

CHAPTER 10

10.0 AMENDMENTS TO SAN FRANCISCO BAY PLAN, BCDC'S IMPLEMENTING REGULATIONS, AND THE WATER QUALITY CONTROL PLAN

10.1 INTRODUCTION

This chapter presents the amendments to the *San Francisco Bay Plan* (Bay Plan) for the San Francisco Bay Conservation and Development Commission (BCDC), changes to BCDC's implementing regulations, and the amendments to the *Water Quality Control Plan* (Basin Plan) for the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). These plans provide the policy framework for the planning and regulatory activities of these two agencies. The amendments support implementation of the LTMS goals, including maximizing the reuse of dredged material as a resource and reduction of in-Bay disposal of dredged material. These amendments support a voluntary allocation program for in-Bay disposal volumes, with mandatory allocation implemented only if voluntary efforts are not successful, based on a gradual reduction of in-Bay disposal

The Bay Plan amendments have undergone a formal public review process, approval by BCDC, and legal review by the California Office of Administrative Law (OAL). The Bay Plan policies were approved by the federal Office of Coastal Zone Management prior to becoming a part of BCDC's federally approved Coastal Management Program. The Basin Plan amendments have been reviewed by the public and approved by the SFBRWQCB, but have not yet been approved by the State Water Resources Control Board nor reviewed by OAL. Additionally, the scientific aspects of the policy for the Basin Plan required an external peer review.

The amendments are generally similar in intent, although the format and form is unique to each plan. The amendments to the Bay Plan are accompanied by changes to the BCDC's implementing regulations, which have been reviewed by OAL¹. Changes to the Basin Plan are contained in several chapters in the Basin Plan including Chapter 4, Implementation, and Chapter 5, Plans and Policies. The focus of these changes is different because the two agencies have different, but complementary, mandates. The amendments to the Bay Plan are focused on the process for regulating dredging and disposal activities within BCDC's jurisdiction. The amendments to the Basin Plan are focused on regulating the known and potential impacts to water quality and beneficial uses of those waters by disposal activities.

¹ The implementing regulations are part of Title 14 of the California Code of Regulations, Division 5, Chapter 7.

10.2 SAN FRANCISCO BAY PLAN AMENDMENTS

DREDGING FINDINGS

Finding (a): Much of the Bay bottom is shallow averaging 20 feet in depth and the bottom is covered with accumulated silt, sand, and clay. An estimated eight million cubic yards of sediment is carried into the Bay annually from tributaries, most of it settling to the Bay bottom. In addition, over 100 million cubic yards of sediment is recirculated in Bay waters each year, some of which lodges in harbors and navigable channels from which it must be dredged at considerable cost.

Finding (b): Dredging consists of excavating or extracting materials from the Bay. Dredging is often necessary to provide and maintain safe navigation channels and harbors for port facilities, water-related industries, and recreational boating, and for flood control channels. Dredging of unstable Bay muds may also be needed to accommodate Bay fill projects. Dredging projects remove existing bottom habitat and can disrupt surrounding areas through turbidity and other impacts.

Finding (c): Some waste disposal practices have deposited pollutants into the Bay, some of which have contaminated Bay sediments. These pollutants are not distributed evenly in the Bay and some areas are highly contaminated. Dredging and subsequent disposal of contaminated sediments in the Bay may adversely affect Bay organisms.

Finding (d): In the past, material dredged from the Bay was disposed throughout the Bay. In more recent times, most disposal has occurred at one of four Bay disposal sites designated by the U.S. Army Corps of Engineers, the SFBRWQCB, and the Commission where the material can disperse and cause as few environmental impacts as possible. These sites are: (1) off Alcatraz Island; (2) in San Pablo Bay; (3) in the Carquinez Strait; and (4) in the Suisun Bay Channel. At the site nearest the ocean, next to Alcatraz Island, less than half of the disposed material is carried out to sea by the tides.

Finding (e): Capacity at the disposal site near Alcatraz Island is limited because a large mound of dredged material has formed which, unless disposal is properly managed, may adversely affect water circulation and Bay aquatic life, pose a hazard to maritime navigation, and completely fill the site. The impact of dredged material disposal on Bay natural resources, which are also impacted by a variety of sources, remains controversial.

Finding (f): In 1994, the U.S. Environmental Protection Agency designated the "Deep Ocean Disposal Site," which is fifty miles outside of the Golden Gate. The EPA manages the site and has set a yearly capacity of 4.8 million cubic yards of dredged material.

Finding (g): Most dredged material can be reused rather than treated as a waste. The material can be used to bolster levees and dikes, to create and restore marshes and wetlands, to cover and seal sanitary landfills, and as fill in construction projects.

Finding (h): In the past, only small amounts of dredged material have been disposed at upland and diked baylands around the Bay. Fortunately, more reuse options are becoming available for dredged material disposal. These sites include Hamilton Wetlands Project in Marin County with a

capacity of over 10 million cubic yards and the Montezuma Wetlands Project in Solano County with a capacity of 17 million cubic yards. Inclusion of the adjacent Bel Marin Keys parcel would likely more than double the capacity of the Hamilton project. Dredged material could be used at these sites to restore thousands of acres of wetlands. However, as identified in the Commission's Diked Historic Baylands Study and the San Francisco Bay Area Wetlands Ecosystem Goals Project diked baylands often contain seasonal wetlands, provide the primary opportunity for enhancement of seasonal wetlands or restoration of tidal wetlands, and can provide other important habitat functions that need to be taken into account as part of dredged material reuse projects to avoid losing critical natural habitat.

Finding (i): Shoreline facilities are needed to dry and prepare dredged material for some upland uses. These sites are particularly important for material with levels of contaminants that cannot be disposed in the Bay, but can be used as capping, lining, and cover in solid waste landfills.

Finding (j): A variety of habitat types within the Bay sustain a multitude of plant, fish, and wildlife species. Many factors determine the habitat functions and values of a given area of the Bay, including water depth and clarity, type of substrate (rock, coarse sand, or fine-grained sand), type of vegetation, and salinity.

Finding (k): Each of the fish and wildlife species found in the Bay has particular habitat needs to forage, rest, take refuge, and reproduce. Although the San Francisco Bay Area Wetlands Ecosystem Goals Project comprehensively studied the baylands and made recommendations for the extent and location of wetlands and related habitats, no such study has been performed of the need for or appropriate mix of habitat types in the waters of the Bay.

Finding (l): Eelgrass beds are considered to be a valuable shallow water habitat, providing feeding, escape, or breeding habitat for many species of invertebrates, fishes, and some waterfowl. Eelgrass grows in relatively few locations in the Bay and requires special conditions to flourish. Cultivating eelgrass is difficult and efforts to grow eelgrass in San Francisco Bay have not succeeded.

Finding (m): Under its existing law and policies the Commission has approved minor amounts of Bay fill to create, restore or enhance habitat in the Bay. The selective deposition of dredged materials in the Bay to extensively modify Bay habitats might enhance the habitat value for some Bay species. However, such projects could also result in significant adverse impacts to Bay water circulation and quality and to Bay habitats and organisms that depend on the Bay. Insufficient information exists about the potential benefits and adverse impacts on which to base Baywide policies governing disposal in the Bay of dredged material that would result in large-scale modification of Bay habitats, either through an individual project or cumulatively with other projects.

Finding (n): Baywide studies would help determine the need for, appropriate locations for, and potential effects of in-Bay disposal for eelgrass or other shallow water habitat enhancement or restoration. The Commission's update of the Bay Plan Marshes and Mudflats and Fish and Wildlife policies will, to the extent scientific information exists, characterize the location, nature and types of Bay subtidal habitat, will characterize their value and functions, and will characterize

the threats to the habitats. A pilot project could help to determine the feasibility of eelgrass or other shallow water habitat enhancement or restoration in the Bay.

Finding (o): The San Francisco Bay Regional Water Quality Control Board and the U.S. Environmental Protection Agency are responsible for determining appropriate dredged material pollutant testing and discharge standards and for assuring that dredging and disposal of dredged materials are consistent with the maintenance of Bay water quality. The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers have joint federal responsibility for regulating ocean, Bay, and wetland disposal.

Finding (p): The California Department of Fish and Game, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service are responsible for management and protection of Bay organisms, particularly threatened and endangered species.

Finding (q): The Long-Term Management Strategy (LTMS) program, initiated by the U.S. Army Corps of Engineers in 1991 in partnership with the Commission, the San Francisco Bay Regional Water Quality Control Board, the State Water Resources Control Board, and the U.S. Environmental Protection Agency, with the involvement of dredgers, fishermen, environmentalists and other interested parties, has comprehensively studied Bay dredging issues and prepared a long-range Bay dredging and dredged material disposal management plan and implementation program. The LTMS provides the basis for uniform federal and state dredged material disposal policies and regulations.

Finding (r): The LTMS has set goals to reduce in-Bay disposal over the next decade to one million cubic yards or less per year and to maximize use of dredged material as a resource.

Finding (s): Using dredged material as a resource is usually more expensive than existing disposal practices. Large reuse sites can attain economies of scale and increase feasibility of dredged material reuse. Concerted efforts are needed to plan, fund, and implement reuse of dredged material. The ongoing efforts by government agencies, dredgers, environmentalists, and others have made great progress and should achieve the LTMS goals. However, if these efforts are not successful, in-Bay disposal may have to be restricted through regulatory controls.

Finding (t): The U.S. Army Corps of Engineers is the largest Bay dredger and has the greatest ability to implement alternative disposal options. Annually, small dredgers account for less than one quarter of a million cubic yards of material and have the least ability to implement alternatives to in-Bay disposal.

Finding (u): As part of the LTMS, a Dredged Material Management Office (DMMO) has been established to consolidate the processing of dredging permit applications by the staff of the LTMS agencies and the State Lands Commission. The DMMO provides a single application form and unified processing of applications for dredging permits.

Finding (v): Underground fresh water supplies are an important supplement to surface water now brought into the Bay Area by aqueduct from mountain reservoirs. Deep dredging of Bay mud, or excavation for tunnels or bridge piers, could strip the "cover" from the top of a fresh water reservoir under the Bay, allowing the salt water to contaminate the fresh water, or allowing the

fresh water (if artesian) to escape in large quantities and thus cause land to sink. However, the precise location of groundwater reservoirs under the Bay is not yet well known.

Finding (w): More information on Bay sediment dynamics is needed to: (1) better determine the impacts of dredging and dredged material disposal projects and (2) identify long-term trends in Bay sedimentation that relate to dredging needs and potential impacts to Bay resources, such as wetland and mudflats.

DREDGING POLICIES

Policy 1: Dredging and dredged material disposal should be conducted in an environmentally and economically sound manner. Dredgers should reduce disposal in the Bay over time to achieve the LTMS goal of limiting in-Bay disposal volumes to a maximum of one million cubic yards per year. The LTMS agencies should implement a system of disposal allotments to individual dredgers to achieve this goal only if voluntary efforts are not effective in reaching the LTMS goal. In making its decision regarding disposal allocations, the Commission should confer with the LTMS agencies and consider the need for the dredging and the dredging projects, environmental impacts, regional economic impacts, efforts by the dredging community to implement and fund alternatives to in-Bay disposal, and other relevant factors. Small dredgers should be exempted from allotments, but all dredgers should comply with policies 2 through 12.

Policy 2: Dredging should be authorized when the Commission can find: (a) the applicant has demonstrated that the dredging is needed to serve a water-oriented use or other important public purpose; (b) the materials to be dredged meet the water quality requirements of the San Francisco Bay Regional Water Quality Control Board; (c) important fisheries and Bay natural resources would be protected through seasonal restrictions established by the California Department of Fish and Game, the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service, or through other appropriate measures; (d) the siting and design of the project will result in the minimum dredging volume necessary for the project; and (e) the materials would be disposed of in accordance with Policy 3.

Policy 3: Dredged materials should, if feasible, be reused or disposed outside the Commission's Bay and certain waterway jurisdictions. Except when reused in an approved fill project, dredged material should not be disposed in the Commission's Bay and certain waterway jurisdiction unless disposal outside these areas is infeasible and the Commission finds: (a) the volume to be disposed is consistent with applicable dredger disposal allocations and disposal site limits adopted by the Commission by regulation; (b) disposal would be at a site designated by the Commission; (c) the quality of the material disposed of is consistent with the advice of the San Francisco Bay Regional Water Quality Control Board and the inter-agency DMMO; and (d) the period of disposal is consistent with the advice of the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

Policy 4: If an applicant proposes to dispose dredged material in tidal areas of the Bay and certain waterways that exceeds either disposal site limits or any disposal allocation that the Commission has adopted by regulation, the applicant must demonstrate that the potential for adverse environmental impact is insignificant and that non-tidal and ocean disposal is infeasible because there are no alternative sites available or likely to be available in a reasonable period, or

because the cost of disposal at alternate sites is prohibitive. In making its decision whether to authorize such in-Bay disposal, the Commission should confer with the LTMS agencies and consider the factors listed in Policy 1.

Policy 5: To ensure adequate capacity for necessary Bay dredging projects and to protect Bay natural resources, acceptable non-tidal disposal sites should be secured and the Deep Ocean Disposal Site should be maintained. Further, dredging projects should maximize use of dredged material as a resource consistent with protecting and enhancing Bay natural resources, such as creating, enhancing, or restoring tidal and managed wetlands, creating and maintaining levees and dikes, providing cover and sealing material for sanitary landfills, and filling at approved construction sites.

Policy 6: Dredged materials disposed in the Bay and certain waterways should be carefully managed to ensure that the specific location, volumes, physical nature of the material, and timing of disposal do not create navigational hazards, adversely affect Bay sedimentation, currents or natural resources, or foreclose the use of the site for projects critical to the economy of the Bay Area.

Policy 7: All proposed channels, berths, turning basins, and other dredging projects should be carefully designed so as not to undermine the stability of any adjacent dikes, fills or fish and wildlife habitats.

Policy 8: The Commission should encourage increased efforts by soil conservation districts and public works agencies in the 50,000-square-mile Bay tributary area to continuously reduce soil erosion as much as possible.

Policy 9: To protect underground fresh water reservoirs (aquifers): (a) all proposals for dredging or construction work that could penetrate the mud "cover" should be reviewed by the San Francisco Bay Regional Water Quality Control Board and the State Department of Water Resources; and (b) dredging or construction work should not be permitted that might reasonably be expected to damage an underground water reservoir. Applicants for permission to dredge should provide additional data on groundwater conditions in the area of construction to the extent necessary and reasonable in relation to the proposed project.

Policy 10: Interested agencies and parties are encouraged to explore and find funding solutions for the additional costs incurred by transporting dredged materials to nontidal and ocean disposal sites, either by general funds contributed by ports and other relevant parties, dredging applicants or otherwise.

Policy 11:

- (a) A project that uses dredged material to create, restore, or enhance Bay natural resources should be approved only if:
 - (1) The Commission, based on detailed site-specific studies, appropriate to the size and potential impacts of the project, that include, but are not limited to, site morphology and physical conditions, biological considerations, the potential for

fostering invasive species, dredged material stability, and engineering aspects of the project, determines all of the following:

- (i) the project would provide, in relationship to the project size, substantial net improvement in habitat for Bay species;
 - (ii) no feasible alternatives to the fill exist to achieve the project purpose with fewer adverse impacts to Bay resources;
 - (iii) the amount of dredged material to be used would be the minimum amount necessary to achieve the purpose of the project;
 - (iv) beneficial uses and water quality of the Bay would be protected; and
 - (v) there is a high probability that the project would be successful and not result in unmitigated environmental harm;
- (2) The project includes an adequate monitoring and management plan and has been carefully planned, and the Commission has established measurable performance objectives and controls that would help ensure the success and permanence of the project, and an agency or organization with fish and wildlife management expertise has expressed to the Commission its intention to manage and operate the site for habitat enhancement or restoration purposes for the life of the project;
- (3) The project is either a small pilot project or the success of similar projects has been demonstrated in similar settings;
- (4) The project would use only clean material suitable for aquatic disposal and the Commission has solicited the advice of the San Francisco Bay Regional Water Quality Control Board, the Dredged Material Management Office and other appropriate agencies on the suitability of the dredged material;
- (5) The project would not result in a net loss of bay surface area or volume. Any offsetting fill removal would be at or near as feasible to the habitat fill site;
- (6) Dredged material would not be placed in areas with particularly high or rare existing natural resource values, such as eelgrass beds and tidal marsh and mudflats, unless the material would be needed to protect or enhance the habitat. The habitat project would not, by itself or cumulatively with other projects, significantly decrease the overall amount of any particular habitat within the Suisun, North, South, or Central Bays, excluding areas that have been recently dredged;

- (7) After a reasonable period of monitoring, either:
 - (i) the project has not met its goals and measurable objectives, and attempts at remediation have proven unsuccessful, or
 - (ii) the dredged material is found to have substantial adverse impacts on the natural resources of the Bay,
 - (iii) then the dredged material would be removed, unless it is demonstrated by competent environmental studies that removing the material would have a greater adverse effect on the Bay than allowing it to remain, and the site would be returned to the conditions existing immediately preceding placement of the dredged material if; and
- (8) The Commission has consulted with the California Department of Fish and Game, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service to ensure that at least one of these agencies supports the proposed project.
- (b) To ensure protection of Bay habitats, the Commission should not authorize dredged material disposal projects in the Bay and certain waterways for habitat creation, enhancement or restoration, with the exception of a single pilot project at a site designated by the Commission and used in a manner consistent with the regulation designating the site, until:
 - (1) The Bay Plan Marshes and Mudflats and Fish and Wildlife policies have been updated and any additional objective and scientific studies have been carried out to evaluate the advisability of disposal of dredged material in the Bay and certain waterways for habitat creation, enhancement and restoration. Those additional studies should address the following:
 - (i) The Baywide need for in-Bay habitat creation, enhancement and restoration, in the context of maintaining appropriate amounts of all habitat types within the Bay, especially for support and recovery of endangered species; and
 - (ii) The need to use dredged materials to improve Bay habitat, the appropriate characteristics of locations in the Bay for such projects, and the potential short-term and cumulative impacts of such projects; and
 - (2) The Commission has adopted additional Baywide policies governing disposal of dredged material in the Bay and certain waterways for the creation, enhancement and restoration of Bay habitat, which narratively establish the necessary biological, hydrological, physical and locational characteristics of candidate sites; and

- (3) The pilot project authorized under this section, if undertaken, is completed successfully.

Policy 12: The Commission should continue to participate in the LTMS, the Dredged Material Management Office, and other initiatives conducting research on Bay sediment movement, the effects of dredging and disposal on Bay natural resources, alternatives to Bay aquatic disposal, and funding additional costs of transporting dredged materials to non-tidal and ocean disposal sites.

WATER RELATED FINDINGS

Finding (a): Certain industries, including some dredged material rehandling facilities, require a waterfront location on navigable, deep water to receive raw materials and distribute finished products by ship, thereby gaining a significant cost advantage. These industries are defined as water-related industries.

RECREATION POLICIES

Policies 8, 9, 10: Revise the former Bay Plan Recreation policy No. 9 and 10 to correct proposed policy numbers changed as a result of the deletion of former Bay Plan Recreation policy No. 8.

OTHER USES OF THE BAY AND SHORELINE POLICIES

Policy 3(a): Wherever waterfront areas are used for housing: (a) whenever feasible, high densities should be encouraged to provide the advantages of waterfront housing to larger numbers of people; and

Bay Plan Maps

San Francisco Bay Conservation and Development Commission hereby adopts Bay Plan Amendment 3-00 which amends the Bay Plan Maps 1 through 7.

Priority Use Areas at Mare Island

The Commission hereby adopts Bay Plan Amendment 3-00 which amends Resolution 16 (which sets the boundaries of priority use areas along the shoreline) to reflect the deletion of the three northernmost ponds at Mare Island as follows:

18. Mare Island (Industry)
 - (A) Northwest Boundary: Northern edge of dredged material disposal pond No. 2N.
 - (B) Southeast Boundary: Southern edge of pond No. 7.

10.3 BCDC IMPLEMENTING REGULATIONS

On May 17, 2001, BCDC adopted the following regulations regarding disposal of dredged material. The regulations have been reviewed by OAL. The new regulations are in Title 14 of the California Code of Regulations, Division 5, Chapter 7, Sections 10720, 10721, and 10726 through 10729.

Article 4. Dredging

10720. Commission Procedure For Determining If It Should Decline To Implement Individual In-Bay Dredged Material Allocations.

- (a) The Commission shall commence a formal rulemaking process pursuant to the Administrative Procedures Act to determine whether or not to implement an individual in-Bay dredged material allocation program either (1) within 45 days of the Executive Director's determination at the triennial reviews starting in 2004 that the average annual volume of dredged material disposed of over the preceding three-year period at the Alcatraz Island, San Pablo Bay, Carquinez Strait, and Suisun Bay Channel in-Bay disposal sites designated by the Commission exceeds the target volume specified in Section 10721 or (2) within 45 days of receipt of a written request to make such a determination from the Long Term Management Strategy Management Committee.
- (b) The Commission shall also hold a public hearing prior to voting on whether or not to implement an individual in-Bay dredged material allocation and shall otherwise follow the formal rulemaking process pursuant to the Administrative Procedures Act when it determines whether or not to implement such a program.
- (c) If an analysis of the factors affecting the need for allocations, including (1) the status of alternatives to in-Bay disposal and cooperative efforts to implement them, (2) exigencies that hamper the use of alternative sites, and (3) other relevant factors and any needed environmental documentation has not been submitted by the LTMS Management Committee as part of the written request or if in-Bay disposal volumes exceed the target volumes, then such an analysis will be prepared by the Commission staff prior to the public hearing on the matter.
- (d) The Commission shall vote on whether or not to implement such a program within 60 days of the close of the public hearing.
- (e) The Commission shall implement a program of individual in-Bay dredged material disposal allocations unless a majority of those Commissioners present and voting vote not to implement the program.
- (f) The program will commence no later than six months after the Commission vote if the Commission vote results in a determination to implement an allocation program, provided that the Commission must also complete the formal rulemaking process and any allocation adopted by the Commission must be approved as a

regulation pursuant to the Administrative Procedures Act before the allocation can go into effect.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding s and Policy 1.

10721. Target Volumes.

- (a) The target volume for the calendar years of 2001-2003 is an average of 3.05 million cubic yards per year.
- (b) The target volume for the calendar years of 2004-2006 is an average of 2.66 million cubic yards per year.
- (c) The target volume for the calendar years of 2007-2009 is an average of ~~2.27~~ 2.28 million cubic yards per year.
- (d) The target volume for the calendar years of 2010-2012 is an average of ~~1.88~~ 1.89 million cubic yards per year.
- (e) The target volume for the calendar years thereafter is an average of 1.50 million cubic yards per calendar year for each three-year period thereafter.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding s and Policy 1.

10726. Small Dredger Exception.

Small dredgers are exempt from the individual in-Bay dredged material disposal allocation process, but they must still fully comply with all other McAteer-Petris and San Francisco Bay Plan policies regarding dredging and the disposal of dredged material.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding t and Policy 1.

10727. Small Dredgers.

Small dredgers are defined to be project sponsors of dredging projects with a depth no deeper than -12 feet Mean Lower Low Water (not including over-depth dredging) and generating an average yearly volume as defined in Section 10723 of less than 50,000 cubic yards of material.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding t and Policy 1.

10728. Termination of Individual Dredged Material Disposal Allocations .

- (a) Within 45 days of either (1) a written determination by the Executive Director that the average annual volume of dredged material disposed of over the preceding triennial review period at all in-Bay disposal sites designated by the Commission no longer exceeds the target volumes specified in Section 10721 or (2) the Long Term Management Strategy Management Committee recommends ending allocations, the Commission shall commence a formal rulemaking process pursuant to the Administrative Procedures Act to determine whether or not to end the imposition of individual dredged material disposal allocation. As part of that process, the Commission shall hold a public hearing.
- (b) Within 60 days of the close of the public hearing, the Commission shall vote on whether or not to end the imposition of individual dredged material disposal allocations.
- (c) The Commission shall end the imposition of individual dredged material disposal allocations unless the Commission determines by a majority of those Commission members present and voting not to end the imposition of individual dredged material disposal allocations.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding s and Policy 1.

10729. Re-implementation of Individual Allocations For the In-Bay Disposal of Dredged Material.

After terminating the imposition of individual dredged material disposal allocations, the Commission can reimpose individual dredged material disposal allocations only if the conditions specified in Sections 10720 and 10721 exist and the Commission determines to impose the allocations pursuant to Section 10720, including the commencement and completion of a formal rulemaking process pursuant to the Administrative Procedures Act.

NOTE: Authority cited: Section 66632(f), Government Code and Section 29201(e), Public Resources Code. Reference: Sections 66632(f) and 66652, Government Code; Section 29008, Public Resources Code; and *San Francisco Bay Plan*, Findings and Policies on Dredging, especially Finding s and Policy 1.

10.4 BASIN PLAN AMENDMENTS

The text of the Basin Plan amendments is presented verbatim below, including all tables as they appear in the source document.

CHAPTER 4 DREDGING AND DISPOSAL OF DREDGED SEDIMENT

BACKGROUND

Dredging and dredged sediment disposal in the San Francisco Bay Area is an ongoing activity because of continual shoaling that impedes navigation and other water-dependent activities. Large volumes of sediment are transported in the waters of the Sacramento and San Joaquin rivers, which drain the Central Valley. The average annual sediment load to the San Francisco Bay system from these two rivers is estimated to be eight million cubic yards. Of this amount, some four million cubic yards are transported out of the Bay through the Golden Gate. The remaining four million cubic yards are circulated and/or deposited in the Bay. In addition, some two-and-one-half million cubic yards are deposited into the Bay from local watersheds. The largest volume of sediment that affects the Bay is the approximately 100 million cubic yards that are re-suspended in the water column by the actions of tide, wind and currents.

Dredging is generally necessary to maintain the beneficial use of navigation. The trend towards increasingly larger vessels also necessitates increased channel depths in the shipping channels.

Disposal of the majority of dredged material from San Francisco Bay has historically been at designated disposal sites in San Francisco Bay. This practice dates back to at least the beginning of the 20th century. Currently there are three such multi-user disposal sites designated by the U. S. Army Corps of Engineers (USACE, or Corps): the Alcatraz (SF-11), San Pablo Bay (SF-10), and Carquinez (SF-9) Disposal Sites. A fourth site (Suisun Bay, SF-16) is maintained for Corps use exclusively for material from dredging of the Suisun Bay and New York Slough federal channels.

Annual maintenance dredging of shipping channels, harbors, and marinas in the San Francisco Bay results in disposal of between two and eight million cubic yards of dredged material at in-bay disposal sites. All designated aquatic dredged material disposal sites are operated as “dispersive” sites, that is, material disposed at the sites is intended to disperse and be carried by currents out to sea. Additionally, one of the management practices is to only allow material to be disposed of at disposal sites downstream of the dredging sites, with the objective of moving sediments away from dredging sites and out of the Bay. While the overall hydrodynamics of the Bay are not completely understood it is clear that the fate of material placed at in-bay disposal sites is dependent upon material type, disposal volume, and disposal frequency.

Since 1994, when the U. S. EPA designated the Deep Ocean Disposal Site approximately 50 miles offshore of San Francisco, approximately 6 million cubic yards of dredged material have been disposed of there.

Dredged material has also been used as fill for wetland restoration projects, for levee maintenance, and as daily cover for landfills. Volumes for these, and other beneficial reuse projects, have totaled approximately 2 million cubic yards over the past 9 years.

REGULATORY FRAMEWORK

The Corps of Engineers issues federal permits for dredging projects pursuant to Section 404 of the Clean Water Act. The U. S. EPA provides oversight of the Corps' regulatory program.

As a part of the Section 404 permitting process, the dredging permit applicant must seek water quality certification from the State of California, in accordance with Section 401 of the Clean Water Act. The Regional Board reviews the proposed project, then may grant or deny certification. Additionally, the Regional Board may choose to act under the authority of the state Porter Cologne Water Quality Control Act, by issuing waste discharge requirements for the project in conjunction with the water quality certification.

Water quality certifications and waste discharge requirements often contain conditions to protect water resources that the permittee must meet during the term of the permit.

The San Francisco Bay Conservation and Development Commission (BCDC) also regulates dredging and disposal under the provisions of the McAteer-Petris Act.

Projects involving the use of sovereign lands of the state may be subject to the lease or permitting requirements of the State Lands Commission.

LONG TERM MANAGEMENT STRATEGY

In the early 1980s, the problems associated with heavy reliance on in-Bay disposal sites became apparent, including navigational problems associated with the "mound" of dredged material at the Alcatraz disposal site, as well as potential environmental problems associated with disposal and dredging activities in general. These conditions led to the creation of the Long Term management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS).

The LTMS program began in 1990, when the Regional Board joined with USACE, U. S. EPA, BCDC, the State Board, and representatives from the dredging and environmental communities to ensure adequate dredged material disposal and reuse capacity and protection of aquatic resources over a 50-year planning period. The adopted goals for the program (Table 413) reflect this purpose. The primary focus of the LTMS is on the various dredged material disposal options and their related impacts. The LTMS was also initiated to maximize beneficial reuse of dredged material, improve coordination of the agencies governing these activities, and ensure a more predictable regulatory framework.

The LTMS examined several possible long-term dredge material management strategies. The LTMS Policy Environmental Impact Statement/Programmatic Environmental Impact Report (LTMS EIS/EIR) for the program selected as the preferred alternative a reduction in the reliance on in-Bay disposal. The ultimate goal of this alternative is a "low" volume of disposal at in-Bay sites (20% of historical average dredging volumes), and an increased reliance on ocean disposal

and beneficial reuse of dredged material (with the remaining material split evenly between these two options). The LTMS EIS/EIR was certified by the USACE and U. S. EPA in July 1999, and by the State Board in November 1999, thus beginning the implementation of the preferred alternative.

During the preparation of the LTMS EIS/EIR, the LTMS agencies consulted with USFWS, NMFS, and CDFG regarding potential impacts of dredging and dredged material disposal to sensitive biological resources. These resource agencies, in conjunction with the LTMS agencies, developed a list of restrictions for such projects to protect critical habitat for special status and important commercial and recreational species.

The LTMS EIS/EIR identified the overall future disposal management strategy (i.e. reduced in-Bay disposal volumes at the designated dispersive sites). The LTMS Management Plan contains specific guidance that will be used to implement the preferred alternative by each of the LTMS agencies. The Management Plan will be reviewed and updated every three years to reflect changing statutory, regulatory, technical, or environmental conditions. The Basin Plan dredging policies will be updated, as necessary, in conjunction with Management Plan updates.

ENVIRONMENTAL IMPACTS OF DREDGING AND DISPOSAL IN THE AQUATIC ENVIRONMENT

Most dredging and dredge material disposal operations cause localized and ephemeral impacts with related biological consequences (Table 4-12).

In the 1980s, it was determined that the Alcatraz disposal site was accumulating significant amounts of material, with the depth of the site going from the original 110 feet to 30 feet. The mounding at the disposal site ultimately became a threat to navigation. The Corps eventually dredged the Alcatraz site to increase the depth, redistributing the material within the disposal area several times between 1984 and 1986.

In September of 1988, Regional Board staff circulated and presented an issue paper entitled "A Review of Issues and Policies Related to Dredge Spoil Disposal in San Francisco Bay." The issue paper discussed the major environmental concerns posed by dredged sediment disposal in San Francisco Bay, namely: 1) mounding at the Alcatraz disposal site, which posed a navigational hazard and has the potential to alter circulation patterns in the Bay; 2) the disposal of increasingly large amounts of material has the potential to alter benthic and shoreline habitats and to increase water column turbidity; and 3) the resuspension of dredged sediments may increase contaminant bioavailability. The issue paper presented a range of alternative strategies for the Regional Board to consider. Public and agency testimony was received by the Regional Board during hearings on September 15, 1988, and October 19, 1988. Agencies testifying included the Corps, U.S. EPA, and the California Department of Fish and Game. In the issue paper, Regional Board staff recommended that the Regional Board consider adopting quantity and quality limits for the disposal of dredged sediment at unconfined aquatic disposal sites within San Francisco Bay.

Additionally, the Regional Board and the Corps took steps to prevent further "mounding" at the region's single largest disposal site, the Alcatraz site. In 1989, the Regional Board adopted volume targets, which served to prevent overfilling of the region's three aquatic disposal sites.

BCDC also revised its policies to restrict in-bay disposal. These volumes were reduced further for the Alcatraz disposal site (SF-11) in 1993 when the USACE issued Public Notice 93-3.

WETLAND RESTORATION USING DREDGED MATERIAL

While the Regional Board remains concerned about the impacts of both polluted and clean sediments on the San Francisco Estuary, much of the sediment disposed of in the region is not polluted and could be used in beneficial ways (termed "reuse"). One of these uses involves the restoration of tidal marshes in areas that were once part of the Bay. These areas, known as diked historic baylands, were once open to the tides and were thriving salt marsh and mudflat ecosystems (discussed further under the "Wetlands Protection and Management" section). Decades of land "reclamation," first initiated in the 1800s, resulted in diked agricultural lands, the land surface of which has subsided for a variety of reasons.

In order to foster growth of marsh vegetation and proper slough channel formation, the new marsh must be built near mean high tide. In many cases it will be beneficial to place a layer of sediment across the site to raise the elevation of the land surface to a point near the mean tide line. LTMS studies have examined the environmental, engineering, and economic considerations that are involved in restoring certain sites. The studies commissioned by LTMS have shown that, given current laws and policies, placement of dredged sediment at wetland restoration projects may cost more than traditional in-bay disposal, but less than ocean disposal.

DELTA ISLAND LEVEE REPAIR AND MAINTENANCE

Winter Island, located in the western Delta, near Pittsburg, is operated as a duck club by the local Reclamation District. In 1998, the Reclamation District, in need of material to repair levees, partnered with the Corps of Engineers, and accepted over 200,000 cubic yards of sandy dredged material from the Corps' dredging of the federal Suisun Bay Channel. In 1999, an additional 225,000 cubic yards from the Suisun Bay Channel project was placed on the site, along with approximately 30,000 cubic yards of finer-grained material from the Port of San Francisco. The Reclamation District estimates that they will have a long-term need for fine-grained dredged material, of about 100,000 cubic yards per year.

Other Delta islands are also in need of material for levee repair. For example, the Corps is currently exploring the possibility of taking material from the Suisun Bay Channel to Sherman Island. Cooperation with the Department of Water Resources, the Central Valley Regional Water Quality Control Board, and the CalFed program may provide additional opportunities for reuse of dredge material in the future.

REGIONAL BOARD POLICIES ON DREDGING AND DREDGED SEDIMENT DISPOSAL

The overall policy for dredging and disposal of dredged sediment includes a reduction of in-bay disposal volumes and an increased emphasis on beneficial reuse of dredged material. The most likely beneficial reuse of dredged material is wetland restoration projects or for levee maintenance and repair. Additional capacity for dredged material is available at the deep ocean

disposal site designated by U. S. EPA in 1994. The goal of the policies below is to reduce in-bay disposal volumes to approximately 20% of recent historical dredging volumes, to about 1 million cubic yards per year.

Dredging and dredged material disposal should be conducted in an environmentally and economically sound manner. Dredgers should reduce disposal in the Bay over time to achieve the LTMS goal of one million cubic yards, or less, per year. The LTMS agencies will implement a system of disposal allocations for the designated disposal sites to individual dredgers to achieve the LTMS goal only if voluntary efforts are not effective in reaching this goal.

1. NEED FOR REGIONAL AND LOCAL MONITORING

The Regional Monitoring Program (RMP) provides information on the regional-scale effects of contaminants in the Bay. The Regional Board is evaluating whether additional, more localized monitoring to isolate the effects of the disposal of dredged material in the Bay is needed. In the interim, existing sediment evaluation procedures (see Policy 5, below) and monitoring and management efforts at the in-Bay disposal sites are protective of the beneficial uses of the Bay.

2. MATERIAL DISPOSAL RESTRICTION

Materials disposed of at approved aquatic dredged material disposal sites shall be restricted to dredged sediment. Disposal of rock, timber, general refuse, and other materials shall be prohibited. Additional specific requirements regarding material type and dredging and disposal mechanisms may be implemented as required, based on ongoing site monitoring and adaptive management.

3. VOLUME TARGETS

Individual Disposal Sites

Volume targets for each disposal site were developed based on understandings of sediment dynamics and historical information regarding disposal volumes (Table 4-15).

In addition, the Regional Board established a volume target of 0.2 million cubic yards per year for the Suisun Bay Channel disposal site and restricts its use to Corps maintenance dredging. The San Francisco Bar site is used for disposal of material from the bar channel. The use of the San Francisco Bar disposal site is regulated under the Marine Protection, Research, and Sanctuaries Act (MPRSA).

Overall In-Bay Disposal

Total in-Bay dispersive disposal volumes shall decrease according to the schedule identified in Table 4-16, until the long-term LTMS target of 1.25 million cubic yards per year is attained.

In addition to the total volume specified in Table 4-16:

- a. Material from small dredging projects (see below) will, in general, be exempt from restrictions on in-Bay disposal if it is demonstrated through an alternatives analysis that there are no practical alternatives to in-Bay disposal, and
- b. A contingency volume of 250,000 cubic yards per year will be established for "emergencies"² or for years when sedimentation or other factors result in unanticipated material volumes.

4. VOLUME TARGET IMPLEMENTATION

Individual Disposal Sites

The Regional Board will consider denial of water quality certification for:

- a. Any project proposing to place material at a disposal site for which the monthly or annual volume target, as defined in Table 4-15, has been exceeded; and
- b. Any project that does not provide an adequate alternatives analysis showing that there are no practicable alternatives to in-Bay disposal.

Small project proponents may apply for an exemption to monthly or annual volume targets. A small project is defined as a facility or project whose design depth does not exceed -12 feet Mean Lower Low Water (MLLW) with an annual average disposal volume of less than 50,000 cubic yards. The project proponent must demonstrate:

- a. That the additional burden of using an alternative to in-Bay disposal placed upon the applicant would be inordinate relative to the beneficial uses protected; and
- b. The alternatives analysis indicates that there are no practical alternatives to in-Bay disposal.

Overall In-Bay Disposal

A voluntary program will be instituted to attain the overall in-Bay disposal targets adopted by the LTMS EIS/EIR, with the majority of maintenance material from Corps of Engineers projects being used in wetland restoration projects or taken to the ocean disposal site. As part of the voluntary program, other dredgers will make efforts to use alternatives to in-Bay disposal.

Progress towards the goal will be evaluated both on an annual basis and every three years, based on the three-year average volume of in-Bay disposal. Should this voluntary program fail to provide progress toward the goal in the reviews outlined above, a mandatory allocation program

² A dredging emergency is a situation that poses an immediate danger to life, health, property, or essential public service and that demands action by the Board more quickly than the Board's normal permit procedures would allow.

will be considered. The institution of the mandatory allocation process will occur as outlined below and the determination to rescind mandatory allocation, if imposed, will be a symmetric process.

The Board will consider the imposition of mandatory allocation in a Board hearing. In making its decision regarding disposal allocations, the Board will confer with the LTMS agencies and consider the factors affecting the need for allocations in light of progress towards the long-term goal adopted by the LTMS EIS/EIR, including (1) the status of alternatives to in-Bay disposal and cooperative efforts to implement them, (2) exigencies that hamper the use of alternative sites, and (3) other relevant factors. If the Board votes to impose mandatory allocations then the mandatory allocation program will be regulated through the issuance of general Waste Discharge Requirements for small- and medium-category dredging projects and through separate Waste Discharge Requirements for all USACE dredging projects. If in place, rescission of the mandatory allocation program would be considered if the three-year average disposal volume was lower than the target volumes as identified in Table 14-16, unless, after review by the Board in a public hearing, the Board votes to not rescind mandatory allocations. Both the institution and rescission of the mandatory allocation program would be discretionary actions of the Board, and thus subject to review pursuant to CEQA under the Board's functionally equivalent process.

5. USE OF TESTING GUIDELINES

In February of 1998, the Corps and U.S. EPA published *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual, Inland Testing Manual (ITM)*. The ITM has been adopted by the LTMS agencies as the framework for the evaluation of the suitability of dredged material for in-Bay disposal. It provides comprehensive guidance to dredging permit applicants on sampling and testing of sediment proposed for disposal in waters of the United States, pursuant to Section 404 of the Clean Water Act. Disposal at the in-Bay disposal sites is subject to this guidance. The ITM outlines a tiered approach to sediment testing, similar to the existing Ocean Disposal Testing Manual, or "Green Book," the federal guidance document for testing for ocean disposal (pursuant to MPRSA). The Regional Board's Executive Officer will require evaluation of sediments proposed for in-Bay disposal according to the ITM, which is incorporated by reference into this plan, before issuing authorizations for such disposal.

The ITM was intended to only address testing of material for aquatic disposal and does not provide a protocol for upland disposal. Regional Board staff have developed a document, "Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines," to assist project planners with developing testing procedures for beneficial reuse projects, including wetland restoration, levee maintenance, and construction fill. The document also provides general sediment screening guidelines for these uses. However, disposal of dredged material for beneficial reuse will be subject to site-specific testing requirements and material suitability criteria that will be defined in Board Orders.

The Regional Board is working in cooperation with other LTMS agencies to develop a regional implementation manual that will detail testing requirements for all three disposal environments.

The Executive Officer, following consultation with other agencies, will periodically review and update all testing procedures. The Executive Officer may require additional data collection beyond the tiered-testing procedures on a case-by-case basis.

6. ENVIRONMENTAL WINDOWS

The Regional Board will restrict dredging or dredge disposal activities during certain periods (“windows”) in order to protect the beneficial uses of San Francisco Bay. These beneficial uses include water contact recreation; ocean, commercial, and sport fishing; marine habitat; fish migration; fish spawning; shellfish harvesting; and estuarine habitat. These restrictions may include, but are not limited to those specified by the United States Fish and Wildlife Service and the National Marine Fisheries Service in their review of the LTMS programmatic EIS/EIR pursuant to Section 7 of the Endangered Species Act, and will incorporate any requirements from project specific consultations.

7. IMPACTS AT DREDGE SITE

The Regional Board may require additional documentation and inspections during dredging activities in order to ensure that dredgers minimize impacts at the dredging location. Water quality certifications or waste discharge requirements may contain additional conditions to address barge overflow and other impacts at the dredging site. Permit conditions may include:

- a. Special reporting procedures for the hydraulic pumping of dredged material into transport scows prior to disposal (marina slip applications);
- b. Evidence of compliance with the conditions described in 6, above;
- c. Time limit on the overflow from hopper-type hydraulic dredges in order to obtain an economical load; or
- d. Precautions to minimize overflow and spillage from the dredging vessel when en-route to the authorized disposal site. (Appreciable loss during transit shall be considered unauthorized disposal, or “short dumping,” and such occurrences are subject to enforcement by the Regional Board or other applicable state or federal agencies.)

8. POLICY ON LAND AND OCEAN DISPOSAL

The Regional Board shall continue to encourage land and ocean disposal alternatives whenever practical. Regional Board staff have determined that there should be a high priority placed on disposing of dredged sandy material upland. At a minimum, incentives should be developed to limit disposal of any such material with a market value to upland uses. Staff may condition certifications so as to encourage upland reuse of high value sediments. Staff will also continue to work with staff from the Central Valley Regional Water Quality Control Board to provide appropriate options for material use in levee maintenance in the delta or for use on delta islands, as appropriate.

9. POLICY ON DREDGED MATERIAL DISPOSAL PERMIT COORDINATION

The Regional Board will implement these measures through its issuance of waste discharge requirements, water quality certification under Section 401 of the Clean Water Act, or other orders. In addition, the Regional Board may require pre- and post-dredge surveys to determine disposal volumes and compliance with permit conditions. In order to better manage data and reduce paper files, Regional Board staff may request, but not require, that applicants submit testing and other project data in a specific electronic format. Regional Board staff have been participating in a coordinated permitting process, the Dredged Material Management Office (DMMO), since 1995. The DMMO consists of staff representatives of the Regional Board, BCDC, U. S. EPA, USACE, and the California State Lands Commission, with active participation by the California Department of Fish and Game and the National Marine Fisheries Service as commenting resource agencies. The DMMO meets regularly to review permit applications and sediment testing plans and results and to make recommendations on proposed dredging projects. While each agency retains its separate authority the agency representatives strive to provide clear and coordinated guidance to applicants and to reach a consensus-based recommendations.

CHAPTER 5 REGIONAL BOARD PLANS AND POLICIES

DREDGING

SCREENING CRITERIA AND TESTING REQUIREMENTS FOR USE OF SEDIMENT FOR WETLAND CREATION AND OTHER UPLAND USES – RESOLUTION NO. 92-145

In this resolution, the Regional Board established screening criteria to be used to evaluate the appropriateness of using dredged material for beneficial purposes.

EVALUATION FRAMEWORK FOR DREDGED MATERIAL PROPOSED FOR IN-BAY DISPOSAL AND DREDGED MATERIAL MANAGEMENT OFFICE – RESOLUTION NO. 01-065

This resolution, (1) adopted the federal guidance issued by the USACE and the U. S. EPA in 1998 for evaluating the suitability of dredged material for disposal at aquatic disposal sites like the in-Bay disposal sites: *Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual, Inland Testing Manual (ITM)*, as well as the guidance for implementing the framework locally, which was developed jointly by Regional Board staff, USACE San Francisco District, U. S. EPA Region IX, San Francisco Bay Conservation and Development Commission, and State Lands Commission through the multi-agency Dredged Material Management Office (DMMO); and (2) recognized the success of the DMMO in providing a coordinated permitting process for dredging and disposal projects in the Bay area and as an important component in implementing the Long Term Management Strategy for Disposal of Dredged Material in the San Francisco Bay Region (LTMS), and directed staff to continue to participate in the DMMO.

TABLE 4-12 POTENTIAL CONSEQUENCES AND IMPACTS OF DREDGING AND DREDGED MATERIAL DISPOSAL

Consequences	Impacts
Bottom disturbance	Mastication of sediment-inhabiting organisms; smothering of organisms living in or on the bottom; habitat disruption
Suspended solids loading	Abrasion and clogging of gills (fish and clams); impaired respiration, feeding, and excretory functions; reduced water pumping rates (clams); retarded egg development and reduced growth and survival of larvae
Dissolved oxygen reduction	Reduced efficiency of oxygen uptake by aquatic organisms; increased stress on organisms resulting in reduced ability to meet environmental and biological demands
Mobilization of toxicants adsorbed to sediments	Uptake and accumulation by aquatic organisms
Release of biostimulatory substances (nitrogen, phosphorus, ammonia)	Stimulation of algal growth; ammonia toxicity

TABLE 4-13 GOALS OF LTMS

- 1) Maintain those channels in the SF Bay Estuary which are necessary for navigation, in an environmentally and economically sound manner and eliminate unnecessary dredging activities in the region
- 2) Conduct dredged material disposal activities in the most environmentally sound manner
- 3) Maximize the use of dredged material as a resource
- 4) Establish a cooperative permitting framework for dredging permit applications

TABLE 4-14 LTMS PARTICIPANTS

EXECUTIVE COMMITTEE

- Corps of Engineers, South Pacific Division, Commander
- U.S. EPA, Region IX, Regional Administrator
- State Dredging Coordinator
- San Francisco Bay Conservation and Development Commission, Chairperson
- San Francisco Bay Regional Water Quality Control Board, Chairperson

MANAGEMENT COMMITTEE

- Corps of Engineers, San Francisco District, District Engineer
- U.S. EPA, Region IX, Regional Administrator
- San Francisco Bay Conservation and Development Commission, Executive Director
- San Francisco Bay Regional Water Quality Control Board, Executive Officer

As needed, depending on issues:

- Executive level staff member of California Department of Fish and Game, National Marine Fisheries Service, U.S. Fish and Wildlife Service, State Lands Commission, Coastal Conservancy

PROGRAM MANAGEMENT TEAM

- LTMS Agencies' program management staff

WORK GROUPS

- Varying levels of participation by the organizations listed above, plus other interested parties
 - Disposal site management and monitoring
 - Sediment quality guidelines
 - Funding

STAKEHOLDERS

- Meets quarterly with Program Management Team
- Meets annually with Executive Committee

DMMO

Staff members of:

- Corps of Engineers, San Francisco District
- U.S. EPA, Region IX
- State Lands Commission
- San Francisco Bay Conservation and Development Commission
- San Francisco Bay Regional Water Quality Control Board

Plus:

- Staff members of California Department of Fish and Game, National Marine Fisheries Service, and U.S. Fish and Wildlife Service as available in an advisory capacity

OTHER EFFORTS

- Data Management Team
- Coordination with related efforts such as CALFED, RMP, National Dredging Policy information Exchange

TABLE 4-15 DREDGED MATERIAL VOLUME TARGETS

INDIVIDUAL DISPOSAL SITES

The following volume targets shall be utilized at each aquatic disposal site.

Alcatraz Island (SF-11)	October-April	0.4 million cubic yards per month
	May-September	0.3 million cubic yards per month
San Pablo Bay (SF-10)	Any Month	0.5 million cubic yards per month
Carquinez Straits (SF-9)	Any Month	1.0 million cubic yards per month
Suisun Bay (SF-16)	Any Year	0.2 million cubic yards per year

OVERALL IN-BAY DISPOSAL

The following volume target shall be utilized each calendar year (i.e., January to December) for the total amount of disposal at the aquatic disposal sites.

Alcatraz Island (SF-11), San Pablo Bay (SF-10),

Carquinez Straits (SF-9), and Suisun Bay (SF-16) 2.8 million cubic yards^{a,b}

NOTES:

- a. The average of the most recent three years of in-Bay disposal volumes shall not exceed this value.
- b. This value is equal to the target value of 2.8 million cubic yards plus a 0.25 mcy contingency volume.

TABLE 4-16 TRANSITION VOLUME TARGETS FOR IN-BAY DISPOSAL OF DREDGED MATERIAL

YEAR	TARGET VOLUME
2001-2003	2.8 million cubic yards
2004-2006	2.41 million cubic yards
2007-2010	2.03 million cubic yards
2010-2013	1.64 million cubic yards
After 2013	1.25 million cubic yards

NOTES:

- a. These volumes do not include the allowable contingency volume of 250,000 cy per year.

³ Dredging emergency is a situation that poses an immediate danger to life, health, property, or essential public service and that demands action by the Board more quickly than the Board's normal permit procedures would allow