26. Statement noted; please see the response to comment 1 in BPC's (7/19/96) comment letter.

Please see the response to CMC comment 2. For the broad policy-level decisions being made with this EIS/EIR, the Management Plan details, which will address implementation, are not needed for the LTMS agencies to select a preferred alternative. However, the Final EIS/EIR does include more discussion on the transition to Alternative 3 (see section 6.5). In addition, the public will be included in the review process for the Management Plan.

- 27. Please see the responses to comments 2 and 4 in BDAC's comment letter.
- 28. Statement noted.
- 29. Statement noted.
- Please see the response to comment 2 in BDAC's comment letter.
- 31. Please see the response to comments 3c in BPC's (7/19/96) comment letter.
- 32. Please see the responses to comments 2 and 4 in BDAC's comment letter.
- 33. Statement noted. The current schedule includes the release of the Draft Management Plan in early 1999. Public review and several scoping meetings will provide opportunity for public comment on the Management Plan at that time.
- 34. Statement noted.
- 35. Please see the responses to comments 7a and 10 in BPC's (7/19/96) comment letter and comment 4 in BDAC's comment letter.
- 36. Statement noted.
- 37. Statement noted. Please see the response below to BPC comment 9.
- 38. Please see the response to comment 3c in BPC's comment letter.

NATIONAL PARK SERVICE

- 39. Statement noted. A new discussion on transition and reduction of in-Bay disposal has been added to the Final EIS/EIR. Please see section 6.5.5 and section 6.5.6.
- 40. Statement noted. Please see the response to comment 17 in DOI's comment letter.
- 41. Statement noted. Please see the response to comment 18 in DOI's comment letter.

GREAT LAKES DREDGE AND DOCK COMPANY (GLDDC)

- 42. Statement noted. See also the responses comment 2 to Benicia's comment letter and comment 2 in GGPA's comment letter.
- 43. Statement noted.
- 44. Statement noted.

NATURAL HERITAGE FOUNDATION (NHI)

- 45. Statement noted. Thank you for the quoted excerpts from both the Water Resources Development Act and the federal dredging policy (e.g., the Dredging Process Action Plan) which indicate that the COE is to encourage beneficial reuse of dredged material, consistent with Alternative 3. See also the responses to comments 8 and 10 in the NHI comment letter.
- 46. Please see the responses to comment 16b(5) in NHI's comment letter and comment 20 in CMC's comment letter.
- 47. Please see the response to DOC comment 1, NHI comment 7, and the new discussion on transition in section 6.5 of the Final EIS/EIR.
- 48. The LTMS agencies have chosen Alternative 3 as the preferred alternative and are planning a transition period. Please see the response to comment 8 in NHI's comment letter, and section 6.5 of the Final EIS/EIR.

CALIFORNIA MARINE PARKS AND HARBORS ASSOCIATION (CMPHA)

- 49. Please see the response to comment 1 in the CDBW comment letter and the new discussion of small project exemption in section 6.5.7 in the Final EIS/EIR.
- 50. Please see the response to comment 1 in the San Leandro comment letter. Please also see the responses to CMPHA comment 6 and Lathrop comments 2 and 4, which address, in part, the issue that upland disposal or sediment rehandling facilities can be too expensive as disposal options for small craft facilities.
- 51. Please see the response to comment 5 in the DOC comment letter.

SAVE SAN FRANCISCO BAY ASSOCIATION (SSFBA)

- 52. Statement noted. Please see the response to comments 1 and 20 in the SSFBA comment letter and the responses below (to comments 53 through 63) which address SSFBA's specific concerns.
- 53. Statement noted.
- 54. Please see the response to comment 2 in the DOC comment letter.
- 55. Statement noted.
- 56. Please see the response to comment 18 in the SSFBA comment letter.
- 57. Please see the response to comment 19 in the SSFBA comment letter.
- 58. Please see the response to comment 16 in the SSFBA comment letter.
- 59. Please see the response to comment 4 in the SSFBA comment letter.
- 60. Statement noted. Please see the response to comments 7 and 8 in the SSFBA comment letter which discuss concerns with costs.

- 61. Statement noted. Please see the response to comments 18 and 19 in the SSFBA comment letter.
- 62. Statement noted. Please see the response to comment 4 in the SSFBA comment letter.
- 63. Statement noted. Please see the response to comment 4 in the SSFBA comment letter.

Letters from Federal Agencies



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Habitat Conservation Division 777 Sonoma Avenue, Rm 325 Santa Rosa, CA 95404-6528

July 19, 1996

Mr. Brian Ross LTMS EIS/EIR Coordinator % U.S. Environmental Protection Agency Region 9 (W-3-3) 75 Hawthorne Street San Francisco, California 94947

Dear Mr. Ross:

Thank you for the opportunity to comment on the <u>Long-Term</u> <u>Management Strategy (LTMS) For the Placement of Dredged Material</u> <u>in the San Francisco Bay Region</u> draft Policy Environmental Impact Statement/Programmatic Environmental Impact Report (PEIS/PEIR). This is an impressive document and the interagency team that assembled the PEIS/PEIR should be commended for their efforts. We look forward to the companion EIS/EIR that would address long term management of dredging in San Francisco Bay, since this document only addresses disposal.

National Marine Fisheries Service (NMFS) is responsible for the conservation and restoration of our nation's living marine resources. The loss of near-shore ocean and estuarine fishery habitat is one of the greatest long-term threats to the productivity of U.S. marine and anadromous fisheries. NMFS strongly supports the management of dredged materials in San Francisco Bay to reduce the current and projected future levels of in-Bay disposal, and to manage dredged materials as a valuable resource. The health and natural biodiversity, including fish resources, of the estuary will benefit from the LTMS program over the next 50 years.

Through this PEIS/PEIR the LTMS agencies are soliciting comments on an approach that transitions over time from Alternative 1 (the status quo) to Alternative 3. Of the alternatives presented in the PEIS/PEIR, Alternative 3 is preferred by NMFS. However, NMFS will continue to champion the concept that complete elimination of in-Bay disposal will eventually become a viable alternative.

Our understanding is that the rate of transition from current conditions to Alternative 3 is contingent upon identifying suitable upland/wetland reuse sites. LTMS agencies, either in the final PEIS/PEIR or the implementing Management Plan, must identify these upland/wetland reuse disposal sites; successful 1 implementation of Alternative 3 cannot be achieved until these



1 sites are identified. Please also note that reuse of dredgematerial for creation or enhancement of wetland habitats is not a long-term option; there are a finite number of suitable sites and these will probably be exhausted within fifty years.

During previous opportunities to help guide the development of the LTMS, NMFS has promoted time "windows" for the disposal of dredged materials in Carquinez Strait. Concern for Sacramento River winter-run chinook salmon and Napa River steelhead trout was the catalyst for NMFS to support closure of the Carquinez disposal site during certain critical time frames. This concept is adopted by the LTMS PEIS/PEIR in Policy-Level Mitigation Measures. Other anadromous fish are likely to be added to the list of species protected under the Endangered Species Act of 1973 as amended. Additional closures of Carquinez Strait aimed at protecting these fishes would further reduce the available windows for disposal, rendering the Carquinez site increasingly cumbersome as a long-term disposal option.

The PEIS/PEIR does not select an alternative at this time, but nevertheless prognosticates that Alternative 3 will ultimately be selected for implementation. Alternative 3 reduces in-Bay disposal from today's level to 20 percent when this alternative 2 is fully implemented. NMFS prefers Alternative 3 because it provides minimum in-Bay disposal. Reducing in-Bay disposal could further benefit by decommissioning the Carquinez Strait disposal site in concert with reducing disposal at San Pablo Bay and Alcatraz, increasing reuse, wetland creation, and ocean disposal. We anticipate reduced demand for Carquinez Strait disposal due to closure of the Mare Island U.S. Navy facility.

Some interagency discussions have suggested there is support for ³ closing of one in-Bay disposal site. NMFS would support a five to eight year phase-out of the Carquinez Strait Disposal Site. During the phase-out period, we recommend that instead of time window restrictions, that the disposal site be managed for turbidity in the Management Plan. The Policy-Level Mitigation Measure described in the PEIS/PEIR could be amended to include a five to eight year phase out with turbidity standards for Carquinez Strait Disposal Site.

In the discussion of the role of sediment testing in the PEIS/PEIR, the major purpose of sediment quality testing is described: "to assess whether the bioavailability of and exposure to contaminants...have the potential to adversely effect sensitive, representative organisms at the disposal site." Assessing bioavailability is accomplished with bioaccumulation tests that, under the current regime, is only performed after

4 dredge-material fails lower level bioassay testing. NMFS supports the LTMS approach of relying on the joint EPA/COE ocean disposal testing manual until the more conservative inland testing manual is final, and the use of reference sediments that reflect conditions that would be more representative of the 4 ecosystem, not the disposal site environs.

To facilitate better decision making based on the results of sediment testing, LTMS agencies should establish upper limits for concentrations of important sediment contaminants. Similar to the Apparent Effects Thresholds, these concentrations would provide better guidance to decision makers. Limits should be determined for most pollutants present in San Francisco Bay sediments by employing available science. If absolute maximum allowable concentrations for each chemical pollutant were established, dictating the disposal options, the work of DMMO and other decisions makers would be greatly simplified.

In summary, NMFS supports adoption of Alternative 3. In order to fully implement this alternative, suitable upland/wetland disposal sites must be identified to accommodate the anticipated volume. Also, with more material going to the ocean disposal 6 site, we share the concerns of the Gulf of the Farallones National Marine Sanctuary that compliance monitoring of each ocean disposal event is a necessary component of the LTMS Management Plan.

The goals and objectives of the LTMS are important to the conservation of fisheries resources and overall biodiversity in the San Francisco Bay ecosystem. We look forward to continuing as a partner in the LTMS effort.

If you have any questions concerning these comments please contact Mr. Dick Butler at: National Marine Fisheries Service, 777 Sonoma Avenue, Room 325, Santa Rosa, California 95404; telephone 707-575-6058.

Sincerely,

5

James R. Bybee () Environmental Coordinator Northern California

cc: J. Medlin - USFWS

- E. Ueber GFNMS
- J. Schafer CDFG
- L. Sullivan NOAA
- A. MacCall NMFS

Responses to the DOC — U.S. Department of Commerce, National Marine Fisheries Service, Habitat Conservation Division, letter dated July 19, 1996

- 1. Alternative 3 provides for a mixture of dredged material disposal/placement options, including medium ocean disposal, medium upland/wetland reuse, and low in-Bay disposal. Since the shift from the current emphasis on in-Bay disposal to an emphasis on ocean disposal and upland/wetland reuse will take some time, it is anticipated that a transition period from the No-Action to Alternative 3 will be needed as upland/wetland reuse sites are developed. As discussed in the EIS/EIR, in addition to the reuse of dredged material for the enhancement and creation/restoration of wetlands, the LTMS Technical Studies indicated that dredged material is suitable for a variety of upland purposes including cover material at regional landfills, construction fill, and for stabilizing and repairing levees. The LTMS Technical Studies identified numerous potential upland/wetland reuse and disposal sites that could be developed over the 50-year LTMS planning period (see, for example, LTMS 1995d). This list, although extensive, is by no means exhaustive of all the possible sites. Summary tables of the upland/reuse sites reviewed and ranked by the LTMS (1995d) study have been included in the Final EIS/EIR; see new section 4.4.3.
- 2. Alternative 3 is the preferred alternative for the Final EIS/EIR. However, there will be some period of time before Alternative 3 can be fully implemented. Therefore, a transition period will be necessary. A discussion of the transition has been added to Chapter 6 of the Final EIS/EIR (section 6.5). It will be addressed further in the Management Plan. Please see the response below to DOC comment 3 regarding the Carquinez Strait Disposal Site.
- 3. We have considered managing for turbidity. However, this type of disposal site management would require establishment of standards and real-time tracking to call dredgers when conditions meet the standards. Dredgers need to plan projects months in advance and cannot plan to go to a specific site on short notice. We are reducing overall impacts by restricting disposal during the most critical times when certain species of migrating fish are present and will adjust the restrictions as necessary. We will reduce annual disposal volumes at the site as much as possible. If additional fish species are listed, we will evaluate the need to take other measures that may include adjusting the restrictions or further reducing disposal volumes as necessary. It is possible that with greater use of ocean disposal and UWR that some of the dredgers that propose to use Carquinez would be redirected to other sites. The same is true for other in-Bay sites.
- Statement noted.

5.

EPA is working on developing screening level contaminant concentrations that may allow streamlined testing for many projects on a national level. The state of California, partially supported by LTMS, is also working on contaminant concentration levels that could potentially be used as the basis for screening contaminant level concentrations. It is also expected that testing performed for maintenance dredging projects will build a track record that shows consistently clean material from certain locations, thereby decreasing our need for testing.

However, effects based testing, as described (for aquatic disposal) in section 3.2.5.1 of the Draft EIS/EIR, will continue to be used because factors other than contaminant concentrations contribute to the toxicity of sediments to marine organisms. The other factors influencing sediment toxicity are not well understood, but many include water chemistry, mineral chemistry, concentrations of acid volatile sulfides and total organic carbon, sediment variability, and the interplay of these with human-introduced contaminants on marine organisms. Numerical standards or concentrations are, therefore, usually inadequate by themselves to predict potential toxicity. Bioassays are used to show toxicity on sensitive marine organisms so we do not have to make questionable assumptions concerning the various factors at play in individual sediment samples.

6. Both periodic site monitoring and project-specific compliance monitoring are requirements for use of the ocean disposal site. How and when the monitoring is performed is specified in the Site

Management and Monitoring Plan (SMMP) and the SMMP Implementation Manual for the disposal site. The SMMP and SMMP Implementation Manual will be incorporated by reference in the LTMS Management Plan.



United States Department of the Interior

OFFICE OF THE SECRETARY Office of Environmental Policy and Compliance 600 Harrison Street, Suite 515 San Francisco, California 94107-1376

July 19, 1996

ER 96/0283

Ms. Karen Mason, LTMS EIS/EIR Coordinator U.S. Environmental Protection Agency Region 9 (W-3-3) 75 Hawthorne Street San Francisco, California 94105-3901

Dear Ms. Mason:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement/Report (DEIS/R) regarding the Long-Term Management Strategy (LTMS) for the Placement of Dredged Material in the San Francisco Bay Region and provided comments dated June 27, 1996.

This letter rescinds and replaces the Department's comment letter, dated June 27, 1996. The proposed action evaluated in this DEIS/R is to select a long-term strategy to guide decisions for managing a projected volume of 300 million cubic yards (cy) of dredged material over the next 50 years.

The following comments are provided to assist you in comprehensively evaluating the proposed action and in preparing the Final Environmental Impact Statement/Report (FEIS/R). Additional comments may be provided under the provisions of the Fish and Wildlife Coordination Act (FWCA) or the Endangered Species Act of 1973, as amended (ESA).

GENERAL COMMENTS

Although we do not fully endorse any of the proposed alternatives, we support the LTMS agencies' approach to transition from emphasizing aquatic disposal to maximizing beneficial reuse. The practice of unconfined, in-Bay disposal, 1b particularly at the Alcatraz site should be discontinued.

However, heavier emphasis must be given to industrial and landfill reuse, levee maintenance, and other forms of upland disposal, until wetland creation using dredged material has some proven successes. Confined aquatic disposal of NUAD (not suitable for unconfined aquatic disposal) material in San Francisco Bay is a major concern because of the instability of ³ such sites and mobility of contaminants during and following placement of dredged material.

As stated on page 4-125, "Determining success of past wetland restoration projects that used dredged materials has been hampered by lack of well-defined goals and objectives." NUADclass material should not be used in creating wildlife habitat until pilot projects have adequately characterized the ecological fate of sediment-borne contaminants.

The DEIS/R states that evaluation of specific impacts of dredging is outside the scope of analysis, and limits discussion to potential impacts of dredge material disposal. Dredging activities are fundamental to dredge disposal and may be considered interrelated and inter-dependent under the National Environmental Policy Act.

As such, we believe the FEIS/R should include, at minimum, general discussion of dredging projects and activities which would be accommodated by implementation of the LTMS.

- ⁶ The Fish and Wildlife Service (FWS) envisions preparation of a programmatic biological opinion pursuant to Section 7 of the ESA to ensure compliance of the LTMS. In the biological opinion, FWS would evaluate and analyze impacts associated with both dredging and disposal of dredged material on federally listed, proposed, and candidate species.
- 7 The FEIS/R should clarify how proposed site-specific dredge management plans will incorporate protective measures for federally listed or proposed species and how these restrictions would be addressed at a programmatic level.
- 8 The continued need for rigorous, objective science in the LTMS process remains imperative, and more resources should be allocated to this purpose at a programmatic level. The Department conceptually supports options for beneficial reuse, including restoration of habitat for federally listed or proposed species and other wildlife, and creation of tidal marshes.

However, in San Francisco Bay, many natural processes have not been characterized to a degree that will ensure duplication in man-made systems.

The projected volumes of dredged material for upland and wetland restoration provided in Appendix N of the DEIS/R, illustrate a significant and rapid use of material for this purpose. The greatest reuse potential is proposed for implementation within the next 1 to 5 years.

Given the stated importance of this option, we question why only 13% of LTMS costs have been directed to upland/wetland reuse studies (LTMS Status Report, July 1995). Very few, if any, of these studies have focused on characterizing natural systems in order to establish a baseline condition for quantitatively measuring success of constructed systems.

10a The ecological fate and mobilization of sediment-borne contaminants in wetland systems require further study (an issue relating to proposed use of NUAD material as "non-cover" sediment in constructed wetlands); and, the regional importance of 10b seasonal wetlands (diked baylands) as roosting and foraging areas for migratory birds, including overwintering shorebirds and waterfowl, must be further characterized and understood by both scientists and managers. The importance of these areas relates specifically to proposed conversion of seasonal wetlands to tidal marsh. Wetland characteristics specific to special status species habitats also must be further studied to establish 10c performance criteria for created systems.

Using an adaptive management approach, small-scale wetland 11 demonstration projects using SUAD (suitable for unconfined aquatic disposal) material should be undertaken to refine wetland design and sediment selection criteria, and confirm rates of vegetative development and long-term landform stability. These projects should be proven successful before large-scale projects using NUAD material are undertaken.

Deposition and erosion in San Francisco Bay is generally heterogeneous and unpredictable, as indicated by bathymetric maps in the DEIS/R (Figures 3.2-5 to 3.2-18). Figure 3.2-10 shows up to 3 feet of erosion having occurred over the last 40 years in areas within a few hundred feet of Bay Farm Borrow Area, one candidate disposal site.

The 40-50 centimeter cap thickness indicated as overall guidance 112 (Table 5.1-4) would be insufficient to prevent future long-term erosion and mobilization of contaminated sediments at this site.

Diked baylands should be re-analyzed in the FEIS/R as "wetlands." 13 The DEIS/R (page 4-99) identifies diked baylands as "upland habitat" but states, "the diked bayland areas tend to collect rainwater, functioning as seasonal wetlands if they are not regularly drained and/or pumped."

FWS's wetland classification system, derived from "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin, et al., 1979) identifies diked baylands as wetlands.

This classification system is widely used throughout the United States, and is recognized regionally by the San Francisco Estuary Project in its planning activities, and by the Regional Water Quality Control Board's Wetlands Policy Procedural Guidelines for the San Francisco Bay Region. Additionally, diked baylands have qualified as "wetlands" under Corps of Engineers's (COE) jurisdictional criteria (e.g., Montezuma Wetlands).

14 Care should be taken to differentiate regional wetlands goals currently under development from goals of LTMS. Areas identified for restoration under the regional goals process may not be suitable for dredged material disposal.

Seasonal wetlands of marginal value that are identified by LTMS as suitable for tidal marsh creation may still require in-kind compensation due to an overall loss of freshwater habitat within the Bay/Delta region.

- 15 The FEIS/R should identify the amount in acres of uplands and seasonal wetlands which will be lost or created under each
- 16 alternative for dredge disposal. The FEIS/R should also discuss what planning level analyses are being used to determine how much additional tidal marsh is needed or appropriate for the San Francisco Bay region, and how it will change the existing mosaic of habitats in this ecosystem.
- 17 National Park Service (NPS) staff are extremely interested in the LTMS DEIS/R. Of particular interest is the current primary inbay dredge disposal site, which is identified as one of three disposal sites in the DEIS\R, adjacent to Alcatraz Island, a unit of Golden Gate National Recreation Area (GGNRA).

Alcatraz Island supports the most diverse assemblage of marine and estuarine colonial nesting waterbirds in San Francisco Bay and some of the most significant wildlife resources within GGNRA. The DEIS\R fails to address resources (identified below) which are or may be impacted by dredge disposal activities at the Alcatraz disposal site.

We have previously provided comments through the Department and in meetings with COE staff on individual permits to dredge and dispose spoils at Alcatraz. Through these communications GGNRA has notified the COE that past dredge disposal actions at the Alcatraz site (Site SF-11 in the DEIS\R) have occurred over submerged lands under NPS management.

18 The Alcatraz disposal site significantly overlaps GGNRA-leased, submerged lands adjacent to Alcatraz. The DEIS/R fails to include a map reflecting this overlap, although the document does identify Alcatraz disposal site as being three-tenths of a mile