


We believe our comments can help the LTMS in its intent to, among other things, maximize the cumulative environmental benefits to the whole San Francisco Bay Region. Thank you.

Sincerely,


(710.)

Julie Grantz, President

Responses to the EFM — Environmental Forum of Marin, letter dated July 18, 1996

1. Please see Chapter 3, Appendix E, and the responses above to both CCCR comment 9 and EDF comment 1c.
2. Unnecessary dredging is determined during project-specific reviews. For example, the dredging quantity for the Oakland Harbor 42-foot deepening project was reduced from about 6.6 mcy to an estimated 5.5 mcy. The dredging quantity for the Oakland Harbor proposed 50-foot deepening project has been reduced from about 20 mcy to between 12.0 and 14.5 mcy. See also the responses above to both CCCR comment 9 and EDF comment 1c. We agree that the need for dredging should be done on a case-by-case basis, and this is how it is done.
3. Revisions to the Management Plan will be made, as needed, every 3 years. Every 6 years a major programmatic review of and revisions to the Management Plan will be undertaken. In addition, on a 6-year cycle, any necessary amendments to the San Francisco Bay and Basin Plans will be initiated.
4. The policy-level mitigation measures described in Chapter 5 include the basic requirements that all multi-user sites be operated in accordance with a site-specific management plan, and that appropriate site-specific monitoring be carried out. Also, please see the response to DOI comment 24h.
5. There is a substantial water quality discussion in Chapter 3 associated with dredging and dredged material; that discussion has been expanded in the Final EIS/EIR to include the general impacts of dredging (see new section 3.1.1.3). Chapter 4 describes existing water quality generally in the Estuary (section 4.3.1.2) and by specific embayment (section 4.3.2); it also describes briefly the Regional Monitoring Program (section 4.3.2.1). Chapter 6 discusses the water quality impacts from disposal at in-Bay sites (section 6.1.1.2).
6. Appendix G discusses Confined Aquatic Disposal (CAD), and the kinds of monitoring that should be considered. It appropriately notes that reduced monitoring could be "considered for subsequent operations if conditions are similar and no problems are encountered."
7. A testing program for dredged material disposal involving the COE, EPA, RWQCB, and BCDC has been in place for several years. See the responses to DOI comments 24e(1) and 24e(2). The LTMS proposes to extend this to include a site-monitoring program, which includes water.

The resuspension of sediments is a natural process that occurs in all water bodies with fine sediments and variable currents. It is common in San Francisco Bay and is not expected to increase significantly due to disposal of dredged material.

Additional monitoring might help determine the fate of disposed dredged material for a short period, but the "ultimate fate" of the material is not possible to determine. Regional monitoring has shown that surficial sediments in the central areas of the San Francisco Bay/Estuary are well mixed due to the rapid tidal currents and fine grain sizes. Portions of the dredged materials placed at the dispersive disposal sites could conceivably end up anywhere in the estuary or in the ocean. The use of dispersive disposal sites relies on the overall seaward flow of water to carry most of the dredged material downstream and away from the channels and ports that need deep water.

The Regional Monitoring Program (described in section 3.2) has developed a database of background conditions of sediment and water quality over the last 5 years. This database can be used to determine long-term trends in the levels of pollutants in the Bay.

Sediment bioassays (in addition to chemical testing) are required prior to dredging to determine if individual chemicals or combinations of chemicals will cause significant toxicity.

The amount of barge traffic was considered in the LTMS planning process. Any significant increase in barge accidents that threaten Bay resources would lead to additional conditions placed on dredging permits from one or more of the LTMS agencies.

8. Please see section 3.2 for information on movement and fate of sediments in the Estuary system and contaminant exposure pathways and potential risks in different placement environments. Testing for effects on aquatic organisms and on water quality are required for disposal. Section 3.2.5 discusses the testing that is required to avoid adverse environmental impacts to water quality and aquatic organisms. See also the response to EFM comment 7.
9. Statement noted. Section 5.1.2.2 of the EIS/EIR (Habitat Protection) provides information on the periods during which disposal is permitted. Also see the response to MAS comment 18c.
10. Statement noted. Please see the response to DOI comment 10b.
11. The LTMS agencies recognize the impacts of turbidity on Bay and ocean resources and have provided a discussion in the EIS/EIR in section 4.3.1. In addition, the Inland Testing Manual and the Ocean Testing Manual require the evaluation or testing for effects of suspended solids on a project-by-project basis. Also, please see the response to EFM comment 12.
12. The LTMS agencies believe that the preferred alternative will reduce stresses to aquatic systems. High disposal volumes in any one environment were screened out early in the evaluation and eliminated from the final alternatives (with the exception of no-action). This is due, in part, to the potential impacts/risks of high volume, high frequency disposal in any of the environments. The preferred alternative provides for the least amount of disposal in-Bay, which will decrease the risk of impact more than any of the alternatives considered. This will reduce the potential for overall cumulative effects of dredged material disposal to occur in combination with other stresses on the aquatic environment. At the same time, other programs are working to reduce the effects of those other stresses (for example, the San Francisco Estuary Project [see section 2.2.3], the interagency CALFED program, and various other state and federal programs that control or limit point and non-point source pollution [see section 3.2.3.3]).
13. Please see the response to EDF comment 1i and MAS comment 20e.
14. It is acknowledged that the potential benefits of dredged material reuse are emphasized. However, potential impacts of a proposed projects are also analyzed on a programmatic level in the EIS/EIR. As addressed in the document (see section 5.1), individual as well as cumulative impacts would need to be identified and avoided or mitigated on a project-specific level. Please see the response to SC-LPC comment 3g regarding the impact analysis that would be required. Also see the response to Oakland comment 7 regarding determination of project impacts and the manner in which they would be addressed.

Statement noted. Please see the response to SC-LPC comment 3g.
15. There is no evidence of impacts of dredged material disposal at the San Pablo site or in nearby wetland areas that LTMS is aware of. The LTMS would welcome any evidence in this regard.
16. There is no evidence of impacts of dredged material disposal at the San Pablo site or in nearby wetland areas that the LTMS is aware of. The LTMS would welcome any evidence in this regard. The San Pablo disposal site is already limited to North Bay projects.
17. Please see the responses to DOI comment 15 and MAS comment 20d.
18. Please see the responses to DOI comments 13 and 27f.

The Final EIS/EIR has been revised to discuss mitigation for seasonal wetland loss as a result of tidal wetland restoration projects; please see section 5.1.2 for a discussion of mitigation measures for seasonal wetland loss.

19. Statement noted. The text has been changed accordingly.

Please see the response to MAS comment 18p.

20. Statement noted. Restoration projects would be proposed when the benefits of the reuse of dredged material and the ecological success of a restoration effort could be combined (see the response to Gravanis comment 9r(2)). In addition, each proposed project would be reviewed according to CEQA and NEPA; this review process, as well as a Section 7 consultation under the Endangered Species Act, would ensure the protection of special status species. Please see the response to MAS comment 20e in regard to the manner in which the potential benefits and impacts associated with upland/wetland reuse for special status species was determined.

21. In response to both points above, Statement noted. Please see the response to OAS comment 7.

22. Statement noted. Seasonal wetlands can be created as part of habitat restoration using dredged material. Please see the response to OAS comment 7.

23. More information on these programs (e.g., USFWS' Endangered Species Recovery Plan, BCDC's North Bay Wetlands Protection Program) and copies of documents that have been produced are available through those agencies listed. Many of these programs are in the process of producing regional wetland plans, and conclusive results or guidance may not be available yet.

Statement noted. Please see the response to SC-LPC comment 3g. Also see the response to OAS comment 7 in regard to mitigation for seasonal wetlands. As discussed in the responses to other comments, the LTMS is not a finite program. Rather, it is ongoing and designed to allow for management updates based on the availability of information. This would include data derived from any ongoing or future studies regarding wetland creation using dredged material and regional restoration planning efforts.

24. Please see the response to GGAS comment 17.

25. Statement noted. Many of the potential dredged material reuse sites may be controversial due to the number of stakeholders involved, their varying opinions on the appropriate use of the site, and the amount of funds that would be required for successful completion of projects. However, some sites, such as Bel Marin Keys, have significant potential environmental benefits and may well be worth the effort required by the LTMS agencies.



Golden Gate Audubon Society

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Americans Committed to Conservation • A Chapter of the National Audubon Society

July 16, 1996

LTMS EIS/EIR Coordinator
c/o U.S. Environmental Protection Agency
Region 9 (W-3-3)
75 Hawthorne Street
San Francisco, CA 94947.

RE: "Long Term Management Strategy For The Placement Of Dredged Material In The San Francisco Bay Region Draft EIS/EIR"

Dear LTMS EIS/EIR Coordinator:

The Golden Gate Audubon Society appreciates the opportunity to comment upon the above referenced DEIS/DEIR. Unfortunately, we believe the document to be inadequate. The alternatives proposed could exact greater changes on the topography and ecology of the Bay than any since the filling of 80% the Bay's wetlands and, as such, deserve intensive review. While the document is quite long, the discussions on the topics enumerated below are inadequate. We ask that the DEIS/DEIR be revised or that a supplemental EIS/EIR be prepared that answers the questions posed below.

1) The analysis of the impacts of the loss of 7225 acres of seasonal wetlands (i.e. the alteration of 7225 acres of seasonal into tidal wetlands as described in Alternatives 2 and 3-"medium upland/wetland reuse") are grossly inadequate.

Which species (avian, amphibian, plant, etc.) will be impacted and in what locations? Where will larger and smaller shorebirds go in the North Bay during high tides and storms? Where will they go in the South Bay? What will be the cumulative impacts of such a loss, which species will be most effected?

The San Francisco Bay has been identified as a Western Hemisphere Regional Shorebird Reserve. What impact will the loss of these seasonal wetland have on the entire shorebird Pacific Migratory Flyway? To simply state that the loss could result in "significant cumulative impact" is insufficient.

These impacts could have international significance. The remedy proposed by the DEIS/DEIR for such impacts is also woefully insufficient. See below for a discussion of why a reliance upon a yet to be completed "Regional Wetlands Goal" plan or any of the other "specific habitat goals established by regional planning efforts" is inadequate mitigation.

2. The DEIS/DEIR violates CEQA and NEPA by not including compensatory mitigation for the proposed impacts to seasonal wetlands.

A) The third paragraph of Section 6.1.2.3 states that "...some degree of habitat trade-off would be inevitable with almost any habitat restoration project using dredged material." This statement ignores the concept of "compensatory mitigation".

2 Mitigation has three components; avoidance, minimization and compensation. The DEIS/DEIR does not consider ways to reduce the amount of dredging. If dredging were reduced the amount of dredge material to be disposed of would be reduced. Thus the DEIS/DEIR ignores the avoidance component. The same can be said for minimization.

The last mitigation component is compensatory mitigation. It is the method by which unavoidable impacts are mitigated. In the case of habitat impacts, compensatory mitigation usually requires project proponents to create or restore new habitat similar to the habitat that is being destroyed, in equal or greater amounts. The LTMS does not propose any compensatory mitigation for the loss of seasonal wetlands.

The DEIS/DEIR should be rewritten so that it requires compensatory mitigation for the proposed destruction of seasonal wetlands (and all other unavoidable impacts). If seasonal wetland impacts are mitigated through the creation of new seasonal wetlands, a "habitat trade-off" would not be "inevitable." Failure to consider this violates CEQA and NEPA.

3 B) The DEIS/DEIR does propose "mitigation" measures for impacts to seasonal wetlands, but they are completely inadequate and are not true mitigation measures. In Section 5.1.2.1. The DEIS/DEIR proposes that the restoration of tidal wetlands using dredge material will be based on the implementation of a Regional Wetland Goals Plan, and other regional planning efforts.

According to the DEIS/DEIR, by implementing the Regional Wetland Goals Plan any loss of seasonal wetlands due to the creation of tidal wetlands using dredge material will be fulfilling science's determination of the biological needs of the Bay and thus no detrimental impacts will occur.

The problems with using such a plan as mitigation are manifest: 1) The Plan, and essentially all other planning efforts named in the DEIS/DEIR do not yet exist. Mitigation in a DEIS/DEIR should not be based on non-existent documents. Such documents may never be completed. 2) The Regional Wetland Goals Plan may contain significant flaws. For example, there is insufficient census data on shorebird habitat and any conclusions reached by the scientists will be very subjective. 3) The Regional Wetland Goals Plan is being developed in an ad hoc manner that may not require public scrutiny and comment nor its approval through a CEQA and NEPA process. Thus the "mitigation" for all LTMS habitat impacts could rely on a product that has not undergone CEQA and NEPA analysis and public review. 4) The Regional Wetland Goals Plan may well require increases in both tidal and seasonal wetlands, or an increase in tidal wetlands while maintaining existing seasonal wetland acreage. But such increases in total wetland acreage are not allowed for under the current DEIS/DEIR mitigation proposals. For such increases to take place within the LTMS process there must be a provision for compensatory mitigation for seasonal wetland losses.

One way of looking at this is that the DEIS/DEIR is essentially predicting, or dictating, what will be in the Regional Wetlands Goal Plan. The DEIS/DEIR must include compensatory mitigation in order to allow for all eventualities in the Regional Wetlands Goals Plan.

4 A second mitigation measure under Section 5.1.2.1 is described for projects not covered by a Regional Wetlands Goal Plan. Again, this mitigation component requires no compensatory mitigation instead relying solely on "minimization" of project impacts.

This proposal, too, violates both CEQA and NEPA, both of which require compensatory mitigation for unavoidable impacts. Minimization clearly does not provide that type of mitigation. This mitigation measure also states that the mitigation should result in an "overall net gain in habitat quality". This phrase sounds nice but is too inexact. It does not describe how such a "net gain" will be achieved nor what it means. Quality is a subjective word. Is the habitat for shorebirds improved or for burrowing owls or for an endangered species. True compensatory mitigation requires mitigation for the impacts caused. Thus if seasonal wetlands are to be destroyed, seasonal wetlands should be created. This section should be altered to include compensatory mitigation.

C) In Table 5.2.3 "Habitat Conversion" is indicated as a Mitigation Measure rather than an impact itself. The rationale for this statement is evidently the DEIS/DEIR's conclusion that there is "an increasing recognition of the importance of the Estuary's tidal wetland systems...(pg. 4-101) " and that the "conversion of Bayland sites to tidal wetlands reflects the historical distribution of tidal marshes...(pg. 8-4)."

However, this ignores the fact that while an increase in tidal wetlands may be desirable, there is no evidence to suggest that a decrease in seasonal wetlands is desirable. Thus "habitat conversion" should be considered a negative impact, even within the context of a Regional Wetlands Goal plan. By stating otherwise, the DEIS/DEIR is again predicting the outcome of the Regional Wetland Goals Plan or is trying to influence its outcome.

Furthermore, by not including the concept of increasing total Bay Area wetland acreage, which would be the result of seasonal wetland conversion to tidal wetland plus compensatory mitigation for that conversion, the LTMS is ignoring both federal and state wetland goals (no net loss of wetlands in the short term and a net gain in wetlands in the long term.)

The DEIS/DEIR should be rewritten to recognize that habitat conversion is an impact not a mitigation.

D) By failing to state at the Programmatic DEIS/DEIR level that mitigation for impacts to seasonal wetlands is necessary, the DEIS/DEIR may eliminate the ability of agencies to require, or the public to demand, mitigation at a project-specific EIS/EIR level.

The DEIS/DEIR does state that policy-level mitigation measures "do not replace the need for site-specific mitigation measures" (Section 5.1). But if the Policy-level mitigation measures do not include compensatory mitigation as a mitigation alternative, then it is not unreasonable to assume that project proponents will be able to claim that at the programmatic level it has been determined that no compensatory mitigation should be required at the site-specific level.

Thus to avoid this restriction of site-specific mitigation alternatives, the DEIS/DEIR must be rewritten to require compensatory mitigation. This will allow agencies and the public to seek such compensatory mitigation at the site-specific level.

Furthermore, if compensatory mitigation is to be considered at the site-specific level, the Programmatic DEIS/DEIR should have discussed it at the programmatic level in order to aid agencies and the public in determining how to impose such mitigation. In this regard, the DEIS/DEIR should answer the following questions, as well as others. Should compensatory mitigation be applied on an acre for acre basis or with some other ratio? Should compensatory mitigation require in-kind mitigation?

2. It is not appropriate for the DEIS/DEIR to lump upland reuse of dredge material (e.g., as capping material for landfills or for levee maintenance) and wetland reuse (seasonal wetland alteration into tidal wetlands) into one category, "Upland/Wetland Reuse".

This is not appropriate since wetlands are "waters of the United States" and are regulated quite differently from uplands and have quite different biological values. Also, the DEIS/DEIR does not apparently recognize "diked Baylands" as wetlands when it discusses them under the "Uplands Habitats and Resources" section (Section 4.4.2). This needs to be corrected.

The DEIS/DEIR should be rewritten to create two separate categories, Upland Reuse and Wetland Reuse and it should specifically identify "diked Baylands" as wetlands. In addition, the DEIS/DEIR does not adequately address the Upland Reuse alternative.

3. The DEIS/DEIR is based on a 50-year planning period. This is far too long. Most General Plans are good for only 10 years. In a revised DEIS/DEIR this time period should be shortened to no more than twenty years. Technological advances, new biological information, increases in ocean elevations, economic alterations leading to decreased/increased dredging needs are all possible and could seriously alter the LTMS process.

The DEIS/DEIR should discuss mechanisms for altering the LTMS program based on new information whether the LTMS final plan is for 20 or 50 years.

4. The DEIS/DEIR fails to consider the impacts to several important salmon fisheries. The only salmon fishery considered by the DEIS/DEIR is the endangered Winter Run salmon. For this fishery the LTMS recommends avoiding dredge disposal during the time these fish are migrating through the Bay. The DEIS/DEIR must also consider spring and fall run salmon, all of which are species that may be listed in the future as threatened or endangered.

5. The DEIS/DEIR proposes the disposal of toxic material in wetlands (NUAD material, i.e. dredge material "Not-suitable for Unconfined Aquatic Disposal"). The DEIS/DEIR does not adequately address the issue of impacts to the Bay's wildlife if these NUAD materials are eventually exposed to the bay's waters. Nor does the DEIS/DEIR adequately discuss the likelihood of the material being uncovered. After all, the NUAD material will have to be covered forever to avoid impacts. How likely is this? What level of guarantee is there that such uncovering will never take place? This should be more fully evaluated in the DEIS/DEIR.

Furthermore, the DEIS/DEIR does not adequately address the seismic stability of wetland restoration sites for which they propose to deposit NUAD material, for example the Montezuma Slough site, which is specifically mentioned in the DEIS/DEIR. The DEIS/DEIR must include such an analysis so that we can be apprised of the likelihood of contaminated material being released into the aquatic environment following an earthquake. The DEIS/DEIR should also analyze the impacts of such a release.

Such a discussion should address both CAD sites and the use of NUAD material in wetland reuse projects such as Montezuma Slough.

6. Impacts of in-Bay dredge disposal has not received sufficient attention in the DEIS/DEIR. The area of dispersion resulting from dumping at the San Pablo Bay site is not adequately addressed nor are the impacts of that dispersion.

7. The impacts of in-bay dredging and dredge disposal on waterbird species is not adequately discussed. The DEIS admits that in-bay dredge disposal reduces fish populations, at least "during periods of intense disposal (pg. 4-60)", in "a significant portion of the broader embayment". Waterbirds dependent upon those fish for food are thus deprived of their food base for that period of time. How does this effect these avian species, one such species being the California brown pelican?

Many of these waterbirds will be breeding. They need these fish to feed their newly hatched young. How does this effect these avian species' ability to successfully fledge their young, one such species being the endangered California least tern which may be impacted if the Alameda Borrow Pit is used as a "Confined Aquatic Disposal (CAD)" site or the Double-crested cormorant which nests on Alcatraz and the Bay Bridge?

8. The discussion of the impacts of in-bay disposal on eel-grass beds is inadequate. In fact it is nearly non-existent. Studies suggest that eel-grass beds are negatively impacted by turbidity. For this reason, the DEIS/DEIR should more fully discuss the impacts of dredge disposal, and dredging itself, on eelgrass beds. There should be an attempt to determine whether eelgrass beds have expanded in recent years as a possible result of reduced in-bay dredge disposal. If they have, it would provide support to the idea that dredging and in-bay dredge disposal have negative impacts on eelgrass beds.

9) Section 7.3.1.6-proposes mitigation banking. The Golden Gate Audubon Society believes that mitigation banks encourage the destruction of small wetland in favor of the creation of large ones. This is not necessarily a good thing. Small wetlands play an important role in wetland ecology. This is supported by a recent Master's Thesis written by Kevin MacKay, S.F. State university, whose results showed that small wetlands are important for preserving biodiversity. The DEIS/DEIR should evaluate the impacts to small wetlands resulting from mitigation banking and the impacts on biodiversity resulting from the decrease in small wetlands. Other questions for mitigation banks are: 1. will such banks be created prior to their ability to be used for credits; 2. will the banks be preserved in perpetuity; 3. will there be adequate financing to maintain the banks once all credits are used up.

10. Section 7.4.1.7. suggests altering the 404(b)(1) guidelines to distinguish between fill for projects and fill for restoration. As has been stated above, we believe that the restoration of seasonal wetlands to tidal wetlands may involve very significant negative impacts to seasonal wetlands. Thus it is appropriate that all wetland fill projects, whether for restoration or not undergo the 404 permit process, including the 404(b)(1) alternate site analysis, in order to ensure that the restoration project does not result in a net loss of wetland functions and acres. The DEIS/DEIR should explain how we can be assured that no restoration project will result in negative impacts if the 404(b)(1) guidelines are altered.

11. The DEIS/DEIR does not adequately discuss monitoring plans. All restoration projects and all NUAD and CAD sites must be monitored, as must all mitigation sites if compensatory mitigation is ultimately required. The DEIS/DEIR must explain how will we know whether these projects are successful if adequate monitoring plans are not proposed? How will we know if toxics are escaping from NUAD and CAD sites without adequate monitoring?

19 12. The DEIS/DEIR should discuss how remediation plans will be
implemented if seasonal wetland conversion (wetland reuse) is attempted but fails.
Where will the financing come from for such remediation and who will be
responsible for that remediation effort?

20 13. When discussing the impacts resulting from the destruction of seasonal
wetlands, the DEIS/DEIR attempts to minimize these impacts by stating, "...many
functions of the seasonal wetlands can also exist within mature or maturing tidal
wetlands...(pg. 4-125)." This is unsubstantiated. The Petaluma Marsh contains what are
called "high tidal marsh drainage divide ponds". They evidently provide some significant
habitat to waterbirds. Such ponds are very uncommon anywhere else in the Bay. Such
ponds have never been successfully created by man. The DEIS/DEIR must provide data
concerning which bird species are supported by these ponds. Do the ponds provide
habitat to the smaller shorebirds? What evidence is there that we can successfully create
these ponds?

21 14. When discussing species that inhabit salt ponds within the planning area
the DEIS/DEIR omits the California least tern.

22 15. Tables 5.1-2, 5.1-3 and 5.1-4 provide "Overall Guidance" for Rehandling
Facilities, Wetland Restoration and CAD sites, respectively. These Tables list what
should be evaluated at the project sites prior to project implementation ("Evaluation
of proposed site conditions..."). Under this category, the Tables do not require the
evaluation of existing habitat functions at the proposed site.

If mitigation is to be required, one must know what is being impacted. These
Tables should be revised to include an evaluation of existing habitat functions at the sites
proposed for these three activities. The tables should also require mitigation plans
designed to mitigate the project impacts.

These same tables should also list the need for: 1. monitoring plans (is the effort
succeeding); 2. remediation plans (if it is not succeeding, how do we fix it); 3. an analysis
of how the proposed project conforms to, and meets the goals of, the Regional Wetland
Goals Plan.

23 16. The Cumulative Impact analysis section, "8.3.1. Habitat Conversion" is
completely inadequate and the mitigation for the recognized impacts is, again, the
Regional Wetland Goals Plan which we believe to be inadequate mitigation (see #1
above).

24 17. The science of using dredge material to construct wetlands is very new.
The DEIS/DEIR proposes extensive seasonal wetland conversion to tidal wetlands using
dredge materials in the first few years of the LTMS. This is unreasonable considering the
lack of knowledge concerning such efforts and especially considering the possible lack of
success at Sonoma Baylands. The DEIS/DEIR should scale back this program and
instead should propose a few pilot projects to provide the experience necessary to insure
a greater likelihood of success.

25 18. The DEIS/DEIR does not address the issue of how to reduce dredging in
the Bay. Reducing dredging per force reduces the need for dredge material disposal and
thus reduces negative impacts resulting from that disposal. The DEIS/DEIR must address
this issue. It is the best way to avoid or minimize impacts.

26 19. The DEIS/DEIR does not address the impacts of dredging itself. This is a
serious omission. The DEIS/DEIR must address this issue (e.g. see #7 and #8 above).

20. The DEIS/DEIR is so inadequate, so many major issues are either ignored or treated insufficiently that it must be redone. A Final DEIS/DEIR would have to have so much new material that the process would not allow for sufficient public comment nor, particularly, allow for the drafters' to respond to those comments. We therefore request that the DEIS/DEIR be revised or supplemented (with a new comment period), rather than proceeding to a Final EIS/EIR. 27

Thank you for your consideration of our comments.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'Arthur Feinstein', written in a cursive style.

Arthur Feinstein
Program Coordinator

Responses to the GGAS — Golden Gate Audubon Society, letter dated July 16, 1996

1. The preferred alternative, Alternative 3, could actually result in providing significant overall benefits by reversing wetland losses and restoring habitat, where possible. Each dredging/disposal project will be evaluated on a case-by-case basis and restoration projects would not be done if overall impacts are negative.

Please see the response below to GGAS comment 27.

Only a portion of the diked historic baylands contain wetlands (i.e., there are some seasonal wetland components on the individual diked bayland parcels, however, each parcel in itself is not entirely a wetland). The LTMS Draft EIS/EIR is a policy/programmatic document.

Shorebirds that are unable to find high tide and storm refugia in tidal wetlands will make use of other available existing seasonal wetlands. Seasonal wetland loss as a result of tidal wetland restoration may also require mitigation. Please see the response to OAS comment 7 regarding mitigation for the loss of seasonal wetlands, including significant cumulative impacts. A scheduled tidal restoration approach would be implemented to ensure seasonal habitat functions are not lost without alternative sites available for shorebirds during tidal wetland restoration. Please see the response to SC-LPC comment 3i regarding a scheduled restoration approach.

With respect to the cumulative impacts of losing seasonal wetlands, the expected impacts of seasonal wetland habitat loss are discussed in sections 4.4.5 and 5.1.2.1. Cumulative impacts from habitat conversion are discussed in section 8.3.1.

2. The avoidance and minimization of dredged material disposal is addressed through the environmental review of individual projects. Maintenance projects are reviewed through the DMMO and new work projects are addressed separately by each agency through the NEPA/CEQA review process. Unnecessary projects are often avoided and alternatives that reduce the volume of material dredged and disposed are often implemented. Please see the response to MAS comment 19c for more information on avoiding and minimizing dredging and disposal. Compensatory mitigation has been addressed in the Final EIS/EIR. Please see the response to OAS comment 7 regarding the mitigation required for the loss of seasonal wetlands.
3. The LTMS agencies are not relying entirely upon the Wetlands Goals Program or any of the other programs noted in section 5.1.2.1 of the EIS/EIR to determine the appropriate make-up of wetlands in the Bay area. The Final EIS/EIR includes programmatic mitigation measures that address the need for compensation of seasonal wetland loss. The Regional Wetlands Goals program, when completed, will be used as guidance and as another forum in which to address issues associated with the LTMS process. Thus, planning efforts are not based solely upon any program or plan that is presently incomplete. Please see the response to MAS comment 19d for further discussion of the Wetlands Goals Program.
4. The Final EIS/EIR now contains a programmatic mitigation measure for the compensation of seasonal wetland loss. Please see the response to OAS comment 7 for further information on this mitigation measure. As section 5.1.2.1. states, "net gains" in habitat quality will be based upon a variety of planning efforts. Regional and interagency planning efforts, such as the Regional Wetlands Goals program, will be used to determine the appropriate regional goals for different habitat types and what may be a "net gain" in habitat quality.
5. Section 5.1.2.1 of the EIS/EIR discusses habitat conversion associated with restoration projects. A mitigation measure has been added to this section that addresses compensation for seasonal habitat losses. Table 5.1-4 addresses, among other things, the regulatory, mitigation, and monitoring requirements that must be considered for wetland restoration projects. Habitat conversion is not considered a mitigation measure in this table. Instead, this table notes that local, state, and federal

permits and reviews are required, proposed mitigation and monitoring plans that comply with all applicable regulations and policies must be evaluated, consultation per Section 7 of the ESA must be completed, and projects must be evaluated based upon their likelihood of success, as shown through the monitoring of smaller scale demonstration projects in the Bay area.

6. The LTMS agencies have not ignored federal and state policies regarding no net loss of wetlands in the short term and a net gain in wetlands in the long term. In fact, the LTMS agencies plan to ultimately gain wetland acreage in the Bay area by using dredged material to restore and create wetlands.

The LTMS agencies acknowledge that specific measures will need to be taken to ensure that short- and long-term losses in seasonal wetland habitat do not occur as seasonal habitat is restored to tidal wetlands. The Final EIS/EIR now contains a policy-level mitigation measure that requires mitigation for seasonal wetland habitat functions lost to tidal restoration efforts, if those functions are not augmented by the new restoration site (see section 5.1.2.1). Please see the response to OAS comment 7 for more information on mitigation for seasonal wetlands.

The LTMS agencies encourage the avoidance of areas that have a large area of seasonal wetland habitat, thereby reducing the need for extensive mitigation. Table 5.1-4 provides guidance for wetland restoration that outlines how a potential restoration site should be carefully selected and designed. This table also outlines the regulatory, mitigation, and monitoring requirements that must be met, including an evaluation of the proposed projects in terms of their likelihood of success.

The use of a scheduled restoration approach is also encouraged by the LTMS agencies. This approach would result in converting habitat functions slowly. For instance, newly restored or created seasonal wetlands would be provided before seasonal habitat functions are lost as a result of the restoration of a tidal wetland. Please see the response to SC-LPC comment 3i for more information on the use of a scheduled implementation approach for wetland restoration.

7. Statement noted. Please see the response to OAS comment 7.
8. Policy-level mitigation for seasonal wetland loss has been added to Chapter 5 of the Final EIS/EIR. Please see the response to OAS comment 7 for further information on this mitigation. The type of mitigation required would be determined on a project-by-project basis. However, habitat loss is typically mitigated with in-kind creation or enhancement of habitat functions.
9. Please see the response to DOI comment 13 for an explanation of the edits that have been made in the EIS/EIR that clarify the differences between true uplands, seasonal wetlands, and tidal wetlands. Please see section 4.4.2.1 of the document, which outlines the seasonal wetland habitat values at diked historic baylands. The EIS/EIR addressed those upland reuse opportunities determined feasible for the Bay area. Please see the response to MAS comment 17a regarding the upland reuse options determined feasible for the Bay area.
10. Please see the response to BayKeeper comment 2a.
11. Please see the response above to MAS comment 18c.
12. Please see the responses to SC-LPC comments 3e and 3f.
13. The impacts of dredged material disposal at the San Pablo Bay site are addressed in Chapter 3 of the EIS/EIR. Please see the response to MAS comment 20c regarding dredged material disposal at the San Pablo Bay site and the potential impacts from the dispersion of the dredged material.
14. Section 4.3.2 has been edited to address the potential impacts to bird and fish species as a result of in-Bay disposal. Also, see Table 5.1-2 for the timing restrictions on disposal activity in the Bay and Estuary that are implemented to protect special-status fish and bird species. Please note that the

preferred alternative (Alternative 3) would reduce the amount of dredged material disposed in-Bay. Any proposed project, such as a CAD at the Alameda Borrow Pit suggested in this comment, would require a project-specific environmental review that would address the project's impact on wildlife in the area.

15. Please see the response to MAS comment 18d. Studies by CDFG and SAIC in 1996 at Point Molate indicate that eelgrass beds have probably expanded in the last few years (SAIC 1997b). It has not been determined that reduced in-Bay disposal caused the expansion. The COE is doing an eelgrass survey for dredging at the Port of Richmond.
16. Please see the responses to DOI comment 25l and Oakland comment 10. Other issues/questions associated with mitigation banking, such as the provision of financing for perpetuity, will be addressed in the LTMS Management Plan.
17. The EIS/EIR (section 7.4.1.7) correctly notes that the Clean Water Act 404(b)(1) Guidelines (40 CFR Part 230) do not specifically distinguish between projects whose basic purpose is environmental restoration, and other types of projects that permanently fill wetlands for development purposes. The discussion in section 7.4.2.6 about possible changes in the Clean Water Act 404(b)(1) Guidelines (40 CFR Part 230) to facilitate restoration projects was included only to solicit public comments; any actual proposed changes would occur via a formal rulemaking process with full public review. The only change to the Clean Water Act 404(b)(1) Guidelines (40 CFR Part 230) presently contemplated by EPA is a technical correction to the definition of reference sediment, to allow reference sediment collection outside the boundaries of the active disposal site. Please see also the responses to MAS comment 21e.

No changes to the Clean Water Act 404(b)(1) Guidelines (40 CFR Part 230) are currently planned, except as noted in the paragraph above. In the opinion of the LTMS agencies, any changes to the guidelines that may be contemplated in the future to better distinguish between environmental restoration projects and development fill projects should take into account the issue of habitat type tradeoffs, and should ensure that no net negative impacts would occur.

18. Monitoring plans will be addressed in more detail in the LTMS Management Plan. Section 7.1.2 provides a brief description of the types of monitoring plans that are anticipated. Monitoring plans are proposed for these types of projects and are required to evaluate a project's success. Tables 5.1-3, 5.1-4, and 5.1-5 of the EIS/EIR all note the requirement of a monitoring plan for proposed upland/wetland reuse projects. Appendix G of the EIS/EIR provides additional information on the type of monitoring program that should be developed for CAD sites.
19. As Tables 5.1-3, 5.1-4, and 5.1-5 note, mitigation and monitoring plans would be required for each proposed upland/wetland reuse project. The LTMS Management Plan will address monitoring plans in more detail. However, it is expected that a portion of these plans will be devoted to adaptive management, or correcting and fine tuning aspects of a project to ensure its success. In addition, each proposed project would require environmental documentation under the CEQA/NEPA process. Site-specific remediation and monitoring plans would be required for project approval.

Financing and remediation would be the responsibility of the project applicant. Thus, the LTMS agencies would be responsible if they proposed and developed the project. If a private entity or other government agency proposed the project, they would be responsible for any required remediation and financing. Federal and state cost-sharing may also be possible for such efforts, depending on the project sponsors.

20. The LTMS agencies have edited the Final EIS/EIR to include mitigation for seasonal habitat functions lost as a result of tidal wetland restoration (see Chapter 5). This policy-level mitigation measure will ensure that birds will not lose the habitat functions provided in seasonal wetlands. Please see the response to OAS comment 7 for more information on seasonal wetland mitigation. The response to SC-LPC comment 3i discusses the seasonal wetland habitat functions that can be found in mature tidal

wetlands. Also see the response to DOI comment 10b regarding habitat functions required by bird species.

21. Table 4.4-1 (Special Status Species within the Upland Environment of the EIS/EIR Planning Area) notes that the California least tern uses tidal, adjacent upland, Delta Island, and other upland habitat types. This table's footnote states that tidal habitat is considered mudflats or marshes, Delta Island habitat is considered levees, and other upland is considered vernal pool or seasonal wetland habitat. Salt ponds would be classified under other upland habitat. Also please see the response to MAS comment 18p.
22. Please see the responses to OAS comment 7 and SC-LPC comment 3g. Also please note that the mitigation and monitoring plans that would be required for a project would include measures to adaptively manage a site (remediation), if certain aspects of the project are unsuccessful or not functioning as desired.
23. Statement noted. Please see response to OAS comment 7. Also please note that the mitigation and monitoring plans that would be required for a project would include measures to adaptively manage a site (remediation), if certain aspects of the project are unsuccessful or not functioning as desired.
24. Statement noted. Please see the response to DOI comment 11.
25. Please see the response to MAS comment 19c regarding sections of the document that address the need to reduce dredging.

The Management Plan will include sections that address policies and procedures to provide for periodic analysis of (1) the need for dredging of individual channel and berthing areas, and (2) improvements in the technology to reduce dredging needs. Reducing the need for dredging has three aspects: (1) methods to reduce sedimentation in maintained areas, like jet arrays or training walls; (2) re-engineering maintained areas to reduce dredging needs, such as shifting channels to naturally deeper areas, modifying side slopes, etc.; (3) eliminating maintenance dredging of some or all of certain projects, for example, Mare Island is no longer dredged to the depth necessary to accommodate nuclear submarines, and Palo Alto Yacht Harbor was closed due to excessive siltation.
26. Please see the expanded discussion of the impacts of dredging in section 3.1.1.3. See also the response to DOI comment 5.
27. Statement noted, however, the LTMS agencies disagree. It is the agencies' belief that the EIS/EIR is adequate and appropriate for the policy/programmatic decisions being made. Thus, a supplemental EIS/EIR is not required. Please also see the response to Oakland comment 37.

Integrity in Natural Resources

John Hansen, President
Robert Dodds, Secretary
William Struckmeyer, Treasurer

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Santa Rosa, CA 95409
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July 19, 1996

LTMS EIS/EIR Comments
c/o U. S. Environmental Protection Agency
Region 9 (W-3-3)
75 Hawthorne Street
San Francisco, CA 94947

Dear LTMS Coordinator:

Integrity in Natural Resources (INR) appreciates this opportunity to comment on the LTMS Draft EIS/EIR.

This LTMS Draft (Draft) is substantially based on unwarranted assumptions. It is neither clear nor honest in the information presented. As this Draft now reads, no decision maker or member of the public could comprehend the environmental significance or impact of any of the proposed actions. 1

Assumptions premising the LTMS Draft: 2

- 1• That this Draft conforms to the notice published in the Federal Register.
- 2• That 50 years is a reasonable term for dredge spoil disposal policy.
- 3• That wetland restoration projects will become functional wetlands.
- 4• That the economic valuation of wetlands restoration projects can be predicted to be a positive value.
- 5• That "rehandling" (dredged spoil drying) facilities are currently economically feasible, or that there is any predictable future market for dried dredged spoil.
- 6• That this Draft represents a fair presentation of all the pertinent information known to the authors, rather than a presentation selected to reflect positively on the proposed key restoration and reuse components.
- 7• That key agencies in the LTMS have the demonstrated ability to comply with EIS/EIRs.

promoting the integrity of information in the natural resources arena without advocacy of any position or philosophy

- 3a | 1. The published notice in the 1993 Federal Register repeatedly refers to the proposed Draft EIS/ EIR ... "for dredging and dredged material disposal," yet this Draft only addresses dredged material disposal. Where and when will a policy/programmatic level EIS/ EIR be available for public review to address "dredging" as noticed in the Federal Register? There are many unanswered questions about the economic future and longevity of San Francisco Bay's port communities that are completely independent of dredge spoil disposal alternatives. Our Bay's ports may not remain competitive with other West Coast ports regardless of the expediency of our dredged spoils disposal. Where in the Draft are the particulars of the Pacific rim commerce detailed and projections offered?
- 3b | 2. Where in the Draft is there a discussion or presentation of the logic determining that 50 years is an appropriate span to be covered by this policy draft? Construction projects have reasonably presumed useful lives, but this is a policy document without those material constraints. 50 years of San Francisco Bay policy edict may not seem so great until one considers that only 150 years ago there was all but no port here, the Gold Rush hadn't begun and California wasn't a State.
- 4 | Only for the purposes of this Draft and contrary to known economic trends, the port communities of San Francisco Bay will for the next 50 years continue to compete with other West Coast shipping centers . While this is optimistic and remotely feasible, a more prudent approach for this policy Draft would be to specify the current parameters that this Draft assumes in terms of economic, social and physical status. Next, define a maximum life to the policy with requirements that it be reviewed for conformity with the stated parameters at given intervals. Then, if significant changes were found, the existing policy would terminate.
- 5 | 3. The general thrust of this document appears to be the creation of a benevolent approach to the muck scooped off the bottom of the Bay. It is still muck - no matter how well it is dressed up to make it more presentable. Dredged spoil disposal is a problem that demands attention. Dredging to at least some extent, will continue into the foreseeable future and the current methods and locations of spoil disposal for our Bay need improvement. The port community deserves a reasonable predictability and timeliness in agency consideration of projects involving dredging.
- 6 | This Draft chooses to try to dress up dredged spoil as the basis for wetland restoration, the cap for our levees and the coverings for our landfills.
- 7 | What we do know about wetland restoration is that we don't know much. The critical point about wetland restoration is that wetlands are valued for their functions, not for the simple inundation of ground. What looks similar to a valuable wetland, may not attain the functions of a valuable wetland. The state of our knowledge is such that we cannot accurately predict the functional success of wetland restoration with any great degree of reliability. Not only may we end up with a poorly functioning wetland, we may also end up with a failure that requires considerable effort and finances to attempt correction. The Tolay Creek mitigation project never was more than a pond that usurped the tidal action.

in Tolay Creek Now, millions are being poured into this failed private project at public expense.

This is not to condemn the potential for wetland restoration using dredged spoils; rather INR urges the prudent caution necessary to achieve successfully functioning wetlands. A demonstration wetland restoration project currently exists. The Sonoma Baylands project is comprised of a small pilot unit and a large main unit. This dredged spoils project is in its infancy, with the pilot unit exposed to tidal action for just several months and the spoils still consolidating in the main unit. This is a demonstration project that deserves close monitoring by the various agencies and the public. But we need to do more than inundate the ground. This project must mature into a fully functioning tidal wetland before it can be hailed as a successful project and used as an example for further wetland restoration. Twenty years could easily pass before this demonstration project can provide the guidance for successful wetland restorations using dredged spoils.

4. Appendix L in volume 2 of the Draft is the **Benefit Assessment of Alternative Long-term Management Strategies for the Disposal of Dredged Materials from San Francisco Bay**. This work assigns dollar values to the restoration and reuse options of the Draft.

Wetland benefits for San Francisco Bay are derived using annual dollar per acre figures from other studies done in Louisiana, Georgia, Michigan and Florida. No consideration or adjustment for proposed project -to- functional wetland success rate is considered. Failure and remediation costs are not considered.

5. Levee restoration can at best provide only a very limited use for dredged spoils and with the heavy metal and salinity concerns that are noted, the direct use of spoils on other than adjacent levees is relatively insignificant.

The development of new rehandling facilities to significantly enhance the ability to utilize dredged spoils for cover material at landfills was reviewed in the **Reconnaissance Report on the Leonard Ranch Dredged Material Rehandling Facility**, dated August 1995, done by the Army Corps of Engineers. The Economic Analysis of this report has several interesting findings:

"This study is unique for two reasons. First, while the Leonard Ranch has been declared a primary site, many of the findings specific to LR can be applied to sites such as Cargill. Second, while the results themselves are important, the greatest significance of this study may be in the establishment of a procedure for the evaluation of sites for the rehandling of dredged materials. ... Demand for this dredged material is highly dependent on the distance between the processing site and the project site, therefore, potential users must be in close proximity to the site in order for the facility to operate efficiently. Upon further investigation, it was found that no landfill in the project

area is willing to pay for material at the present time. In fact, many landfills charge tipping fees upon disposal.

"The previous report suggested that there was a market for dredged material. According to the LTMS (Long Term Management Study) prepared by Gahagan & Bryant, the market price for such material ranged from \$2.00 to \$5.00/cy. However, further analysis shows that there was never a market for the material and that the market price used in the LTMS study referred only to one instance in which a landfill was willing to pay for material.

"In their report, 'Analysis of the Potential for Use of Dredged Material at Landfills' (October, 1994) the San Francisco Bay Conservation and Development Commission (BCDC) conducted a market analysis of dredged material. BCDC identified 127 Bay and Delta area landfills and of those, eighteen were considered highly feasible for accepting dredged material for reuse purposes. BCDC staff also asked landfill operators if they had ever paid for dredged material, and if they were willing to pay for the material at present. Of the eighteen landfills surveyed in depth, only two claimed they had actually paid or were willing to pay for dredged material. In one instance, American Canyon was willing to purchase suitable material when it was about to close and needed to cap the landfill immediately.

"Previous reports also failed to mention how competition from construction companies precludes a potential market for dredged material. Many landfills often choose metal chips and sand from construction companies which need to dispose of their sand, gravel, wood chips, etc. from their own projects. Nonetheless, based on follow-up discussions with landfill operators, a market for dredged material could evolve given the increasing need to cap and line landfills, but this is not expected to occur in the near future"

The State of California Coastal Conservancy, in an independent in-house study, also arrived at the conclusion that a rehandling facility was not economically feasible at the Leonard Ranch site.

- 11 6. Are other LTMS reports by Gahagan & Bryant suspect? "The principals and associates of Gahagan & Bryant Associates, Inc. (GBA) have gained their knowledge and expertise by having worked in the dredging industry with Gahagan Dredging Corporation (founded in 1896) in addition to other Contractors." from this Draft volume 2, Appendix P Description of Gahagan & Bryant Estimating Model and Model Output. With the extensive work contracted by LTMS to Gahagan & Bryant what precautions have been exercised to guard against potential conflicts of interest?

Why did the authors of this Draft intentionally withhold the information included in the Corps report? Even if they did not personally agree with the findings of the Corps report,
page 4 of 6 pages

shouldn't the decision makers and public using this EIS/EIR know that it is based on disputed findings? 11

Other reports of significance bearing on dredged material disposal and wetland restoration in the Bay include:

- **Feasibility Study of Alternative Wetland Restoration Plans for the Napa Marsh Unit of the San Pablo Bay National Wildlife Refuge**, dated August 10, 1994, by the Department of Civil and Environmental Engineering, University of California, Davis. This study used computer modeling to predict wetland restoration scenarios on the Cullinan Ranch site along Highway 37 west of Vallejo. One of the five scenarios portrayed uses dredged material to expedite the marsh restoration. The scenario utilizing dredged spoils achieved marsh elevations in "approximately the same time" as the two fastest developing scenarios.
- **Contaminant Levels and Associated Biochemical Effects in Outmigrating Juvenile Chinook Salmon in San Francisco Bay, Final Report - Year 1**, April 1993 by Environmental Conservation Division, Northwest Fisheries Science Center, National Marine Fisheries Service, Seattle, Washington. This report was comparable to the first year of a three year study done in Puget Sound. The local study found that PCB contamination was found at levels comparable to the levels identified in the Puget Sound. The Puget Sound study in the following two years found that the contaminant exposure in the sampled fish was related to the sediment contamination of the sampling locations. "Thus, brief exposure to the chemical contaminants in urban estuaries appears to be of significant magnitude to impair significant biological processes in juvenile Chinook salmon. The long-term consequences of these effects warrant future studies." from **Contaminant Exposure and Associated Biological Effects in Juvenile Chinook Salmon (*Oncorhynchus tshawytscha*) from Urban and Nonurban Estuaries of Puget Sound** NOAA Technical Memorandum NMFS-NWFSC-8, dated April 1993

This first year study of San Francisco Bay contaminant loadings in juvenile salmon was a LTMS funded study. Where is it referenced in the Draft? Integrity in Natural Resources has repeatedly sought, without success, to obtain a listing of LTMS funded reports and papers to compare to those referenced in the draft EIS/EIR. Is this privileged information? What other LTMS funded studies and projects are not properly referenced in this draft? 12

7. Assuming a policy level EIS/EIR is approved, what level of compliance by the agencies can the public expect? The US Army Corps of Engineers has set a poor example of compliance with EIS/EIR requirements. 13

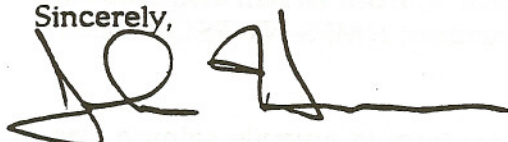
The Sonoma Baylands Wetland Demonstration Project Final Demonstration Project Report and Environmental Assessment spells out on pages 23-24, section 3.12 Monitoring, "The final monitoring plan will be completed prior to the restoration of tidal action to the 14

- 14 pilot unit." An unsigned "draft interim" monitoring plan was all that was available this last January when the pilot unit levee was breached. There is not a final monitoring plan available yet.
- 15 This Draft policy EIS/EIR is misleading and biased. Decision makers and the public deserve and expect a clear depiction of the current status and proposed alternatives that provides a reasonable understanding of what the impacts and implications of each may be. Painting a pretty picture will not make a difficult problem disappear.

This Draft and the noticed draft both miss the larger picture. We the people of the greater Bay Area need the wisdom and leadership to seek out a future, ripe with economic opportunity for all, assured that the varied treasures that drew us to this land remain for our children and their offspring. The future of the port community's role in the Bay Area is not static. INR senses that there may be many comparisons to the Bay's port community today and the timber industry of just a few decades ago. The timber industry understood then that it could not continue as it had for much longer. Those, with vested interests in the way it was, pushed to maintain the status quo. Today, many in the timber industry wish there had been a gradual and directed effort to plan and move ahead of a changing world.

The port communities will continue to play a major role in the Bay Area and dredging will continue to be part of that industry. INR urges the courageous to step forward, not only to seek direction for the tailings of that industry, but to chart a path that can allow the industry and our Bay's people a prosperous future.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Hansen', with a long horizontal line extending to the right.

John Hansen, President

Responses to the INR — Integrity in Natural Resources, letter dated July 19, 1996

1. Statement noted; please see the responses to the specific concerns below.
2. The LTMS agencies agree with these assumptions.
- 3a. In response to why the EIS/EIR focuses on disposal and not dredging, the Notice of Intent said that the EIS/EIR would address dredging, but through public scoping and further agency evaluation, it was determined that the EIS/EIR would focus primarily on dredged material disposal. However, in response to comments like this, we have expanded the discussion of potential dredging impacts in the Final EIS/EIR (see the new section 3.1.1.3). Please see also the response to DOI comment 5.

In response to the question about Pacific Rim commerce and how the dredging/disposal will affect ports' economic futures, one goal of the LTMS as stated in section 2.1.2 of the EIS/EIR is to maintain in an economically and environmentally sound manner those channels necessary for navigation in San Francisco Bay and Estuary and eliminate unnecessary dredging activities in the Bay and Estuary.
- 3b. As discussed in Francingues and Mathis (1989) and cited in Chapter 2, 50 years is an appropriate time frame for programmatic evaluation and planning. However, the LTMS agencies agree that the 50-year time period is a long time and the plans for implementing LTMS should be updated as needed. The LTMS Management Plan will be updated as needed during this period to reflect changing trends.
4. Please see the response to BayKeeper comment 2a.
5. One of the goals of LTMS is to establish a cooperative permitting framework for dredging and dredged material disposal applications. In an effort to attain this goal and to improve regulatory certainty over the permit and application process for dredging and disposal projects, the LTMS agencies have created a pilot Dredged Material Management Office (DMMO). We believe the DMMO has greatly improved the process for both applicants and agencies, thereby reducing the time it takes to plan projects. Please see the response to Redwood comment 5f(1).
6. The feasibility of dredged material for upland/wetland reuse has been documented through a variety of LTMS technical studies, pilot and final projects. Throughout the Draft EIS/EIR, the benefits of decreasing the amount of dredged material that is disposed in-Bay is discussed. In cases where dredged material can be reused in upland/wetland environments and provide required construction or fill material, environmental benefits can be achieved.
7. Statement noted. The LTMS agencies intend to proceed with wetland restoration in a manner that will ensure ecological success as well as the reuse of dredged material. Section 5.1.2.1 of the EIS/EIR now addresses upland habitat conversion that is associated with restoration projects. In addition, Table 5.1-4 (Overall Guidance for Wetland Restoration) has been revised to include, as a criterion, the evaluation of a proposed restoration project's likelihood of success. Also see the responses to DOI comment 9.
8. Statement noted. Please see the responses to DOI comments 9 and 25a regarding the determination of a project's success. The LTMS agencies are continually learning more about aspects of wetland restoration projects, including their costs. Additional information on projects conducted to date, including projected and actual costs, is provided in the Final EIS/EIR. See the new discussion of the Sonoma Baylands wetlands restoration project in Appendix K.2. Also see the response to NHI comment 14c.
9. Please see EIS/EIR section 4.4.2.4 and Appendix N.
10. Statement noted.

11. State and federal requirements concerning potential conflicts of interest are followed in all contracts supporting the LTMS studies, this programmatic EIS/EIR, and future work. Ultimately, the government retains both control over and responsibility for the content of, and decisions made in, this EIS/EIR and subsequent implementation documents. Note that numerous contractors have worked on LTMS activities, in addition to Gahagan & Bryant.

A new section of the EIS/EIR, section 7.2.3 (Other Implementation Efforts), has been added to discuss the COE Reconnaissance Study for a dredged material rehandling facility at Leonard Ranch, and two alternative locations. In addition, this section also describes a new effort by the California Coastal Conservancy and others to facilitate designation of a rehandling site and/or an upland disposal facility at other locations.
12. The Final EIS/EIR has been revised to include more information on the LTMS work groups; see new section 2.1.4. Note that LTMS overall is broader than this EIS/EIR, as described in section 2.1.3 (this EIS/EIR constitutes Phase 3 of the overall 5-Phase LTMS approach). The EIS/EIR cites studies that are relevant to the programmatic decision being made now. Other decisions or documents will reference all studies relevant to them.
13. The alternative selected in this EIS/EIR will be implemented by the LTMS agencies to the maximum extent possible at any time, via subsequent Management Plans and related actions. However as described in Chapter 7 (Implementation of the Selected Alternative), in order to achieve the long-term goals defined in Alternative 3, certain constraints must be eliminated and beneficial reuse sites must be available.

However, the LTMS agencies do and will take appropriate compliance actions on individual projects in addition to the efforts described in the new discussion of the transition (section 6.5) and implementation (Chapter 7).
14. The 1997 Annual Monitoring Report on Sonoma Baylands is summarized in Appendix K.2; monitoring reports for 1996 and 1997 are available at the San Francisco District, Corps of Engineers.
15. Statement noted. Please see the response above to DOC comment 2. Please also see the responses below to Krone comments 3 and 9a.



Marin Audubon Society *Box 599* *Mill Valley, California 94942-0599*

July 18, 1996

LTMS EIS/EIR Coordinator
c/o U.S. Environmental Protection Agency
Region 9, (W-3-3)
75 Hawthorne Street
San Francisco, CA 94947

RE: LTMS DRAFT EIS/EIR

Dear LTMS Agencies:

The Marin Audubon Society has reviewed the LTMS EIS/EIR for the disposal of dredged material in the San Francisco Bay Region and submit the comments in this letter for your consideration. We appreciate the time LTMS staff has taken to hear environmental concerns. We appreciate your consideration of and response to our comments.

REVIEW OF MAJOR ISSUES

1. The major flaw in the NEPA/CEQA analysis is the failure to adequately address mitigation for impacts of loss of seasonal wetlands due to placement of dredged material on seasonal wetlands. The EIS/R suggests that these impacts be addressed on a project by project basis or through reliance on various regional planning processes. A primary reason neither of these approaches is acceptable is because none are completed so no one knows what their goals will be, whether they will be acceptable and even whether they will agree with each other. Furthermore, only a few of the plans mentioned are actually plans focused on habitat, the Regional Wetlands Ecosystem Goals Project and the USFWS Endangered Species Recovery Plans. Most of the other plans mentioned on page 4-123 while they may involve wetlands, they are not focusing on the habitat needs of wildlife.

Furthermore, the failure to address seasonal wetland loss in a policy/programmatic way in this EIS/R not only does not comply with NEPA avoidance, minimization and compensation sequence, but it fails to provide the supporting analyses and policies necessary to support requiring mitigation on a project by project basis. This approach also establishes the framework for applicants to try to avoid replacing the seasonal wetlands lost and would set the stage for constant battles over projects.

Instead, we strongly recommend that this EIS/R develop policy/guideline that commits to having each project restore the acreage of seasonal wetlands filled by the placement of dredged material. These could be restored on site using dredged material to create seasonal wetlands. Dredged material could even be used as a base to create uplands which are also essential components of wetland habitats for many species. The policy should address creation of complete wetland habitats, which includes some upland, seasonal and riparian components where feasible and appropriate.

The guidelines should remain in effect until there are acceptable goals and Wetlands Management Plan. There are risks with the regional goals approach so this should only be acceptable after careful deliberation by agencies, industry and environmental representatives.

R-511

A Chapter of National Audubon Society



RECYCLED PAPER

- 4 | What are the pollutants of concern with alternating wetland and drying of pollutants in dredged materials that was brought up at the recent Workshop? If this is determined to be a problem, we suggest that materials with contaminants of concern not be used for seasonal wetland creation. Using material with the pollutants of concern could also be avoided by using on-site material excavated from a location where tidal wetlands would be restored for creating seasonal wetlands. The borrow area could then be filled with dredged material.
- 5 | With regard to mitigation options, while we have no objection to designing shallow ponded areas within tidal marshes and, in fact, believe efforts should be made to restore some of these ponds particularly in areas where they existed historically, we do object to considering such ponds as mitigation for the loss of existing seasonal wetlands. There is no data demonstrating that these tidal ponds provide the same habitat functions for species that use seasonal wetland nor is there any evidence that they can be recreated. Until this information is provided, these should not be used as compensatory measure for losing seasonal wetlands. The Management Plan should provide regulatory certainty not only to ports but to the public interested assuring the protection of environmental resources.
- 6 | 2. The benefit/risk analysis presented in Chapter 6 is not acceptable because it is a bias analysis. It emphasizes benefits and ignores the potential for adverse impacts. Impacts should be the term used instead of "risks." "Risks" does not convey the full meaning of issues. While "benefit" is an important concept, benefits do not diminish, outweigh, cancel out or compensate for impacts. Simply because a project may have a substantial benefit, does not mean risks are avoided or minimized. In fact, the alternative (3) with the greatest identified potential benefit also has the greatest risk of destroying existing habitat. They are separate and distinct effects of a project. Further, although the assumption is that benefits would accrue from placing dredged material in diked baylands, these benefits are not yet proven. There has not been a clearly successful marsh restoration from such reuse. Therefore, benefits should be considered potential, until proven.
- 7 | 3. Disposal is only part of the dredging-disposal issue. Dredging has adverse impacts of its own, which should also be considered as part of this programmatic/policy document. Without dredging there would be no need to even be doing this LTMS and EIS/R effort. Therefore, this EIS/R should address both dredging and disposal. To do otherwise is a fragmented approach which neither NEPA or CEQA allow.
- 8 | The EIS/R addresses reducing dredging only in terms of the Corps evaluating their projects to determine which are "unnecessary." This is an ineffective solution because the Corps is charged with implementing dredging projects and actually is supported by funding from these projects. While we fully support evaluation of Corps projects, this should be a more open process with input from all interest groups.
- 9 | 4. Policy level guidance should be developed to ensure that dredging and disposal needs do not increase but are decreased wherever possible:
- discouraging applicants from new dredging projects.
 - encouraging the reduction of existing dredging projects.
 - approving only new marinas in locations that would require no dredging.
 - allowing no new marinas or other projects requiring dredging in high sediment areas should be denied.
 - encouraging ports, and perhaps marinas, to consolidate where appropriate.
 - evaluating the need for disposal projects.
- 10 | 5. True upland alternatives should be more fully developed and addressed. More attention must be focused on developing other options instead of simply

10
focusing on diked bayland as a disposal option. Use of already developed uplands on closing military bases which could be developed after placement, should be investigated. Landfill opportunities should be more thoroughly pursued as another option. The DMMO should devote some staff time to pursuing options for these true upland reuse as well as for rehandling facilities. It is important, however, in the zeal to find disposal locations that sites planned for private development not appear to be endorsed. This would be seen and/or used as "promoting" the development which would be undesirable for LTMS reparation. We are alerted of this possibility by the appearance of Bel Marin Keys Unit 5 on a list of potential sites in a recent LTMS document. This is an extremely controversial project and being seen as supporting it would result in bad press for LTMS, or and could have worse implications.

11
6. We appreciate the distribution to the Work Group of the Draft Outline for the Management Plan. This draft is a good start in the development of a Management Plan. In addition to the items identified, we suggest that the following be added: LTMS goals, policy guidelines for disposal of material to ensure limits are not exceeded, guidelines for choosing sites, policies for mitigating seasonal wetlands, guidelines for public participation, guidelines for choosing disposal sites and for determining which projects to become involved with, guidelines for choosing disposal and rehandling facility sites, a system for allocating disposal volumes, schedule and triggers for review and revision of the Plan, procedures and criteria for updating testing procedures, pollutants to be tested, and discharge limits, and provision for monitoring and enforcement.

12
7. A 50 year planning period is far too long. Section 1.9.2 Page 1-18: It is not sufficient to simply say that the Management Plan will be periodically reviewed and updates as necessary to reflect changing statutory ... (and other) conditions." this explanation too vague. We recommend a specified time, every 10 years for example, after which review and possible revision would take place. The process by which the review would take place should also be identified. The process should include the public and update of policies based on changes in conditions with particular note of changing conditions.

13
8. MAS generally supports the approach of reusing dredged material for beneficial purposes to avoid adverse impacts to bay and ocean aquatic environments. However, we believe it is premature to choose a preferred alternative until additional work is done to: develop real upland sites, including landfills; develop specific guidelines to ensure contaminants do not adversely impact natural resources; show how plans would protect endangered, special status and migratory species habitat functions; ensure seasonal wetland loss is mitigated to benefit native wildlife; ensure the success of wetland creation is demonstrated; and develop testing and disposal standards for using NUAD materials. We suggest that an interim preferred alternative be developed to be used in the meantime. We suggest that the preferred alternative be "working toward Alternative 3" with the commitment to addressing deficiencies before 3 is actually adopted.

14
9. Model Mitigation and Monitoring plans or at least policy guidelines should be developed and presented with this EIS/R. The importance of having monitoring and mitigation guidelines is emphasized by the history with Sonoma Baylands. Repeating of this pattern must be avoided. Recommendations for mitigation guidelines is addressed in many locations throughout this comment letter.

SPECIFIC COMMENTS ON THE EIS/R

CHAPTER I EXECUTIVE SUMMARY

Page 1-2 The NEPA criteria for addressing impacts should be following. This includes avoidance and mitigation.

16 | CHAPTER 2 PROPOSED PROJECT AND ALTERNATIVES

- 16a | 2.4.2.2: An overall dredge material management system must include some provision for limiting, controlling and/or reducing dredging itself should be added to the components mentioned in the last paragraph p 2-13.
- 16b | 2.4.2.5: Is any dredging anticipated to be continued by the Navy in view of the base closures? If so, how much? With no cost sharing for work done by the Navy how will it be assured their dredging is dealt with like Corps projects?
- 16c | 2.5: Evaluation Criteria for EIS/R Alternatives. Simply because the degree of actual adverse impacts to Estuary resources associated with current volumes of in-bay dredge is impossible to accurately quantify, does not relieve agencies from identifying these impacts to the extent possible. Similarly, this evaluation should be applied to other dredge disposal locations. The analysis must identify both, and then either avoid or mitigate both. One does not cancel out the other. It appears that benefits cancel out impacts under current system.
- The potential "benefits" and "impacts" associated with each of these criterion must be identified programmatically, i.e. types of impacts, such as loss of seasonal wetlands from placing dredged material on diked baylands, that could be anticipated from each action. Criterion A is the only one that address environmental impacts and Criterion B (Regulatory Certainty) and C (Economic Effects) both focus on benefits to the dredgers. Ensuring regulatory certainty and effects on socioeconomic sectors could lead to reduced environmental analysis and, consequently, to increased impacts to Bay, Ocean and seasonal wetland resources.
- 16d | 2.6.1: Issues Addressed in Policy Level Mitigation Measures. This section states that reducing "unnecessary" dredging is a goal of the LTMS effort, however, there are no criteria that could be applied to filter out unnecessary dredging projects. How is "unnecessary" defined? Analysis of dredging needs on a project specific basis (page 2-17) is not adequate to make this assessment. LTMS should develop an overall goal that dredging not be increased and, in fact, continue to be reduced. Specific criterion for meeting this goal should also be developed. For example, one criterion could be that new marinas or ports must be located in areas that have deep water access so that no dredging is required.
- 16e | Habitat Conversion and Siting. It is important that life cycle functions for wildlife not be lost by losing any habitat type. Evaluating proposed habitat restoration projects in the context of regional habitat goals still being developed may work, but it is premature to base the LTMS plan on this approach until the goals are approved by all interests.
- 16f | What does "Only habitat restoration projects having positive overall net benefits will be supported as LTMS projects" mean? How would adverse impacts be addressed in this criterion? Does this mean that if dredged material is not used for some restoration projects LTMS would oppose them?

17 | CHAPTER 3 DREDGING AND DREDGE MATERIAL CHARACTERISTICS

- 17a | 3.1.1.4, page 3-8: Categories of Beneficial Reuse. While we agree that dredged material can be a valuable resource and that the 10 categories defined here offer reuse opportunities, most of the LTMS reuse efforts, as reflected in this discussion, have been devoted to analysis of habitat restoration on diked baylands with some attention to landfills.
- 17b | 3.1.1.5: Feasible Reuse Alternatives. LTMS should devoted more time and effort to true upland reuse options, i.e. options that would not result in the

loss of existing wetland habitat. In particular, the potential to place material on uplands that have already been developed and which can then be redeveloped with buildings (such as at closing military bases), is promising. spend more time on developing true upland disposal options, such as construction and industrial uses and landfill cover.

17b

3.2.2: The Movement and Fate of Sediments in the Estuary System. This discussion should acknowledge that dredged material disposed of in the Bay at the three approved disposal sites is also a source of resuspended sediments and, therefore, increased sedimentation throughout the Bay.

17c

3.2.3.1, end of column one page 3-55: Determining whether contaminants in dredged material may pose a threat of adverse impacts is more than a function of determining: (1) the potential for contaminants to cause adverse effects at the placement site; and (2) the practicability of control measures that may reduce or eliminate impacts. There is also the potential for impacts to extend far beyond the placement site. Bioaccumulation in organisms could adversely impact fish and other aquatic organisms that in sediments and species that feed on creatures that foraged in these sediments but then travel some distance away from the placement site. How is the potential for bioaccumulation of contaminants being tested and considered in the impact analysis?

17d

3.2.4, page 3-66: The discussion in the second paragraph of differences between placement of dredged materials in upland vs aquatic environments should differentiate whether the "upland" refers to actual upland or diked historic baylands.

17e

Discuss measures that would be taken to correct collapsed containment levees to avoid or limit the release contaminated material to an aquatic environment. The potential for failure of cover measures and contaminants leaching or escaping to adjacent waters should be addressed. Are there any projects which have successfully confined contaminated materials in aquatic locations? If so where?

Page 3-78: The updated status of the Interim Testing Guidelines. The allowable limits for contaminants for aquatic disposal should be presented.

17f

3.2.5.1, page 3-82: The Additional Sampling and Analysis Considerations discussion mentions a practice of compositing sediment samples from an area into a smaller number for testing purposes. Couldn't this have the effect of diluting some contaminants?

17g

Page 3-82: Additional Sampling and Analysis Considerations. The first paragraph, fourth sentence, which states that additional upland/wetland sediment tests have been developed, needs additional explanation. Why would an aquatic disposal site, namely a wetland, be lumped with true upland locations? The nature and significance of adverse impacts to environmental resources would be substantially different under these two disposal options, so they should not be considered categorically identical.

17h

3.2.5.4: Opportunities to "Streamline" Testing Needs: The discussion should address the potential for weakening environmental protection as a impact of "streamlining," and address guidelines or other measures to ensure that streamlining does not result in adverse environmental impacts in the long term.

17i

3.2.6.1: Confined Aquatic Disposal: Describe locations where confined aquatic disposal has worked successfully and is still in place. Describe the similarities and dissimilarities in the conditions at SF Bay sites and the current sites? with regard to such characteristics as current, velocities, weather, etc. Have any CDF's failed?

17j

- 18a | 4.3.1.4, page 4-3: Tidal Salt Marshes are found in more than "several" locations around the Bay. With the exception of urbanized areas of East Bay, San Francisco, Sausalito, San Rafael and the Tiburon Peninsula which is rocky shoreline, at least a fringe of tidal salt marsh exists along the rest of the shoreline.
- 18b | 4.3.1.4, page 4-41: Do California and Western Gulls nest in or around salt ponds? Does the statement in column 2, paragraph 2, sentence 2 mean that salt ponds or levees are "less valuable than marsh habitat"? While these habitats are different, both provide components of functions needed for different species and should be considered complimentary not in competition.
- 18c | 4.3.1.5: Biological Resources of the San Francisco Estuary, Special Status Species: This discussion on pages 4-45 to 4-50 addresses at least 5 species of native fish that declining but are not mentioned on Appendix Table J-2, Resources of Concern Associated with Dredged Material Disposal. The following native species are identified as being Special Status or in a state of decline: Fall-run Chinook Salmon, Spring and Fall Salmon, Delta Smelt, Sacramento Splittail, Green Sturgeon, and Starry Flounder. All of these species should be addressed on the table.
- 18d | 4.3.2.1, page 4-57: Central Bay, Eelgrass Beds. This discussion states that eelgrass beds are sensitive to the disposal of dredged material. Figure 4.3-7 shows the largest, of a total of only three, eelgrass beds in the Bay as being off the shore of Richmond in San Pablo Bay near the San Pablo Bay disposal site. The EIS/R should discuss the potential for disposal at the San Pablo Bay site to adversely impact this eelgrass beds. How close is the disposal site to the eelgrass bed? At what tidal stages would material be carried to this bed?
- 18e | Page 4-60: Central Bay, Wildlife Resources. This section should be revised to include a discussion of the wildlife resources on and around Alcatraz Island which is immediately adjacent to the Alcatraz disposal site. Seven species of pelagic and water birds (Black Oystercatcher, Brandt's and Pelagic Cormorant, Pigeon Guillemont, Western Gull, Black-crowned Night Heron and Great Egret, breed on this island and many forage in the waters nearby. If most dredged material is disbursed from the site, as stated on page 4-64, then a considerable amount is suspended in the vicinity. Discuss the impact of this continue resuspension on birds nesting at Alcatraz and other species expected to use the area. There has been indication that young of some nesting species may not be getting enough to eat. Where do birds forage in the vicinity of the island? Is there any restriction on disposal during breeding season? How frequently can disposal events occur during different times of year? What is the impact on fish resources near the island during disposal plumes? Discuss the impact of fish leaving during disposal events on these higher food-web species. How long could fish be absent? What time restrictions would protect these species? Include a table showing window's of opportunity for the Alcatraz area species. A map should be included showing submerged lands under GGNRA's jurisdiction and the boundaries of the Alcatraz disposal site.
- This discussion should also recognize that the Alcatraz Island area, being deep water and located where the estuary meets the ocean, supports a unique array of species that utilizes both deep water ocean and more protected deep water embayments. Use by Common Murre, Pigeon Guillemont, diving birds including all species loon and grebe. Other species, such as Common Murres which teach young to feed in that vicinity, can also be impacted. The EIS should address these potential impacts.
- 18f | 4.3.2.2, page 4-61: San Pablo Bay. The SP Bay disposal site is considered dispersive. However, dispersion at this site means the material is