and nonconsumptive recreational uses, such as wildlife viewing) have greatly increased.

5. Fishing accounts for nearly as much recreational use of the Marsh as ~~duck waterfowl~~ hunting. The Joice Island Unit provides maintained parking areas, litter cans and restrooms to accommodate fishing use. Public boat launches exist at Suisun City and Belden's Landing. Island Slough and Grizzly Island Wildlife Area both provide public fishing piers. Fishing is also allowed at unimproved sites in much of the publicly owned areas of the Marsh. However, most public fishing occurs in areas that are unimproved and not maintained. This Fishing at unimproved sites is accessed primarily on foot from designated parking areas. ~~may result in environmental damage, such as rutting of land by automobiles or levee destruction, from overuse. In addition, s~~Some frequently used fishing sites ~~are~~ may be dangerous because they are located on narrow roads and place fisherman in close proximity to passing automobiles.

### **Policies**

1. Continued recreational use of privately-owned managed wetlands should be encouraged. Additional land should be acquired within the Suisun Marsh to provide for increased public ~~duck hunting~~ recreational use and additional refuge areas for waterfowl during the hunting season. Acquisition priority should be given to those lands not now operated as managed wetlands.

~~2. The Fish and Game Commission and the Department of Fish and Game have the ultimate responsibility and authority for management of the fish and wildlife resources of California and the Suisun Marsh. Lands acquired with State funds for the purpose of enhancing and managing wildlife habitat and providing related recreation use should be administered and managed by the Department of Fish and Game.~~

~~3.~~ Land should also be purchased for public recreation and access to the Marsh for such uses as fishing boat launching and nature study. These areas should be located on the outer portions of the Marsh near the population centers and easily accessible from existing roads. Improvements for public use should be consistent with protection of wildlife resources.

~~4.~~ Public agencies acquiring land in the marsh for public access and recreational use should provide for a balance of recreational needs by expanding and diversifying opportunities for activities such as bird watching, picnicking, hiking, and nature study.

54. Agencies administering land acquired for public access and recreational use should be responsible for maintaining the areas and controlling their use. Signing on roads leading into the Marsh and maintained litter receptacles at major public use areas should be provided by the appropriate local or State agency to prevent littering and vandalism to public and private property.

65. Recreational activities that could result in adverse impacts to the environment or aesthetic qualities of the Suisun Marsh should not be permitted. Levels of use should also be monitored to insure that their intensity is compatible with other recreation activities and with protection of the Marsh environment. For example, boat speeds and excessive noise should be controlled and activities such as water skiing and naval training exercises should be kept at an acceptable level.

### **Land Use and Marsh Management**

#### **Findings**

2. The managed wetlands are a unique resource for waterfowl and other Marsh wildlife, and their value as such is increased substantially by the management programs used by ~~the duck waterfowl hunting clubs and the Department of Fish and Game~~ public agencies to enhance the habitat through the encouragement of preferred food plant species. ~~The major types of management practiced in the Marsh are natural food plant production, permanent ponds, grain production and grazed lands. However, water control management problems~~ challenges exist on many duck clubs managed wetland units, including: due to inadequate water distribution and levee systems water quality concerns such as salinity; effective water circulation, conveyance and drainage due to subsided land; restrictions resulting from endangered species protection; and ongoing exterior levee system integrity and maintenance issues.

3. Individual management plans were developed for each waterfowl hunting club in the 1980s, and were reviewed by the California Department of Fish and Game and certified by the San Francisco Bay Conservation and Development Commission. The management plans include site information on each club's infrastructure, a water management schedule, and a discussion of management activities needed to accomplish the schedule. Land managers can conduct ongoing management activities described in the plans, such as maintenance, repairs, and enhancements, without having to apply for separate permits from the Commission for each activity.

4. The Suisun Marsh contains approximately 230 miles of levees, many of which have been constructed over time largely using material dredged from adjacent waterways and were not constructed to meet flood protection standards. Consequences of levee failure may include: risks to life; damage to residences, businesses, utilities, and transportation infrastructure; loss of recreational opportunities; changes in water quality conditions; loss of managed wetlands values and functions, and changes in ecosystem conditions. Appropriate methods of levee repair and maintenance can both protect managed wetlands and neighboring properties as well as avoid adverse impacts to wildlife habitat both on and adjacent to levees.

35. The tidal marshes and managed wetlands can also provide excellent conditions for mosquito production. The Solano County Mosquito Abatement District regulates Marsh management programs to ensure adequate mosquito control.

46. There are several seasonal marshes around the periphery of the managed wetlands. They have high value for Marsh-related wildlife and also serve to buffer the Suisun Marsh to a certain extent from potential adverse ecological and aesthetic impacts. The seasonal marshes are presently used for grazing during the dry summer months.

~~5~~7. The lowland grasslands constitute an important transition area between the Marsh and the uplands which has high value to Marsh-related wildlife, particularly during the winter months when the wetlands are flooded. The lowland grasslands also play an important role in protecting the Suisun Marsh from potential adverse impacts resulting from adjacent land uses, such as water pollution, predation by domestic pets, and noise. Most of the lowland grasslands are presently used for grazing, which helps to maintain the habitat, providing that over-grazing does not occur.

~~6~~8. Several areas adjacent to the wetlands were originally marshland but have been segregated from tidal action due to land reclamation, diking and filling for grazing purposes, cultivation or flood protection. Examples of historic marshes occur at Thomasson near Cordelia, east of Suisun City and in the area east of Montezuma Slough between Birds Landing and Collinsville. These areas could be restored to wetlands status by returning them to tidal action.

~~7~~9. The tidal marshes, managed wetlands, adjacent lowland grasslands, and seasonal marshes are unsuitable for urban development due to several physical constraints. They are subject to periodic flooding and tidal action. They are also underlaid by saturated soft Bay muds which tend to settle under structures. Soft Bay mud may also experience severe ground shaking and failure during earthquakes.

~~8~~10. The upland grasslands and cultivated areas adjacent to the Suisun Marsh are critical to its protection. These undeveloped areas, presently used for grazing cattle and cultivated agricultural lands, function as a buffer for the Marsh. Development in the uplands adjacent to the Marsh would remove this protective function and result in potential adverse ecological and aesthetic impacts. Furthermore, these areas represent valuable habitats for many species of Marsh-related wildlife.

~~9~~11. Soil conditions and seismic activity in the uplands adjacent to the Suisun Marsh may also create hazards to urban development. In addition, earth disturbance, such as grading and filling to enable development in hazard areas, can lead to erosion which degrades valuable aquatic and wildlife habitat due to sedimentation. For example, the Benicia hills west of Highway 680 are steeply sloped, contain landslide deposits, include soils with high susceptibility to landslides and erosion, and are the location of the active Green Valley Fault. Major portions of the Potrero Hills are also steeply sloped with soils having high erosion potential. Other hills and mountains in the immediate Marsh watershed, particularly the hills around Rockville and the Vaca mountains, contain steep slopes with soils that are either easily eroded or susceptible to landslides.

~~10~~12. Sediments carried into the Marsh by soil erosion in the watershed could degrade aquatic and wildlife habitats. They would probably cause higher water turbidity in the sloughs reducing light penetration into the water which may be very detrimental to phytoplankton populations which form the base of the Marsh fishery food chain. In addition, increased sedimentation can reduce the range of migratory fish spawning habitat and increase fish egg mortality.

~~11~~13. Some areas of lowland grassland and seasonal marsh (notably east of Suisun City and east of Montezuma Slough) are historic marshlands and could be restored as tidal marshes or managed wetlands.

~~12~~14. Physical barriers to wildlife movement are created by such structures as highways, railroad tracks, exposed pipelines, and fences. However such barriers can act to protect the Marsh from certain adverse impacts such as predation by domestic pets.

## Policies

1. The managed wetlands, tidal marshes, lowland grasslands and seasonal marshes should be included in a primary management area. Within the primary management area existing uses should continue and both land and water areas should be protected and managed to enhance the quality and diversity of the habitats.
2. Agriculture within the primary management area should be limited to activities compatible with, or intended for, the maintenance or improvement of wildlife habitat. These include extensive agricultural uses such as grain production and grazing. Intensive agricultural activities, involving removal or persistent plowing of natural vegetation and maintenance of fallow land during part of the year, should not be permitted. Grain production should be confined to the Grizzly Island Wildlife Area and relatively small, well-suited areas of some of the large duck waterfowl hunting clubs. Grazing should be used to control vegetation on duck waterfowl hunting clubs where plant cover is sub-optimum for waterfowl use and should be discouraged on those clubs properties where there is already a good mixture of preferred waterfowl food plants. Grazing pressures should not exceed sound range management practices.
4. The water management schedules originally developed by the U.S.D.A. Soil Conservation Service and the California Department of Fish and Game and ratified by the Solano County Mosquito Abatement District should be modified as necessary in response to new biological, technical and management challenges. Modified water schedules should include provisions for adaptive management (systematic process for evaluating and improving strategies) to better address management challenges and should be used to the maximum extent possible in the managed wetlands. Individual club management plans should include the most current water management schedules and management approaches. These schedules provides the most desirable habitat for waterfowl as well as many other types of marsh wildlife, and will may also result in good mosquito control a significant reduction of vector production if properly managed.
5. In order to improve the efficiency of water control management in the Marsh, the Suisun Resource Conservation District should be empowered to develop and enforce regulations establishing sound water management practices on all privately-owned managed wetlands within the primary management area.
6. The Suisun Resource Conservation District should be empowered to improve and maintain exterior levee systems as well as other water control facilities on the privately-owned managed wetlands within the primary management area.
7. Burning in the primary management area is a valuable management tool. However, it should be kept to a minimum to prevent uncontrolled fires which may destroy beneficial plant species and damage peat leaves, and to minimize air pollution.
8. ~~Permanent ponding, which provides only marginal wildlife benefits should be practiced only in the following situations~~ provide shelter and food for resident and migratory wildlife species, including waterfowl broods, molting waterfowl, pelicans and shorebirds. :- (a) in deep ponds that are difficult to drain and manage as seasonally flooded marshes; (b) in limited shallow areas where habitat diversity is desired; (c) in areas of high salinity concentrations. Permanent ponds should maintain high circulation rates and, where necessary, should be drained every three to five years to reset the vegetative composition. To control mosquitos production, the water levels in permanent ponds should be kept constant, and the water should be circulated. Water salinity levels exceeding 17mS/cm may be toxic to ducklings and should be considered when managing permanent ponds.

13. Where feasible, historic marshes should be returned to wetland status, either as tidal marshes or managed wetlands. If, in the future, some of the managed wetlands are no longer needed for private waterfowl hunting, they should be restored as tidal marshes to tidal or subtidal habitat, or retained as diked wetland habitat and enhanced and managed for the benefit of multiple species. Sound practices consistent with Marsh preservation recommended by the Solano County Mosquito Abatement District to control mosquitoes should be followed during and after marsh restoration.

14. Ongoing management activities, such as maintenance, repairs and enhancements, that are undertaken on managed wetlands in accordance with certified individual management plans should continue to be allowed without the need for further authorization from the Commission. On those managed wetlands no longer needed for private waterfowl hunting, any project for the restoration, enhancement or conversion of managed wetlands to subtidal or wetland habitat should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and provisions for long-term maintenance and management needs. Design and evaluation of the project should include an analysis of:

- a. The anticipated habitat type that would result from managed wetland conversion or restoration, and the predicted effects on the diversity, abundance and distribution of fish, other aquatic organisms and wildlife;
- b. Potential fill activities, including the use of fill material such as sediments dredged from the Bay and rock, to assist restoration objectives;
- c. Flood management measures;
- d. Mosquito abatement measures;
- e. Measures to control non-native species;
- f. Opportunities for a diversity of public access and recreational activities, and; Water quality protection measures that may include monitoring for constituents of concern, such as methylmercury.

~~14~~<sup>15</sup>. Any development in the Suisun Marsh watershed or secondary management area proposed for areas that have poor soil conditions for construction or that are seismically active, should be controlled to prevent or minimize earth disturbance, erosion, water pollution, and hazards to public safety. Local runoff, erosion, and sediment control ordinances should be established in the immediate Suisun Marsh watershed to protect the Marsh from these potential adverse effects.

~~15~~<sup>16</sup>. Riparian vegetation in the immediate Suisun Marsh watershed should be preserved, due to its importance in the maintenance of water quality and its value as Marsh-related wildlife habitat. Stream modification should only be permitted if it is proved necessary to ensure the protection of life and existing structures from floods and only the minimum amount of modification necessary should be allowed.

~~16~~<sup>17</sup>. State and federal agencies and the Solano County Mosquito Abatement District should continue and expand their research efforts on marsh management with the objective of improving wildlife habitat, preserving rare and endangered species and controlling mosquitoes. These agencies and the Suisun Resource Conservation District should periodically conduct joint reviews of marsh management programs to ensure that they are compatible with one another and consistent with the policies of the Suisun Marsh Protection Plan.

We certify that this resolution was adopted at the Commission meeting held October 4, 2007 at San Francisco, California.

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 2007 at \_\_\_\_\_, California

\_\_\_\_\_  
SEAN R. RANDOLPH  
Chairman

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 2007 at \_\_\_\_\_, California

\_\_\_\_\_  
WILL TRAVIS  
Executive Director

FIGURE 1

Plan Map 1  
San Pablo Bay

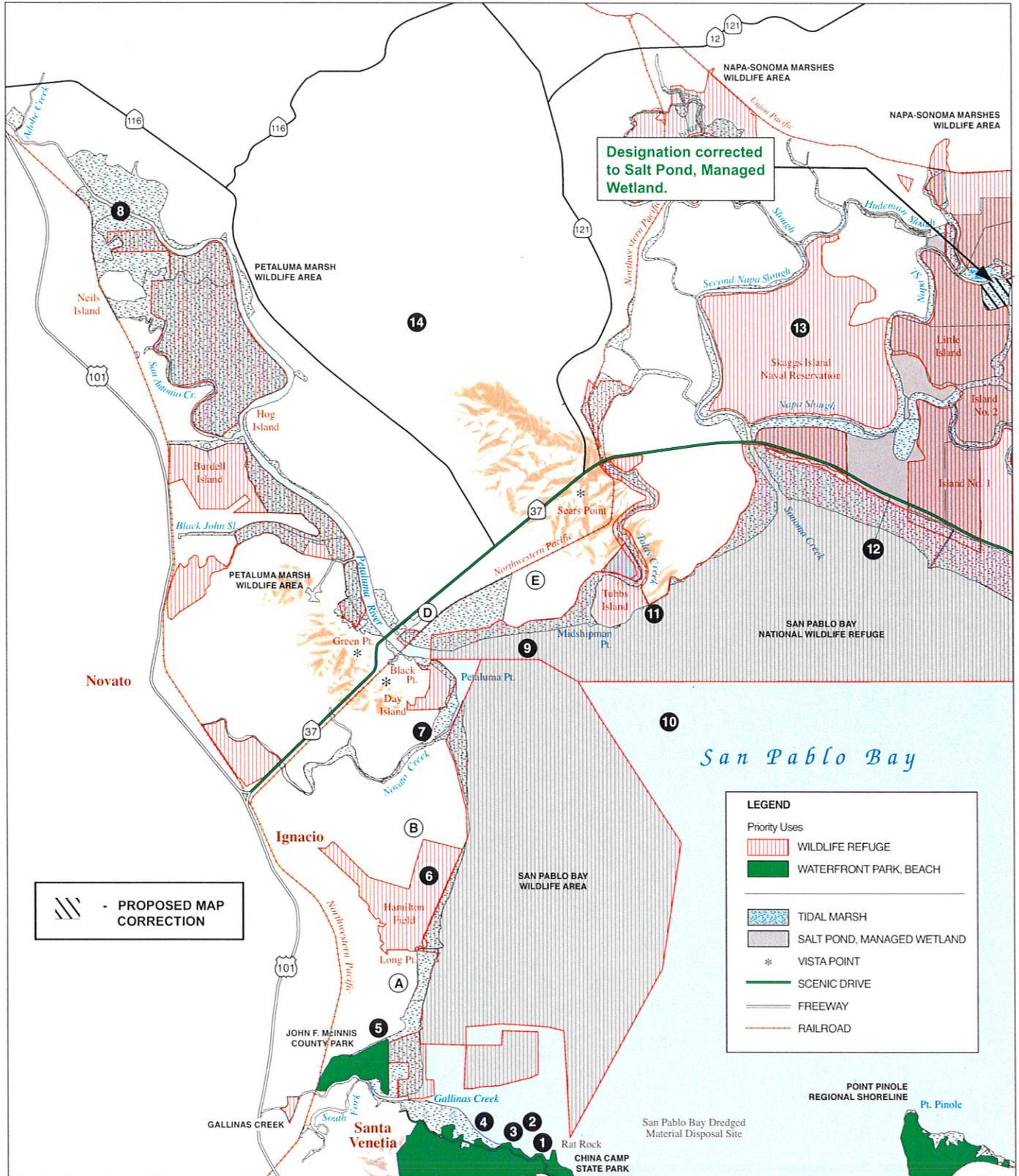
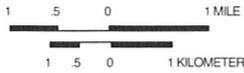


FIGURE 2

Plan Map 2

Carquinez Strait

