Vol. 3

Responses to Comments
Final Supplemental Environmental Impact Report/
Environmental Impact Statement

Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

April 2003



California State Coastal Conservancy

U.S. Army Corps of Engineers

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Responses to Comments

Final Supplemental Environmental Impact Report/Environmental Impact Statement

Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

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Chapter 1
Introduction

General Information

This document presents responses to comments submitted by agencies, individuals, and organizations concerning the Draft Supplemental Environmental Impact Report/Environmental Impact Statement (SEIR/EIS) for the Bel Marin Keys Unit V (BMKV) Expansion of the Hamilton Wetland Restoration Project. The Draft SEIR/EIS, prepared for the California State Coastal Conservancy (Conservancy) and the U.S. Army Corps of Engineers (Corps), was made available to the public and regulatory agencies for review and comment during the comment period (July 19, 2202 to September 13, 2002).

The Guidelines implementing the California Environmental Quality Act (CEQA) require that written responses be prepared for all written and oral comments received on a Draft EIR during the public review period. CEQA Guidelines Section 15132 specifically states:

> The Final EIR shall consist of:
>
> a. The Draft EIR or a revision of that draft.
>
> b. Comments and recommendations received on the Draft EIR either verbatim or in a summary.
>
> c. A list of persons, organizations, and public agencies commenting on the Draft EIR.
>
> d. The response of the Lead Agency to significant environmental points raised in the review and consultation process.
>
> e. Any other information added by the Lead agency.

Similarly, the Council on Environmental Quality Regulations Implementing the National Environmental Policy Act (NEPA) require that a final EIS be prepared responding to all substantive comments received on the draft and also discussing any responsible opposing views on issues raised. Specifically, 40 CFR 1503.4 states:

> An agency preparing a final environmental impact statement shall assess and consider comments both individually and collectively, and shall respond by one

or more of the means listed below, stating its response in the final statement. Possible responses are to:

1. Modify alternatives including the proposed action.
2. Develop and evaluate alternatives not previously given serious consideration by the agency.
3. Supplement, improve, or modify its analyses.
4. Make factual corrections.
5. Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response.

This Final SEIR/EIS has been prepared in compliance with these Guidelines and Regulations, as well as with applicable procedures of the Corps and the Coastal Conservancy.

Comments on the Draft SEIR/EIS were received in letters submitted during the public comment period. A public hearing was also held on August 21, 2002, in Novato, California. Oral comments were received at the public hearing and were recorded on a transcript. Comments received and the transcript of oral comments made at the public hearing, along with the lead agencies' responses to the comments, are included in chapter 3 of this document.

This document is organized as follows.

- Chapter 1. Introduction
- Chapter 2. Master Responses
- Chapter 3. Response to Comments

Master Responses

Chapter 2 of this document contains detailed master responses to the following 18 general issues, which were raised in multiple comments.

1. Preferred Alternative
2. Flooding (Novato Creek and Pacheco Pond)
3. Flood Zoning and Marin County Flood Control and Water Conservation District Easements
4. Bel Marin Keys South Lagoon Overflow and Bel Marin Keys Community Services District Drainage Easement
5. Flood Insurance

6. Novato Creek Morphology (Levee Breach and Navigation)
7. Pacheco Pond Outflow Diversion
8. Levee Heights and Locations
9. Visual Aesthetics
10. Dredged Material Quality and Sources
11. Habitat Design
12. Existing Wildlife Habitat
13. Trails and Use
14. Interpretive Center Location
15. Mosquito Breeding Habitat and Pest Displacement
16. Construction Disturbance (Air, Noise, Traffic)
17. Agriculture
18. Climate Change

Individual Responses

Chapter 3 of this document contains the comments received by the lead agencies during the comment period (July 19, 2002 to September 13, 2002) and responses to substantive issues raised in the comments. Copies of comments received in writing are included in the chapter. Comments provided orally at the public hearing were recorded by a court reporter. The transcript of the comments is included in the chapter. Where an agency, individual, or organization provided multiple written comments or provided both written and oral comment at the public hearing, the comments were consolidated together to provide consolidated responses to the commenting party in one location.

The comment letters are grouped in 4 categories: federal agencies, state agencies, local agencies, and individuals and organizations. The letters are organized alphabetically within each category by commenter name. Each comment letter has been designated with a letter and a number. The letter reflects the category, and the number reflects where the comment letter falls in the category. For example, the first letter in the federal category is F-1, the second is F-2, and so on. Individual comments in each letter are numbered sequentially. For example, the first comment in comment letter F-1 is F-1.1, the second is F-1.2, and so on. The comment letters are listed below.

Federal Agencies

F-1 U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration (NOAA)
F-2 U.S. Environmental Protection Agency (USEPA), Region IX
F-3 U.S. Department of Interior, Office of Environmental Policy and Compliance (OEPC)

State Agencies

S-1 California Department of Fish and Game (DFG)
S-2 Office of Planning and Research, State Clearinghouse
S-3 California Department of Toxic Substances Control (DTSC), July 26, 2002
S-4 California State Lands Commission (SLC)
S-5 San Francisco Regional Water Quality Control Board (SFRWQCB)
S-6 California Department of Toxic Substances Control (DTSC), September 13, 2002
S-7 California Historical Resources Information System (CHRIS)

Local Agencies

L-1 Bel Marin Keys Community Services District (BMK CSD)
L-2 Port of Oakland
L-3 North Marin Water District (NMWD)
L-4 Association of Bay Area Governments, Bay Trail Project
L-5 Novato Sanitary District (NSD)
L-6 Marin-Sonoma Mosquito and Vector Control District (MSMVCD)
L-7 City of Novato
L-8 Marin County Flood Control and Water Conservation District (MCFCWCD)
L-9 Marin County Community Development Agency (MCCDA)

Individuals and Organizations

I-1 Leila Tweed
I-2 Kristine Jackson
I-3 Lisa and Tom Mowbray
I-4 Duane Collins
I-5 N.C. Nicholas
I-6 Howard Hall
I-7 Mark Kubik
I-8 Richard Cohen
I-9 Edward Mainland
I-10 Robert Farnham
I-11 G. Kroneberger

1	I-12	Jeffory Morshead
2	I-13	Guenther and Ursel Braun
3	I-14	Nancy Kubik
4	I-15	John Boscacci
5	I-16	Hugh Smith
6	I-17	Evelyn Becker
7	I-18	Tom Harrison
8	I-19	Madeline Thomas
9	I-20	Jean Ducommon
10	I-21	Tom Jackson
11	I-22	Madeline Swartz
12	I-23	Robert Forsythe
13	I-24	Susanne Garber
14	I-25	Don Swartz
15	I-26	Vince Lattanzio
16	I-27	Karla Jacobs
17	I-28	Anna Lang
18	I-29	Mary Serpa
19	I-30	Dianne Kling
20	I-31	Rudolph & Elisabeth Sheldon
21	I-32	Anonymous Written Comments Submitted at Public Hearing
22	I-33	Andrea Vincent
23	I-34	Friends of Novato Creek
24	I-35	Marin Audubon Society
25	I-36	Marin Conservation League

Chapter 2
Master Responses

Introduction

This chapter contains master responses concerning subject areas for which multiple comments were received on the Draft SEIR/EIS. Many of the subjects noted below are multifaceted. The master responses are intended to consolidate in one discussion the responses to key issues raised in multiple comments. Responses to issues that fall outside of the master responses are addressed in chapter 3. Underlined text identifies where revisions have been made to the Draft SEIR/EIS. The 18 master responses are listed below.

1. Preferred Alternative
2. Flooding (Novato Creek and Pacheco Pond)
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17. Agriculture
18. Climate Change

1. Preferred Alternative

After a review of the Draft SEIR/EIS analysis; the comments received from agencies, the public, and interested organizations; the response to comments presented in this document; and the revised analysis in the Final SEIR/EIS, the project sponsors have selected Revised Alternative 2, as presented below and as described in chapter 3 of the Final SEIR/EIS, as their preferred alternative. This alternative is determined to best meet the Corps' and Conservancy's project goal and objectives while responding to a number of concerns raised by the local community.

Alternative 2, as described in the Draft SEIR/EIS, has been revised as follows.

a. **Interpretive Center**. The location of the interpretive center/trailhead has been moved from the northwest corner of the expansion site to the City of Novato property west of the seasonal wetland area on the Hamilton Wetland Restoration Project (HWRP) site. This location is the same location included in Alternative 1, and was selected because of its proximity to other planned trails; its separation from the Pacheco Pond wildlife area; and because it is likely to pose less traffic, noise, or other disruptions to adjacent residential areas.

b. **Bay Trail**. The route of the Bay Trail is the same as in the Draft SEIR/EIS (around the east side of Pacheco Pond) except that the last portion of the Bay Trail would go around the west side of Headquarters Hill. This minor change was added to avoid terminating the trail at a blind curve on Bel Marin Keys Boulevard, to follow the designated trail alignment in the City of Novato and Marin County general plans, and to reduce any associated disruption to the residential areas in Bel Marin Keys.

c. **No Spur Trail**. The spur trail to Novato Creek has been deleted from Alternative 2 to reduce the potential for adverse public access impacts on restored habitats and to reduce potential disruption to nearby residential areas in Bel Marin Keys.

d. **Lower South Lagoon Levee**. The improvement to the south lagoon levee would now consist of improving the existing levee itself to an initial construction height of 6 feet national geodetic vertical datum (NGVD), (rather than 10 feet NGVD as proposed in the Draft SEIR/EIS) with a levee crest 50 feet south of the existing levee. This height was selected to allow for settlement to a design height of 5 feet NGVD, which is consistent with the existing levee height, except for several low spots on the levee. The overflow structures would still be included to allow outflow from the south lagoon

when the water level exceeds 1.5 feet NGVD. These structures would be built into the improved levee structure itself. This change was made because it would achieve the heights needed for consistent lagoon containment, and also because the lowered construction height would reduce the visual impact on nearby residential/community views.

e. **Lower New Levee**. The new outboard levee to be constructed to separate the tidal restoration area from the rest of the site would be constructed to an initial height of 10 feet NGVD, instead of 12 feet NGVD, for a lowering of 2 feet. This change in initial height was implemented to reduce the visual impact on nearby residential/community views. The design elevation of the new levee would remain at 8 feet NGVD as necessary, regarding tidal flooding protection. In order to maintain the 8 feet NGVD design height, it would be necessary to raise the levee to 10 feet NGVD about 6.5 years after initial construction and again just prior to breaching of the outboard levees, which is anticipated to occur approximately 13 years after commencement of construction. This will allow for the initial settling to occur during the construction period and maintenance of the design height.

f. **New Levee Located further South From South Lagoon**. The new outboard levee adjacent to the tidal marsh restoration area has been relocated to a location at least 1,500 feet from the Bel Marin Keys (BMK) south lagoon levee. The purpose of moving the outboard levee is: a) to reduce the visual impact on nearby residential/community views; b) to expand the capacity of the swale to receive potential overflow from the BMK south lagoon and c) to expand the upland and transitional habitat component. The prior swale was about 230 acres in size and contained 190 acres of upland and 40 acres of seasonal wetland. The revised swale would be about 388 acres in size and would contain about 247 acres of upland and 141 acres of seasonal wetland. This would also change the overall site acreage totals (see table 3-2 in the Final SEIR/EIS).

g. **Primary Construction Access Route via Hamilton** . The primary construction access route would be from Nave Drive to New Hamilton Parkway, around Landfill 26 and via the Hamilton Army Airfield (HAAF) site instead of Bel Marin Keys Boulevard. The designation of the primary access road would reduce the amount of traffic from construction vehicles on Bel Marin Keys Boulevard. The secondary construction access route would be via Bel Marin Keys Boulevard.

h. **Improvements to Levees Connected to South Lagoon Lock.** Improvements to approximately 440 feet of existing levee on Conservancy-owned land west of the BMK south lagoon lock have been added and are now included in the preferred alternative. The purpose of improving the existing levee is to prevent bypass flow from Novato Creek in the immediate area west of the lock, which could otherwise increase south lagoon high water levels, and thus increase the amount of potential flow into the BMKV swale. On the east side of the lock, the project design calls for improving the levee

along Novato Creek and the lagoon outlet channel north of the lock to the same height as the new outboard levee (10 feet NGVD), which would also prevent bypass flow around the east side of the lock. By preventing the bypass flow near the lock, a relatively greater amount of the swale capacity would be available for overflow from the south lagoon.

i. **Pacheco Pond Water Management**. While the water management plan would be developed later as part of the detailed design phase, the project sponsors have determined that it would be preferred to maintain the existing outlet from Pacheco Pond to Novato Creek, while adding a new outlet from the pond to the seasonal wetland on BMKV. The seasonal wetland would not require water in the dry season, and thus the existing outlet can be used to drain any baseflow or to modify water levels during the dry season. Further maintaining use of the existing outlet during the wet season would allow drainage during high stage events in the pond via 2 separate outlets, 1 to Novato Creek and 1 to San Pablo Bay (via the seasonal wetland on BMKV), thus enhancing the ability to manage the pond for flood control. Maintenance of some flows through the existing outlet channel would also help to keep the channel open.

j. **Expansion of Pacheco Pond**. In the interest of creating a more diverse array of wetland and wildlife habitats in the preferred alternative, a 21-acre expansion of Pacheco Pond with a 12 acre emergent marsh, was added to Alternative 2. The expanded pond would be similar to, but smaller than the expanded ponds in Alternatives 1 and 2. The pond overflow would be directed via an overflow structure in the surrounding levee leading to a 136-acre seasonal wetland area. This seasonal wetland area is slightly smaller than in the original alternative 2, but as noted above, due to the expansions of the swale, the overall amount of seasonal wetlands has increased to about 277-acres.

All of the remaining features of Alternative 2 as described in the Draft SEIR/EIS have not been revised and are therefore retained as a part of the preferred alternative. The preferred alternative is also considered the environmentally superior alternative. The revised alternative is described in chapter 3 of the Final SEIR/EIS.

2. Flooding (Novato Creek and Pacheco Pond)

A number of comments raised concerns about flooding, the methodology and assumptions used to assess flooding in the hydrologic and hydraulic modeling, the relation of ponding capacity at BMKV to flooding, and the influence of rising sea levels and climate change. This master response concerns flooding effects in regards to the physical effects of the project on Novato Creek and Pacheco Pond. The subsequent master responses discuss flood zoning and drainage easements

and flood insurance. A subsequent master response addresses specifics of overflow from Bel Marin Keys south lagoon.

Potential to Increase Flooding

A number of comments asserted that the project as proposed would result in increased flooding. To reiterate the conclusions of the Draft SEIR/EIS, the proposed project is not expected to result in an increase in peak water surface elevations in Novato Creek or Pacheco Pond. This conclusion is based on the hydrologic and hydraulic modeling studies that are summarized in chapter 4 and described in greater detail in appendix B. The hydrology and hydraulics discussion in appendix B have been updated to more clearly describe the assumptions, methodology, modeling, analysis and conclusions.

Existing Flooding Problems

A number of comments also describe existing flooding problems along Novato Creek and in the Bel Marin Keys community, and inquire about why this project does not resolve the described flooding problems. The project assessed in the Draft SEIR/EIS is an expansion of the existing HWRP project, which was authorized by Congress in 1999. The HWRP project has a defined purpose and authorization, which is environmental restoration. The HWRP project is not a flood control project and is not authorized to address flooding problems. For the BMKV expansion, the same holds true. If the project is determined not to have an adverse effect on flooding, the legal authority under which the BMKV expansion is being considered does not allow the addition of flood control measures to resolve problems that pre-exist and that arose independently of the project. However, the proposed project does, as an incidental benefit, provide additional floodwater routing, particularly as it relates to Pacheco Pond and to off-peak drainage in Novato Creek.

Context of Impact Assessment in the SEIR/EIS

Understanding of the project purpose and authorization is a necessary context to understanding the nature of the assessment of flooding presented in the Draft SEIR/EIS. Unlike a hypothetical flood control project, which might be designed to address a particular set of flooding conditions or might be designed to control flooding levels at a specific height at a certain location, the BMKV expansion is not intended to provide any particular flood control function. However, both NEPA and CEQA require assessment of whether a proposed project would result in an adverse effect on flooding that may affect surrounding properties and development. If a significant adverse effect on flooding were identified, then mitigation (if feasible) to reduce those effects to a less than significant level must

be identified and evaluated. However, if no such significant project-caused adverse effects are identified or if an incidental benefit is identified, NEPA and CEQA do not require a specific quantification of that benefit.

As a result, the hydrology and hydraulic assessment conducted for the Draft SEIR/EIS were designed to first and foremost, assess whether or not the proposed project would or would not increase water surface elevations in surrounding areas, which would consequently increase flooding. The tools and methodology employed in this assessment were selected to answer this question by examining whether or not the proposed project would raise water surface elevations *relative* to without project conditions. They were not employed to generate the results that might be appropriate to support a flood control project or a floodplain management study or a watershed assessment. In short, the analysis is focused on impact assessment of the proposed project's hydrology and hydraulic effects.

Methodology and Assumptions for Analysis

A number of comments questioned the methodology and assumptions used in the modeling including: assertions that the modeling includes insufficiently high flows or durations; relies on "old" or "inaccurate" data; does not take into account the sinuosity (curvature) of Novato Creek; does not take into account the loss of ponding capacity on the expansion site; and does not take into account potential sea level rise and increased storm severity that may result from global warming.

Again, it is important for the document reader to understand that the assessment of hydrology and hydraulics conducted in the Draft SEIR/EIS was a *relative* assessment designed to identify the relative (e.g. positive or negative) effect of the proposed project on peak water surface elevations (e.g. peak flood levels). As a result, the studies were not designed to identify the *absolute* water surface elevations, but instead the relative differences in peak levels with and without the project for scenarios that approximate a 10-year and 100-year storm event.

The studies conducted to support the analysis in the Draft SEIR/EIS are not intended to precisely characterize any and all flooding events in Novato Creek. The UNET 1-dimensional model, which was developed by the Corps, is a standard model used by the Corps, FEMA, and flood control agencies across the state and the country for assessment of flooding in dynamic systems and is an adequate tool for prediction of water surface elevations based on the data used in this study (UNET stands for Unsteady NETwork and is a numerical model that simulates one-dimensional unsteady flow through a full network of open channels). This tool can be used to evaluate whether the existing surface water elevations will rise, fall, or not be changed as a result of the proposed project.

Regarding selection of the parameters used in the model, several comments asserted that higher flows (one mentions 8,000 CFS), longer storm durations (one comment mentions 72-hours), or higher tides (7 feet NGVD is mentioned) are necessary to assess the impact of the project. As described in appendix B, the flow hydrographs were selected based on prior studies conducted for the Corps and 2 scenarios were developed to approximately represent a 10-year and a 100-year storm event. Due to the channel capacity of Novato Creek upstream, existing constrictions (such as at Highway 37 and the nearby railway bridge), and low points in adjacent levees upstream, it is not considered feasible to achieve an 8000 CFS flow in the lower portion of Novato Creek adjacent to the expansion site. The assumed flow inputs approximately represent what is considered to be realistically possible in a 10-year or 100-year event. The 8000 CFS flow is based on speculation that improvements in Novato Creek channel capacity, removal of existing constrictions (such as at Highway 37), and other measures have already been implemented to allow such a potential flow to reach the creek adjacent to the expansion site. While the City of Novato and Marin County have contemplated a number of improvements that may improve creek capacity in certain portions of the Novato Creek watershed, there are no currently proposed projects that would remove the constrictions at Highway 37 and the railroad bridge and no proposals to sufficiently widen Novato Creek to be capable of delivering 8000 CFS to the expansion site. While NEPA and CEQA require the analysis of "reasonably foreseeable" actions, this amount of flow, is at this time, considered speculative and is not an appropriate basis for impact assessment. As to comments that ask for evaluation of a 72-hour storm event duration, as shown in appendix B, the model was run for a period of 100 hours including hydrographs approximately representative of 10-year and 100-year storm events, which is considered adequate for impact assessment. Concerning tide, as described on page 4 of appendix B, the local tide data was adjusted in 2 ways to conservatively estimate tidal conditions using methodology commonly employed by FEMA and the Corps.

Regarding data accuracy and representative nature of the data to Novato Creek conditions, as described in appendix B, existing data from a 1996 bathymetry survey and a 2000 LIDAR (Light Detection and Ranging) topographic survey were used to develop cross-sections for the creek channel. This data is not considered to be either "old" or "inaccurate" as alleged in comment. Also, comments raised the question of whether the curvature of Novato Creek must be taken into account in order to assess impacts. The data used is considered adequate to support the modeling effort. Further, acquisition of new bathymetry or topography is not considered necessary to complete the impact assessment because it is considered highly unlikely to result in different conclusions. On page 5 of the Hydrologic and Hydraulic Modeling memo in appendix B, it notes that "relative differences in peak water surface elevations and flow rates between the alternative conditions assessed in this analysis are fairly insensitive to the small changes in absolute geometric conditions". This means that the results of the modeling would not substantially change even if more detailed data on the physical conditions of Novato Creek were acquired . Adjustment to take account of sinuosity are not necessary for assessment of channel morphology impacts.

Ponding Capacity and Flooding

A number of comments assert that the proposed project would result in increased flooding due to a loss of existing "ponding capacity" on the expansion site as result of fill (levees and dredged material placement) and tidal inundation. As described in chapter 4 and appendix B, the existing expansion site is surrounded by levees that constrain the hydrologic connections to Pacheco Pond, Novato Creek, and the BMK south lagoon. The levees along Pacheco Pond are at elevations that limit overflow onto the BMKV to storm flow events that result in particularly high pond stages. The levees along Novato Creek range between 5.6 feet NGVD and 8 feet NGVD in elevation, which prevents flow onto the site except when Novato Creek water levels reach these elevations. Flow into the south lagoon is impeded by the presence of the south lagoon lock structure, and thus indirect Novato Creek flow onto the expansion site via the south lagoon, is only possible in the event of bypass flow over the adjacent levees. Thus, although the site contains a large, approximately 1,600-acre area that might receive overflow from adjacent water bodies, these flows only occur during the portion of storm events when a stage reaches the sufficient height to overtop the adjacent levees.

The overflow from Novato Creek onto the existing expansion site was included in the modeling conducted for the Draft SEIR/EIS. The potential overflow from Pacheco Pond to BMKV was added to the model for the Final SEIR/EIS and was found to be negligible; a note to this effect has been added to the technical memo in appendix B. Thus, the actual function of the existing potential ponding capacity has been taken into account in the model scenarios that represented approximate 10-year and 100-year storm events. This baseline of existing conditions was then compared to with-project conditions, and the results were consistent between the initial modeling in the Draft SEIR/EIS and the updated modeling in the Final SEIR/EIS. The results showed that the proposed project would not raise peak water surface elevations in Novato Creek, but would actually lower off-peak water surface elevations compared to existing conditions. The result also show that the proposed project would lower peak water surface elevations in Pacheco Pond compared to existing conditions.

With the project, the nominal ponding capacity of the site, as measured by the hypothetical volume present between 0 and 7 feet NGVD would change from existing conditions due to the addition of levees, the placement of dredged material, and tidal inundation of portions of the site. However, the existing function of that ponding capacity in relation to peak water surface elevations in Novato Creek and Pacheco Pond would either be unchanged (Novato Creek) or actually improved (Pacheco Pond). It should also be noted that the project would not result in a complete loss of hypothetical ponding capacity as the expanded Pacheco Pond area, the seasonal wetland area, the upland/wetland swale area, and even the tidal wetland area, would all be able and are designed to, receive overflow from either Pacheco Pond, Novato Creek or the BMK south lagoon. In regard to Pacheco Pond, the hydrologic connections and overflow areas would

actually improve flooding conditions. In regard to Novato Creek, these hydrologic connections would cause peak stage to remain unchanged, but are expected to reduce off-peak stage, which would be a benefit to drainage of the creek and of the BMK lagoons. The BMK south lagoon is discussed in a separate master response below.

Climate Change and Flooding Impact Assessment

Finally, several comments asserted that the hydrology and hydraulic assessment does not take into account the potential effects of climate change, such as rising sea levels or increased winter storm severity. Rising sea levels would result in higher tides than those at present and could result in increased coastal flooding that could effect the BMK community and other communities located along the Bay or along low-lying areas along tidal creeks, such as Novato Creek. Novato and other coastal communities around San Francisco Bay would also be faced with flooding challenges if future sea level rise is accompanied by more severe winter storms, induced by climate change. While these are serious concerns, the BMKV wetland restoration project is not a flood control project, and its purpose is not to ameliorate present nor future flooding conditions that are not directly caused by the project. The effect of sea rise and potentially more severe winter storms, would be higher tide levels and higher peak flows in Novato Creek and its tributaries. Extrapolation of the results of the hydrologic and hydraulic model are considered adequate to support a conclusion that even in the event of higher tides and higher flows than those used in the modeling, the mechanisms of flow routing used in the model would still be valid and the proposed project would not worsen flooding relative to conditions without the project. Master Response 18 provides further discussion rising sea levels and project design.

3. Flood Zoning and Marin County Flood Control and Water Conservation District Easements

A number of comments assert that the project does not comply with the F2 overlay zoning or with the existing drainage easements in place with the Marin County Flood Control and Water Conservation District (MCFCWCD). In addition a number of comments assert that the 300-acre easement on the expansion site is held for the exclusive use of Bel Marin Keys Unit IV. Other comments assert that the project would have a significant effect on flooding unless the drainage easements are maintained or replaced in kind.

Analysis of Consistency with F2 Zoning in the Draft SEIR/EIS

The existing flood zoning of the expansion site, the requirements of the zoning ordinance, the existing easements and their requirements are presented in the hydrology and tidal hydraulics section in chapter 4 and in appendix C. The Draft SEIR/EIS concludes that the project may not be consistent with the specific prohibitions on fill in the F2 zone and the requirements for provision of an ultimate channel or its equivalent in the event that greater than 25% of the existing ponding capacity of the site is lost. The Draft SEIR/EIS also concludes that the project would not maintain the existing MCFCWCD easements in situ and the replacement ponding areas may or may not be determined to be appropriate replacements.

As noted in Master Response 2 above, the hydrologic and hydraulic studies conducted for the project to date have not identified an adverse effect on flooding due to the proposed project or an increase in the water surface elevations of adjacent water bodies. These studies include an evaluation of the existing hydrologic connections of the expansion site and the function of the site in terms of affecting water surface elevations of adjacent water bodies. The Draft SEIR/EIS concludes that no physical adverse effect on flooding would result from the proposed project and there would be flood benefits in term of reduction of peak flood stage in Pacheco Pond.

F2 Zoning, Easements, and Ponding Capacity

Both the F2 zoning and the MCFCWCD easements are based on the proposition that ponding capacity in flood overflow areas adjacent to floodways should be preserved in order to provide reduction in flood levels in those adjacent floodways. The F2 zoning requirements further require that should more than 25% of the ponding capacity be removed from a site within the zone, that flood control improvements should be built through the subject property that are equivalent to the designated "ultimate channel" or its equivalent. As noted above, the project would not eliminate all ponding capacity on the site, and would establish hydrologic connections to the remaining ponding capacity that are as effective or more effective than those that exist at present, in particular related to the projected lowering of Pacheco Pond peak water stage, something that would not occur without the project. Though fill (in the form of levees) and tidal inundation would lower the nominal ponding capacity on the site, the change in hydrologic connections makes the remaining ponding capacity effective by providing hydrologic connections that route flow onto the expansion site at far lower stage than possible at present.

The preferred alternative, Revised Alternative 2, includes designs for hydrologic connections from Pacheco Pond and the BMK south lagoon to retained areas on

the BMKV parcel. Based on a preliminary estimate, the 387-acre swale area would have a ponding capacity of about 450 acre-feet at the overflow structure invert elevation of 1.5 feet NGVD and a ponding capacity of over 1,000 acre-feet when the water surface elevation in the swale reaches 3.5 feet NGVD (assuming overflow structures are 24-inch culverts). The maximum capacity would depend on the final design for the swale and the overflow structures, as it is possible for the swale to fill to the adjacent levee design height of 5 feet NGVD. The expanded Pacheco Pond/emergent marsh area would have a capacity of 175 acre-feet (between 1.5 feet NGVD and 7 feet NGVD). The 136-acre seasonal wetland area connected to the expanded Pacheco Pond would have a ponding capacity of about 400 acre-feet below the 1.5 feet NGVD invert elevation of the overflow structure and a capacity of about 650 acre-feet when the water surface elevation in the seasonal wetland reached 3.5 feet NGVD (assuming the overflow structures are 24" culverts). The maximum ponding capacity of the seasonal wetland will depend on the final design for the seasonal wetland and the overflow structure. These ponding capacities have been added to the Draft SEIR/EIS hydrology section and a table showing the calculations has been included in appendix B. The ponding capacity of the tidal marsh wetland adjacent to Novato Creek varies with the tide. However, with the lowering of the outboard levee, the tidal marsh restoration area can also receive overflow from Novato Creek when stage is above MHW (about 2.8 feet NGVD). The Conservancy is willing to work with the MCFCWCD to record amended drainage easements for the new ponding areas if the MCFCWCD determines this is necessary to comply with the easements or the F2 zoning.

It should also be noted that the concept that a reduction in ponding capacity directly relates to an increase in flood levels is subject to question in a tidally-dominated system like the lower portion of Novato Creek. The expansion site is directly adjacent to San Pablo Bay and tidal stage, as described in the Draft SEIR/EIS is a driving force in determining flood stage. As a result, in the current setting, much of the potential overflow that reaches BMKV over the existing levees is actually tidal flow that comes from a virtually inexhaustible supply - San Francisco Bay and the Pacific Ocean. Routing of primarily tidal flow from Novato Creek at high stage levels onto BMKV has little potential to lower flood levels in the creek due to the replacement in the creek by tide from the Bay. The Draft SEIR/EIS makes no conclusion regarding whether the ponding capacity concept may work in a more linear fashion in other portions of the Novato Creek watershed further upstream that are less influenced by tidal flow. However, the Draft SEIR/EIS does conclude that the proposed project, even if it is determined to reduce the nominal ponding capacity represented by the F2 zoning or the easements, would not result in increased flooding and would actually provide flood benefits.

Agreement between Conservancy, MCFCWCD and City of Novato

In recognition of the concerns of the City and County and local residents concerning the F2 zoning and the MCFCWCD easements relative to the site, the Conservancy, the MCFCWCD, and the City of Novato have developed an Agreement that establishes a process by which further hydrologic and hydraulic studies will be developed, completed, and reviewed to examine the potential effects of the proposed project on water surface elevations in Novato Creek and other parts of the lower portion of the Novato Creek watershed. Although the lead agencies believe that further studies are beyond that necessary for impact assessment under NEPA and CEQA, the Conservancy as the local sponsor of the project has agreed to conduct these additional studies that the City and County believe are necessary to make determinations concerning the consistency of the project with the F2 zoning and with the MCFCWCD easements. The lead agencies expect that these additional studies will confirm the results of the study to date and the conclusion in the Draft SEIR/EIS that the proposed project would not increase flooding, and thus do not believe these studies are necessary for the completion of the NEPA and CEQA processes. The Agreement contains performance standardsfor the project design. These performance standards are simply that the proposed project must be shown to not increase peak water elevations in Novato Creek, Arroyo San Jose, Pacheco Creek, Pacheco Pond, Bel Marin Keys lagoons, or any other part of the Novato Creek watershed. If the studies do not show this (something the project sponsors believe is highly unlikely), the Conservancy has agreed not to proceed with construction of the project until flooding issues are resolved to the satisfaction of the City and County. The Agreement is included in appendix I.

Determination of Significance under NEPA and CEQA

The focus of NEPA and CEQA are on physical effects of proposed projects that may result in significant adverse effects on the environment. It is the lead agencies' determination that even if there were an inconsistency with the F2 and the MCFCWCD easements, this would not represent a significant effect under NEPA or CEQA because the studies conducted for the SEIR/EIS demonstrate that the project would not result in increased peak water surface elevations or flooding, as compared to the no-project alternative. The local sponsor has further established a process with the City of Novato and the MCFCWCD to develop the information needed to resolve the consistency of the project with the F2 zoning and MCFCWCD easements.

4. Bel Marin Keys South Lagoon Overflow and Bel Marin Keys Community Service District Drainage Easement

A number of comments assert that the alternatives presented in the Draft SEIR/EIS do not contain sufficient area within the swale adjacent to the BMK south lagoon to contain overflow from the lagoon in compliance with the existing BMK CSD overflow easement. These comments recommend that the swale be enlarged by moving the containing levee further away from the south lagoon.

Enlarged Swale in Preferred Alternative

First, in the preferred alternative, Revised Alternative 2, the levees have been moved back significantly from the south lagoon, which has increased the acreage of the swale from about 190 acres (in the Draft SEIR/EIS Alternative 2) to about 387 acres, which represents a doubling in size. Further, the preferred alternative now contains certain improvements to the levees adjacent to the south lagoon lock and to a portion of lock structure itself to reduce the likelihood of bypass flow from Novato Creek skirting the lock in the immediate vicinity of the lock itself. These improvements reduce the likelihood of Novato Creek surcharging the south lagoon.

A preliminary estimate of the amount of possible flow due to direct precipitation in the southern portion of the BMK community (e.g south of Bel Marin Keys Boulevard) including homes, streets and the lagoon was made. The area of the BMK south lagoon and the homes and streets that drain to the lagoon is approximately 242 acres. The estimated area of the swale is about 387 acres. Based on the NOAA *Precipitation-Frequency Atlas of the Western United States (NOAA 1973)*, the 100-year 24-hour precipitation for the project area is 6 inches. For the swale area, south lagoon, and homes and streets that drain to the south lagoon this corresponds to about 315 acre-feet. The new overflow structures would be set at 1.5 feet NGVD to allow overflow into the BMKV swale when the lagoon exceeds this elevation as required by the existing BMK CSD easement. Below 1.5 feet NGVD, the swale would have a capacity of about 450 acre-feet, which could contain the flow noted above over several tidal cycles, until the swale can fully drain. As noted above, the capacity of the swale would be higher than just the capacity below 1.5 feet NGVD. By increasing the swale capacity and reducing the likelihood of Novato Creek flow directly into the south lagoon, the project has provided for an alternate mechanism of complying with the BMK CSD easement and has actually reduced the potential flood flow into the lagoon itself with the lock improvements.

MCFCWCD Easements

A number of comments asserted that the 300-acre MCFCWCD easement on the eastern side of the expansion site is an easement held by the BMK community or the BMK CSD. This is not accurate, as the only parties to the 300-acre easement are the MCFCWCD and the Conservancy (as owner of the property). Also, the 300-acre MCFCWCD easement is not related to the BMK CSD easement that allows overflow from the south lagoon onto the BMKV property. Rather, the 300-acre easement was established as mitigation for the initial filling of approximately 100 acres to build the BMK IV development and the MCFCWCD holds the rights to that easement, not the BMK CSD. Consistency with this easement is discussed in the prior master response.

5. Flood Insurance

A number of comments express concern that the proposed project would result in changes to the mapping of special flood hazard zones by FEMA, thus resulting in a change in flood insurance rates of residents that may be located in a remapped zone. The discussion below has been added to the Final EIR/EIS.

The preferred alternative would change flood mapping zones on the expansion site itself, but would not change flood mapping of adjacent areas because the hydrologic and hydraulic studies conducted as part of the conceptual design have identified that the project would not result in an increase in flood stage in adjacent waterbodies or increased risk of flooding to adjacent properties. Because a portion of the site would be opened up to tidal action, the portion of the expansion site eastward of the new outboard levee would be remapped from an A (riverine flooding) zone to a V (coastal flooding) zone. However, the new outboard levee would be designed to prevent tidal flooding from reaching the remainder of the expansion site, thus the remainder of the site is likely to remain unchanged from its current Flood Insurance Rate Map (FIRM) designation.

National Flood Insurance Program Overview

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program (NFIP). There are 3 components within the NFIP: (1) flood hazard mapping, (2) floodplain management, and (3) flood insurance. Engineering studies, referred to as flood insurance studies (FISs) are conducted to characterize flooding risks within a community by identification of base flood elevations (BFE). The BFEs are the elevations of the 100-year storm event (referred to as the base flood) identified in the FIS. The results of the FIS are used to identify special flood hazard areas (SFHA), which are areas that the FIS indicated would be inundated by the 100-year storm event. These areas are then identified in the FIRMs).

Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities. Marin County (within which the BMKV and the BMK community are located) is a participant in the NFIP with the MCFCWCD as the local community agency responsible for floodplain management. To get secured financing to buy, build, or improve structures in a SFHA, homeowners are required to purchase flood insurance. Flood insurance is not mandatory if located outside the SFHA. Flood insurance rates are determined based on the risk zone identified on the FIRMs.

Local Flood Insurance Studies and Flood Mapping

FEMA conducted a FIS for the unincorporated parts of Marin County, including the BMKV site and the BMK residential area in 1972, published a flood hazard boundary map in 1977 and published a FIRM in 1982 (Federal Emergency Management Agency 1982 and 1986). FEMA completed an additional FIS for the unincorporated parts of Marin County in 1986, but did not update the FIRM for the BMKV site (Federal Emergency Management Agency 1986a). FEMA also completed an FIS for the City of Novato (including areas adjacent to the BMKV site and the BMK residential area) and published associated FIRMs in 1989 (Federal Emergency Management Agency 1989a and 1989b). The FIRMs for the relevant parts of unincorporated Marin County (Panels 0601730259 and 0601730300) identify the BMKV site as within the A1 zone (BFE of 6 feet NGVD) (Federal Emergency Management Agency 1982 and1989b). The BMK residential area is identified as located within the C zone [which is not a flood hazard zone], with the exception of a low-lying area along Novato Creek and the BMK lagoons, which are located within the A1 zone (BFE of 6 feet NGVD) (Federal Emergency Management Agency 1982). The FIRM for the City of Novato (parcel 0601780005) shows Pacheco Pond as within the AE zone (BFE of 8 feet NGVD) (Federal Emergency Management Agency 1989b). The BMKV site, the BMK lagoons, and Pacheco Pond are mapped as within SFHAs; the BMK residential area and Headquarters Hill are not. Flood insurance is available for BMK residences within the C zone, but it is not required by regulation in this zone. Copies of relevant portions of the local FIRMS are included in appendix C.

Potential for Changes in Flood Mapping

FEMA periodically updates the FIRM maps based on new FISs. New studies utilize the latest data reflecting the physical conditions within a studied community relevant to flooding. Sometimes these new studies will result in changes in mapping of SFHAs. Based on the hydrologic and hydraulic studies to date, the proposed BMKV expansion would not result in changes that would be

the basis for SFHA mapping changes, except those relevant to the tidal marsh restoration area on the expansion site itself.

F2 Zoning and Floodplain Mapping and Management

Several comments also question the relation of the F2 zoning of the expansion site and mapping of flood risk zones. The FIS studies are engineering studies that focus on the physical nature of communities relevant to flooding. The 1982 FEMA FIS for the project area makes no mention of the F2 zoning. In conversation with several MCFCWCD staff concerning the BMKV project, none have identified any direct relation between the F2 zoning and FEMA FIRM mapping or any mention of F2 zoning in FEMA flood studies. As noted above, a local community must adopt floodplain management regulations in order to participate in the NFIP. The F2 zoning is part of MCFCWCD floodplain management regulations. As discussed in the Draft SEIR/EIS, the F2 zoning ordinance prohibits fill in the F2 zone if it will reduce the ponding capacity of a site by more than 25%. The hydrology and hydraulic studies (see Master Response 2) have demonstrated that, although fill would be placed on the site, the preferred alternative would not result in a loss of ponding capacity that would result in an increase in flood levels.

Changes Related to the Project and FEMA Floodplain Management Criteria

Local floodplain management regulations are required to meet the minimum standards found in FEMA regulations, which are located in 44 CFR Section 60. As identified in 44 CFR Section 60.12, for state-owned properties in special hazard areas, the state is required to either (a) comply with the flood plain management requirements of a local community within which the state-owned properties are located or (2) establish and enforce flood plain management regulations which satisfy the minimum criteria found in FEMA regulations (44 CFR 60.3, 60.4, and 60.5).

Flood plain management criteria for flood-prone areas are presented in Section 60.3. In Section 60.3(d)(3), the FEMA regulations identify that construction (including fill) should be prohibited in the regulatory floodway unless it is demonstrated through hydrologic/hydraulic studies that the proposed encroachment would not increase flood levels. It is the project sponsors' conclusion that the proposed project is consistent with FEMA floodplain management criteriaThe Conservancy, as the state lead agency and owner of the expansion site, has committed in the Agreement that, in the unlikely event that the confirmatory studies to be done under the Agreement indicate that the project would increase peak flood levels above baseline in Novato Creek, Pacheco Pond,

the BMK lagoons, or any other part of the Novato Creek watershed, it would not proceed with construction of the project until flooding issues are resolved.

6. Novato Creek Morphology (Levee Breach and Navigation)

Regarding potential morphological changes in Novato Creek due to the proposed breach on Novato Creek, several comments assert that the Draft SEIR/EIS does not assess or describe project effects adequately in the Novato Creek channel and the subtidal channel to the Petaluma channel; does not assess short-term sedimentation post-breach or long-term sedimentation up and downstream of the breach; does not use current or accurate data to describe the existing channel geometry; does not provide sufficient modeling of tidal hydraulic effects; does not provide calculations for increased tidal prism for each alternative; and does not assess the effect on BMK lagoon drainage due to the increase in tidal flow in lower Novato Creek. Comments also suggest that the proposed project would have a negative effect on channel width and depth, and thus the project should dredge Novato Creek as mitigation. Some comments also suggested monitoring of the channel after breach excavation. Each of these items is addressed below. Effects on channel morphology related to Pacheco Pond outlet flow diversion are discusses in the next master response.

Project Purpose

First, it should be noted that navigation is not a purpose of the HWRP and the BMKV expansion, and as such the project is not designed to improve navigability of Novato Creek. However, under NEPA and CEQA, an assessment of the potential negative effects on creek morphology and on navigation are required to determine their significance and whether mitigation is required. The tidal hydraulics analysis is summarized in chapter 4 and discussed in appendix B in the Draft SEIR/EIS and concludes that project would not adversely affect Novato Creek morphology or adversely effect navigability. The Draft SEIR/EIS identifies that the project would actually benefit navigability by increasing the equilibrium width and depth of the creek channel below the levee breach.

Impact Assessment Methodology

The methodology used to assess channel morphology below the proposed breach is presented in the second memo in appendix B. The 1-dimensional hydraulic model, UNET, was used to determine channel velocities in Novato Creek due to an increase in tidal exchange and a statistical analysis of the relation of tidal prism to channel width based on data collected across the Bay Area, including

Novato Creek. Cross sections were developed to estimate existing and likely future geometries of Novato Creek. The hydraulic model was then used based on the determined parameters to estimate sheer stresses and incremental erosion that would result due to increased tidal exchange. The statistical analysis established a relationship between the size of channels and the upstream tidal prism volume. The geomorphic and hydraulic modeling showed that the increase in tidal prism attached directly to Novato Creek (about 600 acres in the preferred alternative; 350 acres in Alternative 1; and none in Alternative 3 due to no design breach) is estimated to result in an expected equilibrium channel width after the breach to Novato Creek is excavated that is about 10-40 feet wider and about 0.5-1.0 feet deeper than at present. (Note: Depth has been added in appendix B morphology memo.)

Dredging events may increase the width and depth of the creek beyond the current or future equilibrium. The channel would move back toward this equilibrium between dredging events. The changes in channel morphology between dredging events that are unrelated to the proposed project were not specifically studied, as they are not related to project-caused effects.

Calculations of the increase in tidal velocity below the breach in Alternative 1 and 2 have been made and added to the Final SEIR/EIS, appendix B.

Characterization of Potential Impacts

The effects on the subtidal channel beyond the mouth of Novato Creek to the Petaluma channel (from Marker 25 to Marker 1) are discussed in the Draft SEIR/EIS (see Impact TH-8), but the prospective increase in channel width and depth is not quantified. The increase in tidal prism will increase the erosion of existing tidal flat immediately adjacent to the subtidal channel resulting in a loss of about 10 to 15 acres of tidal flat. Whether this will result in a noticeable increase in channel width or depth of benefit to navigation is not determined in the Draft SEIR/EIS; however the erosion of tidal mudflat would not result in a decrease in channel width or depth, either of which would be a negative effect on navigation. A new figure, figure 4-7, has been added to the document to identify the location of expected morphological changes to lower Novato Creek and the low-water channel to the Petaluma channel.

BMK Lagoon Flushing and the Krone Report

One commenter suggest that the levee breach may create channel conditions or tidal flows that would conflict with, impede, or reduce the effectiveness of the existing lagoon flushing conducted by the BMK CSD to promote scouring in the navigational channel. A report by Ray Krone was submitted to support this assertion. The Krone report identifies optimum lagoon flushing procedures to provide scouring current along the Novato Creek channel to favor navigation of

the channel. Much of the procedures are designed to create flows with optimum erosional force to promote channel scouring. The effect of these procedures is to add periodic surcharge of the flow in the creek. These flushing events are presently conducted approximately once or twice every month.

The proposed project would add increased tidal flow into Novato Creek, which would increase scour in Novato Creek through the same erosional procedures that the BMK CSD uses themselves when it flushes the lagoons. The difference is that the project-induced increased flow would occur daily compared to BMK CSD lagoon flushing events that occur once or twice a month.

The referenced Krone report noted "the importance of maintaining channel depths at the mouth to station 0+00 particularly to assure a low tide at the mouth". The proposed levee breach, as noted in the Draft SEIR/EIS would increase equilibrium channel depth, albeit in a limited way. This would assist in maintaining depth as recommended in the Krone report. Overall, the increase in tidal prism and flows below the breach is consistent with the recommendations in the Krone report because it increases currents along the lower portion of the Novato Creek channel and in the subtidal channel beyond resulting in enhanced scour that helps to maintain both width and depth in a channel used for navigation.

Short-Term Sedimentation

Regarding short-term sedimentation immediately after the breach of the Novato Creek levee, there is the potential for limited amounts of unconsolidated material to be mobilized from the expansion site during ebb tides. This potential increase in transport of colloidal particles would weakly increase the suspended sediment effluent concentration from the site on ebb tides immediately following the breach of the Novato Creek levee. The plume of slightly elevated suspended sediment would quickly dissipate through flow into and dispersion in the Bay. Suspended sediment concentrations entering the creek on flood tides would be at or near ambient Bay suspended sediment concentrations. Increased tidal flow would produce a net increase in tidal scour that would more than offset the temporary increase of suspension of sediments. Ebb tide suspended sediment concentrations from the expansion site would decrease below ambient Bay suspended sediment concentrations following the breach as the site materials consolidate and the site reverts to a net sediment sink. Discussion of short-term sedimentation effects has been added to the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4.

Long-Term Sedimentation

Regarding long-term sedimentation, the tidal basin itself attached to the Novato Creek breach is designed as a sediment trap in order to capture natural sediment

to form the final cover for the restored wetland area. Thus during formation of final marsh elevations after breach (a process that would take approximately 10 years), the site would actually capture a portion of the sediment from Novato Creek and San Pablo Bay flows. The functioning of the site as a sediment trap until marsh plain equilibrium is reached and the increase in tidal flows below the breach results in a net erosional effect in the creek channel, as noted above, and no long-term increase in sedimentation (that might negatively effect navigation) has been identified in the studies conducted for the Draft SEIR/EIS.

Novato Creek Channel Monitoring

The monitoring and adaptive management plan for the HWRP has been updated to include the BMKV expansion and includes monitoring of the Novato Creek channel upstream and downstream of the levee breach. This updated plan is included as an appendix to the Final SEIR/EIS.

7. Pacheco Pond Outflow Diversion

Comments identified concerns that the potential diversion of some or all of the existing Pacheco Pond outlet flow into Novato Creek may change the channel width and depth resulting in adverse effects on navigation, flooding, creek habitat, water quality. Also, some comments assert that the potential closing of the existing outlet or diversion of outlet flow would eliminate tidal prism in Pacheco Pond or would avert the potential for future restoration of "historic" flow conditions from Arroyo San Jose to Novato Creek. Some comments assert that the Draft SEIR/EIS did not analyze the effects of potential outlet flow diversion during low-flow as well as high-flow events. Finally, some comments assert that the potential diversion would have a significant effect on anadromous species access to the pond and its tributaries.

Water Management Changes in Preferred Alternative

The project includes development of a new water management plan for Pacheco Pond by the MCFCWCD, the DFG, and the project sponsors. The preferred alternative has been changed to reflect that the existing outlet would not be permanently closed, so as to increase the options for water management. The preferred alternative proposes routing flow from Pacheco Pond to the seasonal wetland on BMKV for 2 purposes: 1) to provide seasonal flow to support the seasonal wetland area and create a freshwater to saltwater interface in the tidal marsh area; and 2) to provide expanded ponding capacity for Pacheco Pond to lower peak stage levels and reduce flooding risk to adjacent properties. Since the water is to be used for a seasonal wetland as opposed to a perennial wetland, there is no need to route water during the dry months from the pond for habitat

purposes; thus the existing outlet can be used to drain any dry month base flow. Further, maintaining the existing outlet provides 2 outlets to help drain the pond during storm events–1 to Novato Creek and 1 to the seasonal wetland and San Pablo Bay–which would assist in reducing high stage in the pond. Maintenance of some flow through the existing outlet would also help to keep open the existing outlet channel. The new management plan would seek to optimize the flood control and wildlife conservation purposes of Pacheco Pond while providing seasonal flow to the BMKV seasonal wetland area.

Effects of Diversion on Novato Creek

The concern most commonly identified regarding diversion of some or all of the existing Pacheco Pond outlet flow is that it would decrease channel width or depth in Novato Creek due to either reduction in scour or increase in sedimentation.

The dominant determinant of scour in this portion of Novato Creek is the daily ebb and flow of the tide. While episodic changes in creek morphology may occur due to extreme flow events in Novato Creek, even these changes are negligible compared to the persistent erosional force of daily tidal flows.

Pacheco Pond peak flows during storm events into Novato Creek are limited by the existing MCFCWCD flapgates to about 780 cubic feet per second (CFS). This amount can be compared to the main stem flows in Novato Creek just upstream of the existing outlet which were estimated in the hydrologic and hydraulic modelling done for the project at about 1740 CFS in Scenario A (approximate 10-year event) and 3740 CFS (approximately 100-year event). In the modeled events, due to dynamic effects, the proposed project is estimated to lower Novato Creek flow just downstream of the existing outlet (due to assumed diversion of outlet flow) by about 420 CFS in Scenario A and 380 CFS in Scenario B (see new memo in appendix B), compared to existing conditions. Non-storm-event flows were not modeled; however, as discussed above, dominant determinant of scour in lower Novato Creek is tidal flow, not fluvial flow.

Given the limited flows of Pacheco Pond compared to the main stem of Novato Creek and the tidal domination of this portion of the creek, diversion of the outflow to the expansion site is identified in the SEIR/EIS as resulting in negligible changes in morphology to lower Novato Creek that would not effect navigation. Because only negligible changes in creek channel width and depth have been identified in association with diversion of Pacheco Pond outlet flows, no associated adverse effects on navigation, flooding, or habitat quality in Novato Creek are expected due to the diversion of some or all of the outlet flow during the rainy season.

Concerning water quality, the Draft SEIR/EIS identifies that the primary concern of diverting Pacheco Pond outlet flow would be potentially reducing salinity levels in Novato Creek. However, as identified in the *Water Quality* section of chapter 4, during low-flow summer conditions, the flow from Pacheco Pond is minimal compared to the daily tidal prism, which controls salinity levels. During high-flow events, Pacheco Pond outflow is estimated to provide only a few hours, at most, of freshwater flows to the creek, which has a negligible effect on salinity levels because main stem flow in Novato Creek already cause a change in salinity levels and after the storm event, salinity levels return to a level determined by tidal flows.

Historic Course of Arroyo San Jose

Concerning the potential for the project to avert any potential to restore a natural course of Arroyo San Jose to a confluence with Novato Creek north of the present location of Pacheco Pond and any potential to restore tidal action to Pacheco Pond itself, the following discussion is provided. The project designers reviewed available historic maps and surveys for the project area going back to mid 1850s. An 1863 U.S. Coast and Geodetic Survey based on an 1854 survey shows a fairly wide tidal marsh plain adjacent to San Pablo Bay and Novato Creek but does not extend far enough westward to show Arroyo San Jose (U.S. Coast and Geodetic Survey 1863). An 1860 map of Marin County shows Arroyo San Jose entering "salt marsh" in the approximate location of Pacheco Pond today, joining a tidal channel that flows northward and then northeast to enter Novato Creek (Van Dorn 1860). At some point prior to 1914, the existing outlet channel (now just north of BMK Boulevard) was constructed, presumably as part of agricultural reclamation of nearby land (U.S. Geological Survey 1914). As of 1914, a natural channel was still present in a similar location as 1860, and was shown entering Novato Creek in a location north of present-day railroad bridge at Highway 37 (U.S. Geological Survey 1914). At some point, prior to 1942, it appears that the natural channel was eliminated, and all of the flow from Arroyo San Jose was rerouted to enter Novato Creek through the existing outlet just north of Headquarters Hill (U.S. Geological Survey 1942). Reference in the Draft SEIR/EIS to the historic route of Arroyo San Jose has been updated with this information. Copies of relevant portions of the referenced historical maps are included in appendix B.

Potential for Return of Tidal Prism to Pacheco Pond

The project has not been designed to precisely mimic prior site conditions at a specified time in history; though in general the project has been designed to restore at least a portion of the wide tidal marsh plain that was present prior to the 1850s. The existing MCFCWCD tidal flapgates are designed to prevent tidal intrusion into the pond. These structures have been recently repaired. Prior to their repair, tidal intrusion did occur over a period of time. Based on the present

baseline, diversion of Pacheco Pond outflow would not eliminate any tidal prism in the pond, because the tidal flapgates already do this.

DFG and MCFCWCD manage Pacheco Pond for the dual purposes of flood control and wildlife conservation. The introduction of tidal flows into Pacheco Pond, as one commenter apparently supports, would dramatically change the habitat in the brackish pond and would significantly lower its flood control function. The current habitat present in Pacheco Pond and in the immediate upstream portions of the tributaries are dominated by brackish open water and marsh species, although the saline soils, the proximity to tidal areas (Novato Creek) and the prior intrusion of tide into the pond has resulted in the presence of tidal marsh species (such as pickleweed) as well. The agreement between DFG and MCFCWCD calls for maintenance of the water surface elevation of 1.5 feet NGVD to favor these brackish environments. Introduction of tide into this area would change these habitats dramatically.

The prevention of tide is also crucial to function of the pond for flood control. In times of high flow, the pond can receive and hold flows from its 2 tributaries and then release that flow at low tide when Novato Creek stage is sufficiently low. If the tide were allowed into the pond, its storage volume would be the same as at present at low tide, but would be cut by more than 50% at high tide and more in the event of a plus tide. This would create a backwater effect in the tributaries and under certain conditions might result in localized flooding in the business park and in the nearby trailer park. This would be considered a significant adverse flooding impact.

While restoration of Pacheco Pond to tidal action would result in conditions more consistent with "historic" conditions, the loss of freshwater habitat and flood control functions would constitute significant environmental impacts and would be inconsistent with current DFG-MCFCWCD management goals for the pond and it is for these reasons that any alternative including introduction of tidal action was eliminated from consideration in the SEIS/EIR (see discussion of dismissed Alternative Feature 11).

Effects of Diversion on Anadromous Fish Access

During the prior periods of disrepair, access by anadromous and other species from Novato Creek was feasible, however, with the repair, the gates now allow outflow but prevent inflow. This is the baseline condition against which the BMKV expansion potential diversion of some or all of the outflow must be assessed in regards to fish access. Pacheco Pond is not currently tidal, nor is it reasonably foreseeable that MCFCWCD will allow it to be tidal, due to the loss of flood control function of the pond. As a result, the flapgates will continue to be operated as at present, which will continue to hinder anadromous access to the pond and to Arroyo San Jose and Pacheco Creek. It remains feasible for fish to swim against the outflow from Novato Creek at low tide and access the pond,

depending on the extant height of the weir at Bel Marin Keys Boulevard. Obviously, if all flow were diverted from the pond to the BMKV seasonal area, then the hindered access at present would be blocked. However, as noted above, the preferred alternative does not envision permanent closure of the tidal flapgates.

The Draft SEIR/EIS references the hindered access at present, recent assessments of salmonids by NMFS, the paucity of documentation of salmonid runs in Arroyo San Jose and Pacheco Creek, and the likelihood of the recently sighted chinook as being hatchery in origin, as evidence to support the assertion that it is doubtful that there is a self-sustaining run of listed salmonids in these creeks that would be affected by potential diversion of outlet flow and that this impact is considered to be less than significant.

As noted above, the project includes development of a new water management plan for Pacheco Pond by the MCFCWCD, the DFG, and the project sponsors and it is probable that the plan would ultimately call for dual use of the existing outlet to Novato Creek and the new outlet to BMKV. If the existing outlet to Novato Creek is operated, it would be possible to retain the hindered access at present, at least at those times of operation identified in the plan. The Draft SEIR/EIS (page 4-82) recommended that potential fish passage be considered when developing the new water management plan; this has been retained in the Final SEIR/EIS.

8. Levee Heights and Locations

A number of comments questioned the heights and locations of the improvements to the south lagoon levee and the new levees included in the restoration alternatives in relation to the effect on residential views from the BMK community, the amount of area available for potential outflow from the south lagoon, and the amount of area on the expansion site dedicated to upland and transitional habitat as opposed to tidal marsh habitat.

The existing BMK south lagoon levee is mostly at an elevation of 5 feet NGVD. In certain portions the levee has settled as low as 2 feet NGVD. As noted above, in the preferred alternative, the south lagoon levee would be improved to an initial construction height of 6 feet NGVD in order to allow for up to 1-foot of settlement to a design height of 5 feet NGVD. This improvement represents an initial increase of 1 foot in elevation for the most part over the length of the existing levee, but not a long-term change in the design height of the levee. The purpose of improving the south levee is to ensure levee competency so that the levee does not fail, which would result in inundation of the swale with the entire contents of the south lagoon, and to ensure that the swale area on BMKV has sufficient capacity to hold the potential overflow from the south lagoon until the swale can drain the accumulated water on a low tide to Novato Creek. In the Draft SEIR/EIS, the improvement to the south levee included an initial

construction height of 10 feet NGVD and a design height of 6 feet NGVD; the preferred alternative represents a reduction in the initial height by 4 feet and the design height by 1 foot. This change would reduce the visual effects of the improvements.

In the preferred alternative, the new levees have been designed to an initial construction height of 10 feet NGVD (to settle to 8 feet NGVD), representing a 2-foot drop in initial elevation to that in the Draft SEIR/EIS. The location of the new levee separating the tidal marsh area and the non-tidal area has been moved so that it is located at least 1,500 feet from the south lagoon levee. These changes would reduce the visual effects of the new levee sections and would also increase the ponding capacity of the swale to receive overflow from the south lagoon and would increase the amount of upland habitat provided for at the expansion site.

9. Aesthetics

As noted in the prior master response, numerous comments expressed concern about the visual impact of the proposed improved levees and new levees as included described in the Draft SEIR/EIS. The preferred alternative (Revised Alternative 2), now includes a new levee separating the tidal marsh area from the non-tidal habitats that would initially be at a 10 feet NGVD elevation and located approximately 1500 feet from the BMKV south lagoon. This represents a decrease in 2 feet of the initial construction height and a movement of approximately 500 feet from the south lagoon levee. The improved levee along the BMK south lagoon in the preferred alternative would be at an initial elevation of 6 feet NGVD, which represents a 1-foot increase over the present height in most places of the existing levee.

The aesthetics analysis in the Draft SEIR/EIS has been updated to reflect the changes to levee height and location. Due to these changes, the impacts of the preferred alternative are now identified as less than significant. Revised analysis and line-of-sight graphs are presented in the Final SEIR/EIS.

One commenter asserted that previously proposed housing/lagoon development at BMKV would have had "negligible" effects on views from existing BMK south-facing residences adjacent to the south lagoon. However, the EIS/EIR prepared for the project (Environmental Science Associates, Inc 1993) identified (see pages 5.235 through 5.242) that the project would have had a significant impact because it would "obstruct scenic views of San Pablo Bay and surrounding Marin County hills and mountains for residents of the existing Bel Marin Keys community" and no sufficient mitigation was available to reduce the impact to less than significant. Based on the analysis provided in the 1993 EIS/EIR, the impacts of the formerly proposed project appear most acute from the Bahama Reef viewpoint. Further, the formerly proposed project included 1- and 2-story houses that would have been at similar elevation to those in the BMK

community, which would have completely obstructed certain long-range views, particularly from first floors. The proposed wetland project includes new levees that would be lower than the elevation viewpoint of viewers from residences in BMKV (and whose initial construction height has been reduced in the preferred alternative in part to reduce aesthetic impacts).

One commenter also asserted that views of East Bay Hills, Mt. Diablo, or Mt. Tamalpais would be obstructed due to the proposed project. All of these features are well above the horizon as shown in the photographs provided by one individual at the public hearing on August 21, 2002. Since the top of the improved levee segments and the new levees in the preferred alternative would be at initial elevations of 6 feet NGVD and 10 feet NGVD, respectively, they would be well below the most common viewpoint of residents in the BMK community (first floors), which were estimated in the Draft EIR as being around 13 feet NGVD (7 feet NGVD for street level; 1.5 feet for foundation; and 4.5 feet for average viewing height) and views of features above the horizon would not be obscured.

Several comments suggested the use of photographic simulations for the assessment of aesthetics impacts. Because the proposed improvements on the expansion site are homogenous linear levees, the aesthetic character of the levees are simple and easy to describe in narrative form and easy to envision for local residents who are surrounded by existing levees. The key area of concern is the potential obstruction of views. With linear features at known distances from viewpoints, obstruction can be adequately analyzed as a problem of geometry. Thus, the line-of-sight analysis presented in appendix F is considered an adequate methodology to examine potential obstruction of views from the BMK community. Viewpoints from 5 of the street ends facing the south lagoon levee are considered to conservatively represent affected viewpoints. These viewpoints are far closer to the new BMKV levees than most residences on the south lagoon as they represent the nearest points of the community to the expansion site. Overall, this is a conservative methodology appropriate for examining the effect of uniform linear features on potential obstruction of views.

10. Dredged Material Quality and Sources

A number of comments expressed concern over the quality of dredged material that may be used in the project in terms of contaminants such as heavy metals and PCBs. Comments also requested that the dredged material from BMK CSD dredging of the lagoons and Novato Creek be designated a "preferred" source due to its local origin and seed content. The BMK CSD submitted a report concerning the recent analytical data and requested it be included in the Final SEIR/EIS. Finally, comments questioned why dredged material from the Port of Oakland or other locations would be accepted while BMK CSD dredged materials would not be accepted.

Dredged Material Quality

As noted in the alternatives description in chapter 3 of the Draft SEIR/EIS, the BMKV expansion project, like the authorized HWRP, would only accept dredged material that is determined to be suitable for wetland cover by the Dredged Material Management Office (DMMO). As described in the *Hazardous Substances and Waste* section in chapter 4, the DMMO, which is a consortium of regulatory agencies, evaluates dredged material and makes recommendations on its chemical suitability and biological suitability for use in wetlands and uplands based on testing that is specific to the proposed site environment, as well as on criteria and guidance from federal and state laws. Because dredged material would not be accepted from any source if it were not determined suitable for wetland cover, the project has an effective screening mechanism in place to monitor sediment quality.

The standard of use of material deemed suitable for wetland cover would be applied to any source proposing to place dredged material on the expansion site, whether it is the Port of Oakland or the BMK CSD, or others.

BMK CSD Dredged Material

The project sponsors are willing to accept BMK CSD dredged material during the dredged material placement phase, provided that the material is determined to be suitable cover material for use in the wetland project by the DMMO, its reuse is cost-effective to the project, and the timing and other parameters of the material's availability are consistent with the project implementation process. This has been added to the description of the preferred alternative in chapter 3 of the Final SEIR/EIS. The results of the recent analytical data concerning mercury in BMK lagoons and Novato Creek have been added to the Final EIS/EIR in the *Hazardous Substances and Waste* section in chapter 4. These data do not indicate any mercury levels above the allowable criteria for wetland cover found in the current and draft Regional Water Quality Control Board (RWQCB) sediment screening criteria. However, the Draft SEIR/EIS does not make any determinations that dredged material from the BMK CSD or other sources are suitable for use at the expansion site. This is a determination to be made by the DMMO at the time that the dredged material is to be placed on the site. Such a determination cannot be made years in advance of placement since the quality of sediment can change over time. It should also be noted that the DMMO determination is not limited to use of the RWQCB criteria. Thus, while the project sponsors will abide by the DMMO determination of suitability , the project sponsors have made no assessment of the suitability of BMK CSD dredged material at this time.

11. Habitat Design

A number of comments asserted that the proposed project does not promote "diversity" because it does not contain sufficient upland or transition habitat. Comments also asserted that additional upland habitat should be included in the project design to reduce the effects of the project on existing wildlife and to provide buffer areas between the tidal areas and residential areas. The impact of the project on existing wildlife habitat, particularly upland species, is discussed in the next master response. This response discusses the proposed project habitat design in relation to comments on the Draft SEIR/EIS.

Project Goal and Objectives

The HWRP-BMKV expansion project's goal is "to create a diverse array of wetland and wildlife habitats at the BMKV and HAAF sites that benefit endangered species as well as other migratory and resident species". Further, one of the project objectives is "to create and maintain wetland habitats that sustain viable wildlife populations, with particular emphasis on supporting Bay Area special status species." In both of these cited excerpts there is a clear emphasis on the priority of habitat that supports endangered or special status species, while also noting that other wetland or wildlife habitat should be a component of the project. While it is a goal to provide a diverse array of habitats, given the clear emphasis (and importance as described below) of habitat for endangered species, the goal is not interpreted by the project sponsors to require an equal amount of all potential habitats.

Bayland Ecosystem Habitat Goals Report, Prior Habitats Onsite, and Project Design

Contrary to one commenter's assertion, the proposed project is consistent with the recommendations of the Bayland Ecosystem Habitat Goals Report, which was a collaborative effort involving more than 100 scientists from federal, state, and local agencies as well as private consulting firms and universities. The Goals Report makes specific recommendations for the North Bay and for the HWRP and expansion sites. The recommendations (see page 113 of the Goals Report) include: "restore a wide continuous band of tidal marsh along the bayfront between Black Point and Gallinas Creek and along Gallinas Creek and Novato Creek" and "enhance managed marsh or enhanced seasonal pond habitat on agricultural baylands that are not restored to tidal marsh." There is a clear priority in the Goals Report for a predominance of tidal habitat for the expansion site, though not necessarily at the exclusion of seasonal marsh, upland or transition habitat.

Tidal wetlands perform a number of critical ecosystem functions for the overall health of San Francisco Bay including: fostering inhabitance by diverse animal and plant life;, acting as a buffer between human activity and a healthy estuarine environment, thereby mitigating potential damage to the ecosystem; functioning as a crucial nursery area for fish; and providing a critical nesting ground and migratory transition area for many species of waterfowl.

The entire expansion site, most of the HAAF site, the area now occupied by the BMK residential community, Pacheco Pond, and much of the neighboring industrial park was originally marshland and salt ponds subject to tidal inundation (as identified on page 112 of the Goals Report). These areas have been converted over time due to the building of agricultural levees, military bases, housing, and other developments. As such, there was no original upland habitat on the current expansion site prior to agricultural reclamation except on the adjacent Headquarters Hill, which is outside the restoration area. Several comments also assert that transitional and upland areas have suffered as much or more from development than tidal wetlands and thus should be a substantially larger portion of the habitat mix for the BMKV project. While it is true that substantial amounts of original transitional and upland habitat have been lost in Marin County and the Bay Area in general, the original pre-reclamation habitats lost at the expansion site are all tidal in nature.

Amount of Upland Habitat

One comment asserts that the proposed alternatives have "minimal" upland and transitional habitat. In an effort to be responsive to comments concerned about the upland component, while maintaining consistency with the Goals Report and project objectives, the preferred alternative has been modified to increase upland habitat. The preferred alternative, Revised Alternative 2, now includes 247 acres of upland (excluding areas of seasonal wetland), which constitute approximately 16% of the overall 1,576 acres available on BMKV for potential restoration. Including the 277 acres of proposed seasonal wetland habitat, the non-tidal component of this alternative would be approximately 33 % of the restorable area. Tripling of the areas shown in the Draft SEIR/EIS for Alternative 2, as one commenter recommends would result in about 570 acres of upland, or a total of 930 acres which would be nearly 60% of available restoration area, and would only leave 40% of the site for tidal habitat and seasonal wetlands. This suggested design modification would be inconsistent with the Goals Report recommendations for a "wide continuous band of tidal marsh", and inconsistent with the project goals and objectives.

As noted in chapter 3, the lead agencies considered alternative habitat mixes with greater non-tidal components, but ultimately selected not to proceed with such alternatives because they provide far less tidal habitat than the selected alternatives and would have far less potential to support viable populations of threatened, endangered and other special status species dependent on tidal marsh.

Further, in the context of estimated historical losses of between 80% and 90% of the tidal wetlands in the San Francisco Bay, the provision of a wide band of tidal marsh at the expansion and HAAF sites would be a significant step in restoring the diversity of the San Francisco Bay ecosystem as a whole.

Regardless of the emphasis on tidal habitat restoration, the conceptual designs have also included transitional and non-tidal habitat components to provide a diversity of wildlife and wetland habitats including transitional marsh, seasonal wetland, and upland in the preferred alternative. These areas allow for transitions and buffers from tidal marsh to adjacent areas as well as habitat for a diversity of species, including the species that currently utilized the nest. While an infinite variety of habitat mixes are theoretically possible, given the priorities established in the Goals Report and other regional planning efforts and the project goal and objectives, the alternatives in the Draft SEIR/EIS are considered to be an adequate range of alternatives as required under CEQA and NEPA.

Finally, the preferred alternative includes a larger upland component than the original Alternative 2 due to the enlargement of the swale area, which would provide a greater amount of available habitat for the upland species.

12. Existing Wildlife Habitat

A number of comments questioned whether the Draft SEIR/EIS adequately assessed the impact of the project on upland wildlife species and on nesting birds that utilize existing trees and structures on the expansion site. Comments also questioned the less-than-significance conclusion of the proposed project's effects on common wildlife species including raptors and other birds, deer and other mammals and recommended retention of the trees onsite, in addition to an increased amount of upland habitat. In particular, comments asserted concern for birds nesting and roosting in the eucalyptus grove near Bel Marin Keys Boulevard.

Wildlife Species

The only species mentioned by commenter that is listed as threatened or endangered is the peregrine falcon. As noted in table D-1 in appendix D, this species is a potential occasional visitor to the expansion site, but no suitable nesting habitat is located onsite. With restoration, there would still be foraging habitat on the site; thus no significant impact to the peregrine falcon is expected.

The following species mentioned by comments are California species of concern: golden eagle (nesting and wintering); white-tailed kite (nesting only); and American white pelican (nesting colonies only). Both golden eagle and white-tailed kite are assessed in table D-1 in the Draft SEIR/EIS. While white pelicans are seasonally present in Pacheco Pond; they are not known to nest locally (in

California, they are know to nest in the Klamath Basin). Table D-1 has been updated to include any additional species of concern mentioned as observed onsite or nearby in the 1993 EIR, which includes Cooper's hawk and sharp-shinned hawk. It should be noted that designation as a species of concern does not afford a species any legal protection, although migratory bird nesting is afforded certain protections under the Migratory Bird Treaty Act and raptor nesting is afforded certain protection under California Fish and Game Code Section 3053.5.

The following species mentioned by comments are not listed, nor species of concern, and are common wildlife species: red-tailed hawk; red-shouldered Hawk; kestrels; great horned owl; barn owl; screech owls; great egret; black-crowned night heron; great blue heron; turkey vulture; passerines (orioles, flycatcher, swallows, and warblers); nighthawks; Canadian geese; coyote; fox; skunk; deer; rabbits; raccoons; possums; ground squirrels; voles; mice; rats; gophers; moles; bats and snakes.

Removal of Existing Trees

Most of the eucalyptus grove near the current informal parking lot is on private land and is thus outside the restoration area and is not proposed for removal. In the preferred alternative, the interpretive center has been moved to the City of Novato property at the HAAF site. The Bay Trail route has been revised to follow around the west side of Headquarters Hill. These changes would allow the retention of most of the eucalyptus trees in and around Headquarters Hill. Some individual trees near Headquarters Hill may need to be removed in order to facilitate levee improvements and trail construction. Other trees on the expansion site along with the former agricultural structures would be removed resulting in the displacement of existing species that could be using them for nesting or roosting. The PG&E power towers would not be removed. With the exception of several isolated oaks, most of the trees on-site are non-native eucalyptus and their removal is not considered significant.

Updates to Draft SEIR/EIS – The impact discussion in the *Biological Resources* section of chapter 4 has been updated to clearly discuss the removal of existing trees and structures and the conversion of agricultural areas to other habitats. Most of the bird species utilizing the site trees and structures are common bird species with extensive alternative habitat located nearby. As noted in the Draft SEIR/EIS, implementation of Mitigation Measures BIO-1, BIO-3, BIO-4, and BIO-5 would reduce the impact on breeding nests of special status bird species that utilize the site. Mitigation Measure BIO-1 has been updated to include several additonal species of concern identified in the 1993 EIR as observed on or near the expansion site. An additional impact and mitigation has been added to conduct a pre-construction survey of the existing structures for bats to ensure that structure demolition does not disturb any special-status bats during their breeding season. The section has also been updated to include discussion of the loss of

wildlife habitat related to conversion of the agricultural fields; however due to the regional abundance of nearby diked agricultural fields, this impact is identified as less than significant.

In order to create habitats that are relatively rare in the San Francisco Bay ecosystem, such as coastal salt marsh and seasonal wetlands, it is necessary to convert the existing habitat on the property. While this does result in impacts to existing habitats and the species they support, eventually the value of the site to San Pablo Bay and San Francisco Bay as a whole would be far greater than at present. Overall, the loss of existing agriculture fields and grassland habitat and removal of non-native trees and former agricultural structures and replacement with tidal salt marsh, seasonal wetlands, emergent wetlands, and new upland grasslands is not expected to result in a significant impact to common wildlife.

13. Trails and Use

A number of comments, particularly from the BMK residential community, opposed the establishment of a designated public trail spur crossing the expansion site to Novato Creek due to concerns about noise, private security, and visual disruption. DFG recommended in their comment letter that no spur trail be constructed due to the potential to disrupt sensitive wildlife habitats and species. Some comments recommended that the Bay Trail routing be located on the east side of Pacheco Pond (such as the City of Novato), while others recommended the Bay Trail be routed on the west wide of the pond. Concerns were also raised about routing the Bay Trail close to the BMK residential area and over safety along a future trail along Bel Marin Keys Boulevard. Several comments from the BMK community also expressed concern about project effects on the existing informal use of the south lagoon levee for recreation and questioned whether or not the project sponsors could prohibit continued use by residents of the levee in relation to certain BMK CSD easements. Finally, a number of comments advocated that dogs be allowed to use any recreational trails on the expansion site.

Preferred Alternative Trail Routing

In the preferred alternative, the spur trail Option 2A to Novato Creek has been deleted. The lead agencies decided not to include a spur due to the difficulty in avoiding access impacts on sensitive habitats and sensitive species that exist in Novato Creek and that could become established within the restored wetland areas, in addition to the concerns raised about the proximity of the trail to BMK residential areas.

The preferred alternative also includes a re-routing of the Bay Trail around the east side of Pacheco Pond. The route has also been changed slightly to follow west around Headquarters Hill instead of its existing eastern alignment. This

change was implemented to avoid disruption to the BMK residential area and also to avoid locating a future Bay Trail connection along the blind curves on Bel Marin Keys Boulevard. The lead agencies have determined that the route around the west side of Pacheco Pond, while feasible, would entail a disruption to the existing willow riparian habitat at the confluence of Arroyo San Jose and Pacheco Creeks, would not allow for any buffering between the trail and wildlife habitat, and would involve additional construction disruption and cost due to the need for bridges and boardwalks.

Use of South Lagoon Levee

As noted in several comments, there is informal recreational use of the south lagoon levee by BMK residents as well as other members of the public. The south lagoon levee is located on land owned by the Conservancy and is not a designated public trail. In the preferred alternative, which has no trail spur to Novato Creek, this area would not be designated a public trail. Though implementation of the preferred alternative would eliminate the existing informal use of the south lagoon levee, BMK residents and other members of the public would have access to the new Bay Trail segment to be constructed across the expansion site to connect with existing segments at HAAF and southward. Future plans are to extend the Bay Trail to connect with northward heading segments as well. The replacement of the informal recreational use of levee with a nearby designated and maintained portion of the Bay Trail is not considered a significant effect on land use or recreation. This impact has been clarified in the Final EIS/EIR.

BMK Easements for South Lagoon Levee

A number of comments assert that existing easements held by the BMK CSD relative to the south lagoon levee provides a right of recreational access to the south lagoon levee. The BMK CSD easements for the south lagoon levee are for drainage and maintenance purposes related to the levee itself, which is located on property owned by the Conservancy. Ingress and egress noted in the subject easement(s) are only for the purposes of maintenance or drainage. The easements do not provide an entitlement for BMK community residents or any other persons to access the levee or any other location on the BMKV parcel for recreational purposes. It is for these reasons that the use of the south lagoon levee for walking or walking of dogs is considered an informal use.

Comments provided by the BMK CSD and BMK residents on the Draft SEIR/EIS uniformly opposed any spur trail to Novato Creek, whether along the south lagoon levee or on the new levee to be built for the project. The preferred alternative has no spur trail, in part due to the concerns of BMK residents about public access in proximity to the residential area and in part due to concerns about negative effects of access near restored tidal wetlands and Novato Creek.

However, lack of a designated trail would preclude BMK residents, like any other member of the public, from accessing the south lagoon levee for recreational purposes. The BMK CSD would continue to be able to access the levee for maintenance and drainage purposes, as allowed for by the existing easement. BMK residents, like other members of the public, would be able to access the Bay Trail, which would provide extensive length of recreational trail with scenic vistas for recreational purposes.

Being that the project is on public land, the Conservancy cannot reserve a portion of the project for private access by a certain group of individuals while excluding other members of the public. Thus, in order to allow continued use of the south lagoon levee for recreational purposes by the BMK residents, the Conservancy would need to designate a public trail, which comments from the community specifically opposed. Furthermore, such a designation would also have adverse effects on the existing habitat and restored habitats and incidentally would also not meet the primary purposes of the project.

14. Interpretive Center Location

A number of comments suggested placing the interpretive center on the City of Novato property on the HAAF site to avoid impacts on traffic, wildlife, and disruption to nearby BMK residences. As noted above, in the preferred alternative, the interpretive center would be located on the City of Novato property on the HAAF site. This alternative is supported by the City of Novato (see comment letter L-7).

Since the interpretive center will be placed on lands that are not required for HWRP project purposes, and since the Corps policy greatly limits expenditures for educational facilities, the interpretive center will not be a project feature to be paid for or constructed by the federal government. The land required for the interpretive center is outside the federal project. However, the project design will accommodate the interpretive center construction to be carried out by others. The federal government will be able to share the expenses of some recreation features in addition to the trail, including a parking area, restrooms, and information kiosks (referred to as "access area"). Only land required for these approved features can be cost-shared by the federal government.

15. Mosquito Breeding Habitat and Pest Displacement

A number of comments expressed concern about mosquito breeding habitat and the potential for use of pesticides for mosquito control. A number of comments also expressed concern about the displacement of rodents or other pests during construction into the BMK residential area.

Mosquito Breeding Habitat

As described in the *Public Health* section of the Draft SEIR/EIS, the site already contains mosquito breeding habitat including ponded areas in cultivated fields (not estimated, but fields total about 1,241 acres at present), brackish drainage ditches (36 acres), ponded areas in grassland (not estimated but grassland totals 128 acres), seasonal wetland (114 acres), nontidal salt marsh (21 acres) and open water (15 acres) (see table 4-6). The preferred alternative would eliminate these habitats and replace with other habitat, some of which would be mosquito breeding habitat including open water (21 acres), emergent wetland (12 acres), seasonal wetland (277 acres), and high transitional marsh (79 acres) areas. Due to the use of a majority of the site for tidal marsh in the preferred alternative, which is not mosquito breeding habitat, the proposed project is likely to actually reduce the available areas for potential mosquito breeding. This would reduce the potential use of pesticides or other means of control relative to the existing setting. Regardless, Mitigation Measure PH-1 is included to coordinate with MSMAD in monitoring, water management strategies, and application of EPA-approved pesticides, as needed for mosquito control. Such activities would be similar to those engaged by MSMAD and other parties in adjacent areas that may also provide potential mosquito breeding habitat. The MSMAD in their comment letter, notes their agreement with the analysis and conclusions in the Draft SEIR/EIS concerning the project effects on mosquito habitat.

Pest/Predator Displacement

A certain amount of displacement during construction of pests, including skunks, mice, and rats, would occur due to construction activity. Construction disruption would occur over a 13-year period in the preferred alternative and would only effect portions of the 1,600-acres expansion site at any one time. Thus, existing pests or other wildlife would gradually be displaced from the agricultural and grassland areas as they are changed by site preparation, placement of dredged material, earthworks, and inundation. These species would move to portions of the site that are not currently being disturbed if they provide their habitat requirements or to adjacent offsite areas, such as Pacheco Pond, upland areas at the HAAF site, and the Leveroni parcel that provide upland habitats similar to those present onsite. Some existing species would remain and/or recolonize habitats created on the expansion site. It is possible that some individuals of these species may temporarily move toward adjacent residential areas. This can occur and does occur under existing conditions when wildlife moves from BMKV into adjacent areas. With construction, displacement of pest species may periodically increase, however given that the project area is surrounded by other suitable habitat to which these species could migrate, this effect would be temporary and incidental over a long period of time, this is not considered a significant effect.

16. Construction Disturbance (Air, Noise, Traffic)

A number of comments expressed concern about traffic, noise, and air quality impacts during construction and several suggested that Bel Marin Keys Boulevard should not be used for construction access to avoid these impacts.

As noted above, in the preferred alternative, the primary access route has been moved to approach the expansion site from the Hamilton side in order to reduce construction traffic impacts on Bel Marin Keys Boulevard. Secondary construction access would be via Bel Marin Keys Boulevard.

Construction noise impacts are identified and Mitigation Measure N-1 includes a number of measures designed to reduce the impact of construction noise on adjacent residential areas, including the restriction of hours, as recommended by one comments.

Construction impacts related to air quality and dust are discussed in the Draft SEIR/EIS and Mitigation Measure A-1 includes a range of measures to reduce the generation of PM10 and dust.

During conceptual design, the location of the staging area was moved to the center of the expansion site as shown on the construction figures in chapter 3, where it would be both centrally located and well-separated from adjacent residential areas at the HAAF site and at BMK.

17. Agriculture

A number of comments questioned the conclusion of the Draft SEIR/EIS that the project would not result in a significant effect on agriculture due to the conversion of the existing agricultural use to wildlife habitat uses. In addition, some comments asserted that Marin Countywide Policies concerning agriculture are insufficiently analyzed and that inconsistency with certain policies should be identified as a significant effect of the proposed project. Finally, at least one commenter questioned why the 1993 SEIR/EIS for the previously proposed residential/lagoon development concluded that that project had a significant effect on agriculture, whereas the Draft SEIR/EIS for this project did not.

The Marin County Community Development Agency (MCCDA) is the agency responsible for administering the MCP. According to MCCDA staff in their comment letter on the Draft SEIR/EIS, they do not consider the proposed wetland restoration project a "development" in the context of the MCP (Marin County Community Development Agency 2002). Based on this interpretation, the project would not be subject to the MCP policies for development, including those related to agriculture.

The site is not prime agricultural land and supports a very minor part of current County agricultural production. During the Conservancy appraisal of the BMKV property, the agricultural potential of the expansion site was assessed and agriculture was not considered economically sustainable due to poor drainage, low fertility, and lack of an irrigation supply. Further, the Conservancy has also consulted with an agricultural advisor at the Southern Sonoma-Marin Resource Conservation District (RCD) who also stated that the land was very poor quality for farming due to a number of factors including: soil quality, drainage and lack of water supply (Gustasson, pers. comm., 2001).

The discussion of project effects on agriculture has been expanded in the Final SEIR/EIS to include discussion of economic sustainability and existing CWP policies in greater detail.

The prior SEIR/EIS was conducted in a context of evaluating whether or not a new residential/lagoon, development similar to the existing BMK community, should be allowed to develop in an area of existing agriculture within the diked historic marshlands subzone within Bayfront Conservation Zone. One of the purposes of the subzone is "to foster the enhancement of the wildlife and aquatic value" through allowing uses such as agriculture, wetland restoration, and flood basins (see CWP Policy EQ-2.45). It is not surprising in this context that the prior SEIR/EIS concluded that a significant impact on agriculture would result from the residential/lagoon development. With the restoration project, retention of the site in agriculture use would be far more consistent with the Bayfront Conservation Zone than use for residences and an expanded lagoon. In the event that the prior development would have gone forward, it may have been appropriate to require mitigation to offset the conversion of bayfront lands from the priority uses of habitat and agriculture. In addition, the prior SEIR/EIS used different significance criteria than that used by the lead agencies for the BMKV wetland restoration project. Thus, given the context of the prior housing/lagoon development and divergent methodology, it is also not surprising that the prior SEIR/EIS came to a different conclusion than the current document.

Because the site is not prime, unique farmland or farmland of statewide importance; agriculture is not considered to be economically sustainable onsite due to the low quality of soils, poor drainage and lack of irrigation water; and the site plays a relatively limited role in the County and regional agricultural economy, the loss of agriculture at the expansion site is a less-than-significant impact. As noted in the Draft SEIR/EIS, the project may not be consistent with all CWP policies regarding agriculture, but is overall considered to further the purposes for which the Bayfront Conservation Zone was designated, and these inconsistencies are not considered to be a significant effect. Further, because the project promotes habitat restoration and enhancement within an area in the Bayfront Conservation Zone, the public values for which agriculture onsite was previously considered valuable (namely open space, views, and habitat) are preserved and/or enhanced by the proposed wetland restoration.

18. Climate Change

Climate change was not specifically discussed in the Draft SEIR/EIS. However, rising sea levels were considered during the conceptual design phase of the project. Master Response 2 discussed climate change in relevance to the hydrologic and hydraulic studies conducted for the flooding impact assessment; this response concerns project design.

The design of the new outboard levee (which is the only levee in direct contact with the tide) includes a 0.5 foot allowance in the target design height for mean sea level rise among other factors (see footnote on figure 3-12). In addition, the preferred alternative, Revised Alternative 2, includes periodic increases in levee height as necessary to maintain a barrier to tidal intrusion from San Pablo Bay into the portion of BMKV behind the levee. This "incremental" approach has allowed the initial construction elevation to be lowered from 12 feet NGVD to 10 feet NGVD, as requested by numerous BMK residents who commented on the Draft SEIR/EIS. The previous height of 10 feet NGVD allowed for a far greater margin to account for the potential of accelerating sea level rise. However, projected trends in sea level rise can be taken into account when determining timing of periodic increases in levee height on the site. The upland and non-tidal habitats are all located behind the new proposed levee.

As to the design of tidal wetland areas, while the preferred alternative uses dredged material to reduce the time necessary to reach tidal marsh elevations, it also relies on natural sedimentation for the final cover material. Suspended sediment loading is discussed in the Draft SEIR/EIS in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 (see page 4-19). Sedimentation rates at locations on the margin of San Pablo Bay near the Petaluma River mouth are estimated to be as much as 0.5 to 1.3 feet per year. Based on current estimates of suspended sediment in areas adjacent to the site and estimates of settlement onsite, it is estimated that the site would take about 10 years to form elevations appropriate for tidal marsh after tidal breach, given the conceptual elevations of dredged material placement (about 2 feet NGVD at the highest). This 10-year period represents an average annual net increase of 1 to 2 inches in marsh elevation. The rate of deposition would be higher in the first years after breach and lower in the later years because deposition rates are dependent on water column depths as well as suspended sediment concentrations (i.e., as depth decreases, if concentrations stay the same, deposition also decreases).

The methodology and data described in *The Probability of Sea Level Rise* (James G. Titus and Vijay Narayanan 1995) were used to make a rough estimate of sea-level rise in San Francisco Bay to compare to the sedimentation rates near the expansion site. The historic estimate of sea-level rise in San Francisco Bay noted in the 1995 EPA document is approximately 0.13 centimeter (cm)/year (or 0.05 inches/year). Using the normalized projections in the EPA document to estimate a global warming-induced increase in sea-level rise, there is a 50% possibility of

an increase of 10 cm (4 inches) between 1990 and 2050 and a 1% chance of a 35 cm (17 inches) in sea-level rise above historic trends. Adding the 2, one can develop a probability-based projection of sea-level rise including the effects of climate change. In this case, the estimates derived are a 50% probability of an 18-cm (7-inch) rise and a 1% probability of a 43-cm (17-inch) rise in sea level between 1990 and 2050. These represent an average annual rise of 0.3 cm (0.12 inches) and 0.7 cm (0.28 inches) for the 50% and 1% probability scenarios.

This rough estimate is not provided as a specific and accurate prediction of potential sea level rise, but is useful to compare to the projected sedimentation rates that are assumed in the project design. As noted above, during the 10 years of initial marsh elevation formation after tidal breaching, the site is expected to accumulate sediment at an average net annual rate of 1 to 2 inches, as compared to the 1% probability scenario for climate-changes of annual average sea-level rise of 0.28 inches. This suggests, that at least in the near term, the net sedimentation rates at the proposed expansion site appear sufficient to result in net increases in marsh elevations to match or exceed projected sea level rise.

The long-term fate of the tidal marsh concerning sea level rise would depend on the future rate of sea level rise compared to the future rate of deposition of suspended sediment and settlement on the site. If sea level rise is more rapid that the net rate of deposition, then tidal marsh could be gradually be converted to tidal flat and then open water. If the net rate of deposition is greater than sea level rise, then the elevation of the marsh should rise with sea level.

Concerning flooding, in the long-term, the rise in sea level is more than likely to result in increased coastal flooding that would effect the BMK community and other communities located along the Bay or along low-lying areas along tidal creeks, such as Novato Creek. Coastal communities around San Francisco Bay will also be faced with flooding challenges if future sea level rise is accompanied by more severe winter storms, induced by climate change. While these are serious concerns, the BMKV wetland restoration project is not a flood control project, and its purpose is not to ameliorate present nor future flooding conditions that are unrelated to the project. The effect of sea rise and potentially more severe winter storms would be higher tide levels and higher peak flows in Novato Creek and its tributaries. However, the relative results of the hydrologic and hydraulic model are considered adequate to extrapolate that even in the event of higher tides and higher flows than those used in the modeling, the mechanisms of flow routing used in the model would still be valid and the proposed project would not worsen flooding relative to conditions without the project.

As coastal communities are likely to be forced to adapt to sea level rise and other effects of climate change, so the project sponsors or their successors may also need to adapt the project or the site. Any such future changes are speculative at this time, but if they involved impacts not discussed in this SEIR/EIS, then a separate environmental compliance process would need to be followed when such changes are identified as necessary.

Chapter 3
Response to Comments

Introduction

This chapter contains the written comments received on the Draft SEIR/EIS, the transcript of the comments provided orally at the public meeting, and responses to substantive issues raised in the comments. The comments and responses are grouped in 4 categories: federal agencies, state agencies, local agencies, and individuals and organizations. The comments immediately precede the corresponding responses. Underlined portions of the responses identify where changes have been incorporated into the Final SEIR/EIS. Table 1 below identifies the commenters and the pages on which the comments begin.

Table 1. List of Commenters and Location of Responses

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1

Federal Agencies

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Assistant Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

Comment Letter F-1

August 12, 2002

Mr. Tom Gandesbury
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, California 94612-2530

Dear Mr. Gandesbury:

Enclosed are comments on the Draft Environmental Impact Statement for Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project marine County, California. We hope our comments will assist you. Thank you for giving us the opportunity to review this document.

Sincerely,

James P. Burgess, III
NEPA Coordinator

Enclosure

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Southwest Region
777 Sonoma Ave., Room 325
Santa Rosa, CA 95404-6528
Tel (707) 575-[phone] Fax (707) 578-3435

August 12, 2002 MH

MEMORANDUM FOR: James P. Burgess, III
NEPA Coordinator

FROM: Mark Helvey
Acting Northern California Supervisor
Habitat Conservation Division

SUBJECT: DEIS 0202-05--Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project, Marin County, California

NOAA Fisheries supports the preferred alternative, "Beneficial Reuse of Dredged Material with Seasonal Wetlands" (Alternative 2). This alternative will benefit NOAA's trust resources by reclaiming 1,249 acres of historic wetland habitat and by lessening the amount of dredge material that potentially could be disposed within San Francisco Bay by receiving these dredged materials at the proposed site. F-1.1

The proposed project may still require subsequent consultations with our office regarding section 7 of the Endangered Species Act. F-1.2

MEMORANDUM FOR: James P. Burgess III
Acting Director, Office of Strategic Planning

FROM: Charles W. Challstrom
Director, National Geodetic Survey

SUBJECT: DEIS-0207-05 Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project Marin County, California

The subject statement has been reviewed within the areas of the National Ocean Service (NOS) responsibility and expertise and in terms of the impact of the proposed actions on NOS activities and projects.

Note, in 2000, NOS carried out a project in support of the Hamilton Army Airfield Restoration. This project included establishing geodetic control as well as installing a tide gauge and supporting reference bench marks.

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the National Geodetic Survey's home page at the following Internet World Wide Web address: http://www.ngs.noaa.gov After entering the this home page, please access the topic "Products and Services" and then access the menu item "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the National Geodetic Survey data base for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

If there are any planned activities which will disturb or destroy these monuments, NOS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation(s) required. F-1.3

For further information about geodetic control monuments, please contact Rick Yorczyk; SSMC3 8636, NOAA, N/NGS; 1315 East West Highway; Silver Spring, Maryland 20910; Telephone: 301-713-3230 x142; Fax: 301-713-4175, E-mail: Rick.Yorczyk@noaa.gov.

NOS has a geodetic State Advisor in California, Marti Ikehara, who can provide further assistance. She can be reached at: NGS, c/o CALTRANS, Geometronics Branch, MS 35, 1727

30th Street, Sacramento, CA 95816. Telephone: 916-227-7325; Fax: 916-227-7670; E-mail: marti_ikehara@dot.ca.gov.

Tidal station and water level information are available from the Center for Operational Oceanographic Products and Services (CO-OPS) home page at the following Internet World Wide Web address: http://www.co-ops.nos.noaa.gov/

Contact for water level data and benchmark information: Steve Lyles; NOAA, NOS, CO-OPS, Products and Services, N/OPS3; Attn: Water Levels; 1305 East-West Highway; Silver Spring, MD 20910-3281. Telephone: 301- 713-2877 x 176; Fax: 301-713-4437, E-mail: Stephen.Lyles@noaa.gov

The identified plan provides for potential modifications, to a barrier levee, an access berm, and a tidal breach. If the project is completed as proposed there will be no direct impact on navigation. However, NOS would like as built surveys and engineering drawings so that shoreline changes can be accurately detailed on future editions of affected NOS Charts. F-1.4

For further information about these charting activities, please contact Howard Danley; NOAA, NOS, Office of Coast survey, N/CS28; SSMC3 7458; 1315 East West Highway; Silver Spring, Maryland 20910; telephone: (301)713-2732 x105. E-mail: Howard.Danley@noaa.gov

UNITED STATES DEPARTMENT OF COMMERCE
Office of the Assistant Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

Rec'd Aug 28/02
—ML

AUG 22 2002

Mr. Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, California 94612-2530

Dear Mr. Gandesbery:

Enclosed are additional comments on the Draft Environmental Impact Statement for Bel Marin Keys Unit V Expansion, Hamilton Army Airfield Wetland Restoration Project (Novato, Marin County, CA). We hope our comments will assist you. Thank you for giving us the opportunity to review this document. If you have any questions, please call Mark Millikin at 202-482-2153.

Sincerely,

James P. Burgess, III
NEPA Coordinator

Enclosure

RECEIVED
AUG 28 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

MEMORANDUM FOR: James P. Burgess, III
NEPA Coordinator

FROM: Dr. Russell Bellmer & /s/
Jennifer Macal
NOAA Restoration Center

SUBJECT: Draft General Reevaluation Report and Draft Supplemental Environmental Impact Report/Statement: DEIS-0207-05-Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project Dated July 2002

General Comments:

The document appears to presents a significant amount of physical information on the existing environmental conditions and the three alternatives under consideration. The preferred alternative physical benefits projections seem based in sound technical analyses and professional judgments. The analyses of the proposed dredged material placement to support restoration of important tidal habitat in San Francisco Bay seems to limit the discussion of potential natural resources impacts and benefits. The California State Coastal Conservancy and U.S. Army Corps of Engineers, San Francisco District should be commended on their excellent planning efforts to help restore this significant ecosystem. The few marine resource comments provided below are offered to help the document reader have a more complete understanding of the proposed project impacts and benefits. Thank you for the opportunity to review this document in support of sound ecosystem restoration.

Specific Comments:

The document contains a thorough and complete description of the existing physical environment and the future physical environment with and without the project. An analysis of the existing and future marine biological community, however, is lacking. These resources are one of the main reasons to restore this ecosystem. Consideration should be given to address the existing marine environment, short-term and long-term impacts, and methods to minimize potential impacts. This same approach should be used to address marine resource benefits. This information will assist the reader to fully understand those measures taken to insure that these natural resources will be enhanced with the proposed project in place. F-1.

The document section on environmental regulatory requirements does not reflect all appropriate state and federal environmental laws, regulations, and directives (e.g., Anadromous Fish Conservation Act, Marine Protection, Research, and Sanctuaries Act, Magnuson-Stevens Fishery Conservation and Management Act, and Executive Orders). This section should be expanded and coordinated with the responsible agencies to insure the reader that the proposed project has or will meet all appropriate environmental requirements. This discussion should present information on any potential for project modifications necessary to comply with any conditions that may occur during the review process. The reader needs to have a better understanding of the benefits and impacts to those resources covered under specific authorities. F-1

The document does not provide a Draft Biological Opinion under the Endangered Species Act, a Draft Essential Fish Habitat Assessment under the Magnuson-Stevens Fishery Conservation and Management Act, or a Draft Consistency Determination under the Coastal Zone Management Act. These draft documents would help to insure the reader that the requirements under these specific Acts have been fully addressed in the project planning stage and allow for comments on these requirements. Consideration should be given to including these in the document. F-1.7

F-1 U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA)

F-1.1

The comment is noted.

F-1.2

Requirements for consultation including ESA Section 7 consultation are described in Section 6 (p. 6-2) and also noted in table 1-2

F-1.3

Comment noted.

F-1.4

Comment noted. Detailed engineering design and mapping would be part of the project engineering and design (PED) phase. The project sponsors would be pleased to provide copies of the final design and associated mapping to NOAA.

F-1.5

Existing subtidal and intertidal aquatic habitat are described in the *Biological Resources* in chapter 4 of the Draft SEIR/EIS including a brief discussion of some of the marine communities that utilize these habitats. Short-term (construction-related) impacts on marine biological resources including fish (both common and special-status), tidal mudflat, coastal salt marsh are identified along with mitigation measures to avoid or reduce the identified impacts. Long-term benefits are also described in terms of increases in subtidal aquatic habitat, intertidal aquatic habitat, and coastal salt marsh. While the document does not provide a detailed description of future marine communities, these communities would be expected to be similar to those that currently utilize the subtidal and intertidal aquatic habitats present at neighboring areas of remnant tidal mudflat and coastal salt marsh. Marine resource benefits are estimated by identifying the approximate acreages resultant from the project at maturity. The discussion of marine resources has been expanded to provide the reader with an improved context for the impact and benefit discussion.

F-1.6

The *Consultation and Requirements* section in chapter 6 of the SEIR/EIS has been revised to include discussion of all of the federal laws, regulations, and directives mentioned in the comment, in addition to several additional state requirements.

F-1.7

The project is currently in the conceptual design phase. The Draft SEIR/EIS has been developed to incorporate environmental concerns in the conceptual design phase. A draft Biological Assessment is currently in preparation for the project. A draft essential fish habitat (EFH) assessment and a draft consistency determination will also be developed for the project. The *Consultation and Requirements* section in chapter 6 of the SEIR/EIS has been revised to include an expanded discussion of the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the Coastal Zone Management Act (CZMA). Following conceptual design, the project (if authorized) would move to the detailed design phase, wherein more of the specific details necessary for agency consultation would be identified. At that point, formal consultation and determination of consistency will commenc pursuant to these federal requirements.

Regarding Endangered Species Act consultation, the Corps has begun formal consultation with the U.S. Fish and Wildlife Service and informal consultation with the National Marine Fisheries Service for the HWRP... Formal consultation would occur once the detailed design information that USFWS and NMFS require is developed. Similar consultation regarding EFH would also occur at that point.

Regarding consistency with the CZMA, it should be noted that the San Francisco Bay Conservation and Development Commission (BCDC), which is the state agency that implements the CZMA within the San Francisco Bay, is a cooperating agency for the project. While a consistency determination has not been formally developed and submitted to BCDC, CZMA concerns have been incorporated into project planning from inception, in large part through the involvement of BCDC.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Comment Letter F-2

September 3, 2002

Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market Street, 7th Floor
San Francisco, CA 94105

Dear Mr. Jolliffe:

The Environmental Protection Agency (EPA) has reviewed the Supplemental Draft Environmental Impact Statement/Environmental Impact Report (SDEIS/EIR) for the **Bel Marin Keys Unit V (BMKV) Expansion of the Hamilton Wetland Restoration Project, Marin County, California (CEQ# 020302, ERP #COE-K39034-CA).** The SDEIS/EIR is a supplement to a 1992 Draft EIS/EIR for this project, and is tiered to the 1998 Final Environmental Impact Statement/Environmental Impact Report (FEIS/FEIR) for the Hamilton Wetland Restoration Project (HWRP). The FEIS/FEIR for the HWRP provided a programmatic-level analysis of expanded wetland restoration at the BMKV site. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The U.S. Army Corps of Engineers (Corps) and the California State Coastal Conservancy (Conservancy) propose to restore over 1,000 acres of tidal marsh and other wetland and upland habitat at the BMKV property, as an expansion of the HWRP. In addition to the no-action alternative, the SDEIS/EIR evaluates three action alternatives: 1). dredged material placement with enlarged Pacheco Pond; 2). dredged material placement with seasonal wetlands; and 3). natural sedimentation with enlarged Pacheco Pond. The Corps has identified Alternative 2 as the preferred alternative, and the Conservancy has not yet identified a preferred alternative. The Corps' preferred alternative includes placement of 13 million cubic yards of dredged material on the site to create 1,039 acres of tidal wetlands, 137 acres of other tidal habitats, 210 acres of non-tidal wetland, and 190 acres of upland buffer areas. It includes construction and improvement of new and existing levees, installation of new water conveyance structures, and construction of a recreation corridor (connected to the Bay Trail) and interpretive center.

EPA Region 9 was actively involved in the development of the HWRP, and provided funding to the Conservancy for early project scoping. We support the expansion of the HWRP at the BMKV site, especially Alternatives 1 and 2, as they further the goals of the federal/state *Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region.* Re-using dredged material for this project provides several benefits, including a reduction in the time needed for re-establishing tidal and other wetland habitats on the site, and a decrease in the volume of dredged material disposed of in the Bay or ocean.

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EPA supports the goals and objectives of the proposed restoration at the BMKV property. In our review of the document, we found that the SDEIS/EIR sufficiently addresses the environmental impacts of the proposed alternatives. Therefore, EPA has rated this document "***LO - Lack of Objections.***" (Please see the attached *Rating Factors* for a description of our rating system). Our rating of LO reflects our overall view of the adequacy of the document. However, EPA recommends that the Corps and Conservancy address the following recommendations in the Final SEIS/EIR in order to improve the document and the effectiveness of the final project:

Monitoring

Mitigation Measure BIO-8 and BIO-9 both address measures for monitoring the rate and success of marsh, brackish open water, emergent marsh, and seasonal wetland habitat establishment at the site. For marsh development, the SDEIS/EIR commits to a 15-year monitoring program, with annual monitoring during the first five years, and then again in years 10 and 15. For other habitats, the agencies plan to implement a 5-year monitoring program.

EPA recommends that the Corps and the Conservancy consider using an adaptive management approach in determining the frequency and duration of monitoring for all types of habitat. For instance, if after 5 years marsh habitat on the site is still far from achieving performance standards, then additional annual monitoring (and possible corrective measures) may be needed. Similarly, if habitat establishment in brackish open water, emergent marsh, and seasonal wetlands areas has not been successful within the 5-year monitoring period, the Corps and Conservancy should consider whether monitoring should be continued beyond this initial effort. F-2.1

Biological Impacts

Pages 4-75 and 4-76 list "Impact Mechanisms" and "Thresholds of Significance" on biological resources related to the implementation of the proposed project. We recommend that the bioavailability of contaminants, and any associated impacts from biogeochemical process changes also be considered here. F-2.2

Water Quality

Page 4-58 discusses the potential increases in turbidity and sedimentation associated with breaches of the levees and full tidal circulation. The SDEIS/EIR states that no substantial offsite sediment transport is anticipated. Do the results of the Corps/Conservancy Sonoma Baylands project offer any information which would help evaluate potential changes to offsite transport of sediment and associated increases of turbidity in the Bay associated with the proposed project? Given some of the similarities in restoration approach and design between these projects, outcomes from the Sonoma Baylands project may offer useful information regarding impacts to water quality associated with the proposed project. If so, it would be useful to include a short discussion of this in the FSEIS/EIR. F-2.3

Miscellaneous

- Page 3-12 describes the creation of a staging area for Phase I of the project. EPA recommends that staging areas should be located in upland areas whenever possible. F-2.4

- Page 4-128 - "Chemical Suitability of Dredged Material" section incorrectly lists Cal-EPA as one of the member agencies of the Dredged Material Management Office. F-2.5

- Throughout the document, references to Public Notice (PN) 99-3 should be updated to reference the final guidance document in PN 01-01. F-2.6

- Pages 4-131 and 4-134 discuss several sediment contaminants, including polynuclear aromatic hydrocarbons (PAHs). The document incorrectly abbreviates this contaminant as PNAs and in Table 4-11 incorrectly identifies them as polyaromatic hydrocarbons. F-2.7

We appreciate the opportunity to review this SDEIS/EIR. Please send three (3) copies of the Final Environmental Impact Statement to this office at the same time it is officially filed with our Headquarters Office of Federal Activities. If you have any questions, or wish to discuss our comments, please call Ms. Shanna Draheim, of my staff at (415) 972-3851.

Sincerely,

Lisa B. Hanf

Lisa B. Hanf, Manager
Federal Activities Office

Enclosure: EPA Rating Sheet

cc: Tom Gandesbery, California State Coastal Conservancy.

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

F-2 U.S. Environmental Protection Agency (USEPA), Region IX

F-2.1

The possibility of change in monitoring regime after 5 years has been added to Mitigation Measures BIO-8 and BIO-9. Change in the monitoring regime may be necessary if the rate, quality, and quantity, are not meeting restoration goals. The Monitoring and Adaptive Management Plan for the HWRP has been updated for the BMKV expansion and added as an appendix to the Final SEIR/EIS.

F-2.2

Bioavailability of contaminants has been added as an impact mechanism to the *Biological Resources* section of chapter 4. The document discusses the potential for increased availability of contaminants due to the use of dredged material and due to the potential for increased mercury methylation in the *Water Quality* section (see impacts WQ-1 and WQ-9). A reference has been added to the *Biological Resources* section to direct the reader to this discussion.

F-2.3

A review of available monitoring data from Sonoma Baylands project did not identify any monitoring data for sedimentation off-site. Thus, there are no data available from the Sonoma Baylands project by which to expand the assessment of off-site sediment transport in this SEIR/EIS. Nevertheless, because the project is essentially designed as a sediment trap, the conclusion that no significant increases in sedimentation or turbidity off-site remains unchanged.

F-2.4

Comment noted.

F-2.5

Section corrected as requested.

F-2.6

Reference updated.

F-2.7

Reference corrected.

Comment Letter F-3

United States Department of the Interior

OFFICE OF THE SECRETARY-
Office of Environmental Policy and Compliance
1111 Jackson Street, Suite 520
Oakland, CA 94607

September 16, 2002

ER: 02/684

Mr. Eris Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market Street, 7th Floor
San Francisco, California 94105-2102

Subject: Review of Draft General Re-evaluation Report and Draft Supplemental Environmental Impact Report/Statement for Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project, Marin County, California (ER 02/684)

Dear Mr. Joliffe,

The U.S. Department of the Interior has received and reviewed the subject document and has no comments to offer. F-3.1

Thank you for your opportunity to review this project.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc: Director, OEPC, DC
FWS, Portland, OR

F-3 U.S. Department of Interior, Office of Environmental Compliance (OEPC)

F-3.1

Comment noted.

State of California

Memorandum

Flex your POWER

Comment Letter S-1

To : Mr. Tom Gandesbery
State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, California 94612-2530
Via fax (510) 286-0470

Date: August 29, 2002

From : Robert W. Floerke, Regional Manager
Department of Fish and Game - Central Coast Region, Post Office Box 47, Yountville, California 94599

Subject: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project, Draft General Reevaluation Report and Draft Supplemental Environmental Impact Report/Environmental Impact Statement, Marin County SCH# 1998031053

Department of Fish and Game (DFG) personnel have reviewed the Draft General Reevaluation Report and Draft Supplemental Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project. We have the following comments and recommendations.

DFG recommends Alternative 2 as the preferred project. Use of dredge spoils as proposed in Alternatives 1 and 2 would provide for restoration of salt marsh habitat at a considerably faster rate than that of Alternative 3. Compared with Alternative 1, Alternative 2 would provide greater seasonal wetland habitat acreage and less upland transition habitat acreage. Furthermore, the Bay Trail alignment as presented in Alternative 2, as compared with Alternative 1, would avoid intruding into the willow dominated riparian habitat associated with the Arroyo San Jose. To minimize disruption of sensitive wildlife at the restoration site, DFG recommends that none of the spur trail options be implemented. It is not clear how enforcement of the proposed mitigation measure to seasonally close the trail during peak breeding season of sensitive wildlife would occur. S-1.1

Preconstruction surveys are proposed to be conducted for a number of sensitive species. Survey reports should be submitted to DFG and other appropriate resource agencies for review and comment prior to initiation of construction activities regardless of survey results. This provides the resource S-1.2

agencies an opportunity to comment on the adequacy of the survey effort and provides a higher level of confidence that impacts will be avoided. S-1.2 Con't.

Impact Bio-4 identifies the potential for construction-related mortality of salt marsh harvest mice (SMHM). SMHM are designated as fully protected species pursuant to Section 4700 of the Fish and Game Code. With the exception of research projects, no take of fully protected species can be permitted by DFG. The mitigation measure for this identified impact is Mitigation Measure Bio-2 which proposes to fence off areas where construction equipment would need to operate in suitable SMHM habitat and then trap and relocate SMHM out of the construction area. Trapping of SMHM has the potential to result in take of SMHM. Therefore, the proposed mitigation measure is not feasible. DFG recommends that, instead of trapping out SMHM, pickleweed habitat within these construction areas be removed by hand to allow any SMHM present to move into suitable adjacent habitat. Fencing as proposed in mitigation measure Bio-2 could then be installed to ensure that no SMHM would be present when construction activities were implemented. S-1.3

If you have any questions regarding our comments, please contact Mr. Eric Tattersall, Environmental Scientist, at (707) 944-5546; or Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525.

cc: Mr. Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market Street, 7th Floor
San Francisco, CA 94105

Ms. Gregoria Garcia
State Clearinghouse
Post Office Box 3044
Sacramento, CA 95812-3044
Via fax (916) 323-3018

Via email: belmarinkeys@jsanet.com

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COASTAL CONSERVANCY
OAKLAND, CALIF.

S-1 California Department of Fish and Game (DFG)

S-1.1

The lead agencies' preferred alternative is a revised version of Alternative 2 that would not include a spur, nor a trail west of Pacheco Pond across the willow habitat. Since the preferred alternative does not include a spur to Novato Creek, the seasonal closure of the spur is no longer relevant in this alternative.

S-1.2

Submission of reports to DFG is mentioned as part of mitigation measures that include preconstruction surveys (see Mitigations BIO-1, BIO-3, BIO-4, and BIO-5). For federally listed species such as salt marsh harvest mouse or California clapper rail, if preconstruction surveys are conducted, survey reports would also be sent to USFWS.

S-1.3

Mitigation Measure BIO-2 has been changed to include hand-removal of pickleweed habitat prior to placement of exclusion fencing. Trapping of salt marsh harvest mice has been deleted from the measure.

Gray Davis
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Tal Finney
Interim Director

Comment Letter S-2

Memorandum

Date: August 30, 2002

To: All Reviewing Agencies

From: Gregoria Garcia, Planner

Re: SCH # 1998031053
Bel Martin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

---

Pursuant to the attached letter, the Lead Agency has extended the review period for the above referenced project to September 13, 2002 to accommodate the review process. All other project information remains the same. S-2.1

cc: Tom Gandesberry
1330 Broadway, Suite 110
Oakland, CA 94612

Attachment S-2

NOTICE OF EXTENSION OF COMMENT PERIOD

JULY 19, 2002 TO SEPTEMBER 13, 2002

Draft Supplemental Environmental Impact Report/Environmental Impact Statement (SEIR/S)
Bel Marin Keys Unit V Expansion of the
Hamilton Army Airfield Wetland Restoration Project
Novato, Marin County, CA

The U.S. Army Corps of Engineers, San Francisco District (Corps) in collaboration with the California State Coastal Conservancy (Conservancy) and the San Francisco Bay Conservation and Development Commission (BCDC) are proposing to restore wetlands on the 1,584-acre Bel Marin Keys Unit V (BMKV) property as an expansion of the Hamilton Wetland Restoration Project (HWRP). The Corps is the lead agency for this project under the National Environmental Policy Act (NEPA). The Conservancy is the lead agency for this project under the California Environmental Quality Act (CEQA).

Abstract: The final environmental report/environmental impact statement (EIR/EIS) for the HWRP was issued in 1998, and the project was authorized in the federal Water Resources Development Act (WRDA) of 1999. The Conservancy purchased the BMKV site in 2001 with the intent of proposing restoration on the site as an expansion of the HWRP. This report describes and analyzes the potential environmental effects of proposed restoration of tidal salt marsh and other wetland habitat and associated actions as part of the expansion of the HWRP. This report will support decision making by the Corps, Conservancy, and other responsible agencies to implement the proposed expansion and to ensure compliance with the NEPA, CEQA, and other pertinent laws and regulations.

The purpose of the BMKV expansion is to restore important tidal wetland habitat in San Francisco Bay and restoration at the BMKV site represents the implementation of local, regional, and national planning efforts. Three alternatives are analyzed in this document: Alternative 1 – Dredged Material Placement with Enlarged Pacheco Pond; Alternative 2 – Dredged Material Placement with Seasonal Wetlands; and Alternative 3 – Natural Sedimentation with Enlarged Pacheco Pond. The alternatives include restoration of tidal and other wetland habitats, construction and improvement of levees, installation of new water conveyance structures, and construction of a recreational trail, among other elements.

Federal, state, and local agencies and the public have the opportunity to comment on this document during the comment period from July 19, 2002 to ~~September 03, 2002~~ September 13, 2002. A public meeting was be held on Wednesday, August 21, 2002 at 7:00 p.m. at the Marin County Humane Society, 171 Bel Marin Keys Boulevard, Novato, CA to solicit additional comments on the draft SEIR/S. Information on the project can be found on the Internet at http://www.coastalconservancy.ca.gov/belmarin. Written comments can also be submitted via email to: belmarinkeys@jsanet.com. The document is also available at the City of Novato downtown library, the south Novato Library, the Marin County central library, and City of Novato and Marin County Community Development departments.

FOR FURTHER INFORMATION: Questions and/or written comments about the proposed action and SEIR/EIS can be addressed to:

Tom Gandesbery, California State Coastal Conservancy, 1330 Broadway, 11th Floor, Oakland, CA 94612-2530; tgandesbery@scc.ca.gov; (510) 286-7028.

Eric Jolliffe, U.S. Army Corps of Engineers, San Francisco District, 333 Market Street., 7th Floor, San Francisco, CA 94105; ejolliffe@spd.usace.army.mil; (415) 977-8543.

Attachment S-2

Notice of Completion

Form A

See NOTE below

SCH # 1998031053

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

Project Title: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

Lead Agency: California State Coastal Conservancy | Contact Person: Tom Gandesbery

Street Address: 1330 Broadway, Suite 110 | Phone: 510-286-7028

City: Oakland, CA | Zip: 94612 | County: Alameda

Project Location

County: Marin | City/Nearest Community: Novato

Cross Streets: Bel Marin Keys Boulevard & Montego Key | Zip Code: 94949 | Total Acres: 1,587 acres

Assessor's Parcel | Section: | Twp | Range: | Base:

Within 2 miles: State Hwy #: 101 and 37 | Waterways: Novato Creek, Arroyo San Jose, Pacheco Creek, San Pablo

Airports: | Railways: NPRR | Schools: Hamilton

Document Type

CEQA: [ ] NOP [ ] Early Cons [ ] Neg Dec [x] Draft EIR [x] Supplement/Subsequent Draft EIR (Prior SCH No.) 1998031053 [ ] Other

NEPA: [ ] NOI [ ] EA [x] Draft EIS [ ] FONSI

Other: [x] Joint Document [ ] Final Document [ ] Other

Local Action Type

[ ] General Plan Update [ ] General Plan Amendment [ ] General Plan Element [ ] Community Plan [ ] Specific Plan [ ] Master Plan [ ] Planned Unit Development [ ] Site Plan [ ] Rezone [ ] Prezone [ ] Use Permit [ ] Land Division (Subdivision, Parcel Map, Tract Map, etc.) [ ] Annexation [ ] Redevelopment [ ] Coastal Permit [x] Other Wetland Restoration

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Development Type

[ ] Residential: Units Acres
[ ] Office: Sq.ft. Acres Employees
[ ] Commercial: Sq.ft. Acres Employees
[ ] Industrial: Sq.ft. Acres Employees
[ ] Educational
[ ] Recreational

[ ] Water Facilities: Type MGD
[ ] Transportation: Type road and bridge construction
[ ] Mining: Mineral
[ ] Power: Type Watts
[ ] Waste Treatment: Type
[ ] Hazardous Waste: Type
[x] Other: Wetland Restoration

Funding (approx.) Federal: $106 million State: $35 million Total: $141 million

Project Issues Discussed in Document

[x] Aesthetic/Visual
[x] Agricultural Land
[x] Air Quality
[x] Archeological/Historical
[ ] Coastal Zone
[x] Drainage/Absorption
[ ] Economic/Jobs
[ ] Fiscal
[x] Flood Plain/Flooding
[ ] Forest Land/Fire Hazard
[x] Geologic/Seismic
[ ] Minerals
[x] Noise
[ ] Population/Housing Balance
[x] Public Services/Facilities
[x] Recreation/Parks
[ ] Schools/Universities
[ ] Septic Systems
[ ] Sewer Capacity
[x] Soil Erosion/Compaction/Grading
[ ] Solid Waste
[x] Toxic/Hazardous
[x] Traffic/Circulation
[x] Vegetation
[x] Water Quality
[x] Water Supply/Groundwater
[x] Wetland/Riparian
[x] Wildlife
[x] Growth Inducing
[x] Land Use
[x] Cumulative Effects
[ ] Other

Present Land Use/Zoning/General Plan Use

Present Land Use – Agriculture; Present Zoning - Bay Front/Conservation – Residential single family planned (1 unit /2 acres)
Present General Designated Land Use = Agriculture/conservation

Project Description

Restore tidal salt marsh and other wetland habitat at the Bel Marin Keys Unit V parcel to create a diverse array of wetland and wildlife habitats at the site as an expansion of the Hamilton Wetlands Restoration Project. Two alternatives include placement of dredged material on site to accelerate tidal wetland establishment. Project also includes construction of a recreational trail.

State Clearinghouse Contact: Gregoria Garcia (916) 445-0613

State Review Began: 7/19 - 2002

SCH COMPLIANCE 9/13 - 2002

* Extended Review *

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#:

Please forward late comments directly to the Lead Agency

AQMD/APCD 2

(Resources: 7/20)

Project Sent to the following State Agencies

- X Resources
- X Boating & Waterways
- X Coastal Comm
- ___ Colorado Rvr Bd
- ___ Conservation 3
- X Fish & Game # ___
- X Delta Protection Comm
- ___ Forestry & Fire Prot
- X Historic Preservation
- X Parks & Rec
- ___ Reclamation Board
- ___ Bay Cons & Dev Comm
- ___ DWR
- ___ OES (Emergency Svcs)

Bus Transp Hous

- ___ Aeronautics
- X CHP
- X Caltrans # 4
- ___ Trans Planning
- ___ Housing & Com Dev
- ___ Food & Agriculture
- ___ Health Services

State/Consumer Svcs

- ___ General Services

Cal EPA

- ___ ARB – Airport Projects
- X ARB – Transportation Projects
- ___ ARB – Major Industrial Projects
- ___ Integrated Waste Mgmt Bd
- ___ SWRCB: Clean Wtr Prog
- ___ SWRCB: Wtr Quality
- ___ SWRCB: Wtr Rights
- X Reg. WQCB # 2
- X Toxic Sub Ctrl-CTC

Yth/Adlt Corrections

- ___ Corrections

Independent Comm

- ___ Energy Commission
- X NAHC
- X Public Utilities Comm
- ___ Santa Monica Mtns
- X State Lands Comm
- ___ Tahoe Rgl Plan Agency

___ Other:

S-2 Office of Planning and Research, State Clearinghouse

S-2.1

Comment noted.

Department of Toxic Substances Control

Edwin F. Lowry, Director
1001 "I" Street, 25th Floor
P.O. Box 806
Sacramento, California 95812-0806

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

Comment Letter S-3

July 26, 2002

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, Suite 110
Oakland, California 94612

Re: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

The Department of Toxic Substances Control (DTSC) is in receipt of the environmental document identified above. Based on a preliminary review of this document, we have determined that additional review by our regional office will be required to fully assess any potential hazardous waste related impacts from the proposed project. The regional office and contact person listed below will be responsible for the review of this document in DTSC's role as a Responsible Agency under the California Environmental Quality Act (CEQA) and for providing any necessary comments to your office:

S-3.1

Barbara Cook
Site Mitigation Branch
700 Heinz Avenue Suite 200
Berkeley, California 94710

If you have any questions concerning DTSC's involvement in the review of this environmental document, please contact the regional office contact person identified above.

Sincerely,

Guenther W. Moskat, Chief
Planning and Environmental Analysis Section

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JUL 29 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

cc: Barbara Cook
Site Mitigation Branch
700 Heinz Avenue Suite 200
Berkeley, California 94710

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.

Printed on Recycled Paper

S-3 California Department of Toxic Substances Control (DTSC) July 26, 2002

S-3.1

Comment noted.

Comment Letter S-4

STATE OF CALIFORNIA GRAY DAVIS, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2922**
from Voice Phone **1-800-735-2929**

Contact Phone: **(916) 574-1858**
Contact FAX: **(916) 574-1925**

September 3, 2002

File Ref: W 25136

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Dear Mr. Gandesbery:

Thank you for the opportunity to comment on the proposed Bel Marin Keys Unit V Expansion (BMK) Draft Supplemental Environmental Impact Report/Environmental Impact Statement (SCH # 1998031053). In general, the SLC staff supports the concept of additional wetland creation and the advantages associated with increased volume of re-usable dredge material. However we're concerned that the tentatively recommended plan (Alternative Two) selects a final land use for North Antennae Field (NAF) parcel that could limit the remedial options available for the NAF area presently contaminated with lead and other hazardous substances.

Specifically, we note that the future planned use of the NAF area is "high transitional marsh" under all of the alternatives, including the tentatively recommended Alternative Two. This land use would require raising the elevation of the existing parcel to approximately 3.5 feet above mean sea level through the beneficial reuse of dredged material. We would prefer that the entire NAF parcel become tidal salt marsh habitat as proposed in the HWRP as the benefits of an isolated high transitional marsh area do not appear to be thoroughly explained. S-4.1

While we recognize that one potential remedial option for the NAF contaminated area is *in situ* treatment and disposal (as the future "high transitional marsh" apparently contemplates), we believe that this proposed future land use is premature since the risk assessments, feasibility study, and remedial action plan are not yet completed. We are also concerned about the scenario of no FUDS money being available for the remediation of the NAF. If the human health or ecological risk assessment establishes adverse risk to those receptors, FUDS funding should be expeditiously made available to address those risks. S-4.2

Also, before resources are irretrievably committed to a certain course of action, we wish to state as landowner the SLC staff's strong preference for the removal of the source(s) of contamination from the NAF parcel and subsequent off-site disposal in an appropriated permitted facility. This remedy would provide overall the most level of protection while, in addition, being the most effective and permanent in both the short and long term. Finally, it is questionable whether *in situ* treatment and disposal would be consistent with public trust purposes or the highest and best use of these lands. S-4.3

Specific Comments

Section 6.1.3. California law authorizes the SLC to enter into permits or leases as real property interests on lands subject to the public trust. It is unfortunate that federal guidelines require a greater property interest than authorized S-4.4

by state law. We consider a forty-nine year lease and accompanying right of first refusal to re-new to be a sufficient property interest to support a federal cost-shared project.

We must also point out that the discussions with SLC representatives and Counsel referred to in 6.1.3 were conducted in the context of the entire NAF parcel becoming tidal salt marsh habitat as proposed in the HWRP. SLC staff did not discuss the BMK proposal to convert the NAF to high transitional marsh habitat. It is uncertain how the HWRP is improved by converting the NAF to an isolated "high transitional marsh" habitat. Without more information, it is doubtful that the SLC would find that the NAF parcel had "significant environmental values", particularly if the purpose of the high transitional marsh is to provide for *in situ* disposal of the contamination present at the NAF parcel. S-4.5

Sincerely,

Dave Plummer
Regional Manager

S-4 California State Lands Commission

S-4.1

High transitional marsh would provide refugia for species utilizing adjacent tidal marsh during high-tide events and would provide a component of diverse habitat in a wide plain of tidal marsh. The design of a high transitional marsh on the SLC parcel precludes neither removal of source contamination nor *in situ* treatment and disposal. Use of the SLC parcel for tidal marsh was analyzed in the 1998 EIR/EIS for the HWRP. The Draft SEIR/EIS analyzes use of a portion of the site for high transitional marsh. Remedial options are addressed through the BRAC and FUDS processes. Between the 1998 document and this supplemental document, several possible uses for the SLC parcel relative to wetland design have been analyzed and disclosed. If the BMKV expansion is authorized as an addition to the HWRP and later it is determined that tidal marsh use is more appropriate for the SLC site, at that point the lead agencies for the HWRP would examine whether any additional NEPA or CEQA compliance would be necessary in light of the analysis provided in the existing NEPA and CEQA documents. At this juncture, the plan is for high transitional marsh on a portion of SLC.

S-4.2

As the commenter indicates, *in situ* treatment is merely one of a large number of remediation options available. The site investigation and remediation process is not controlled by the HWRP, but as the site is still in the investigation stage it is understood that no individual remediation option has yet been selected, nor even proposed. Neither are the extent or timing of FUDS remediation funding under the control of the HWRP. The Draft GRR merely evaluates the available project implementation options under the conceivable scenario of delayed FUDS funding for site remediation.

S-4.3

The SLC staff's strong preference for "removal of the source(s) of contamination" is noted. Authorization of this project would not irretrievably commit the Government to a particular course of remedial action. The design of a high transitional marsh on the SLC parcel precludes neither removal of source contamination nor *in situ* treatment and disposal.

S-4.4

The Corps acknowledges the SLC's viewpoint on the adequacy of a 49-year permit or lease, coupled with a right of first refusal to renew, as a real property interest underlying this ecosystem restoration project. Lease period(s) of finite length would require a deviation from the Corps' long-standing policy of requiring fee title underlying such projects. The Draft GRR reflects 2 options found potentially viable in resolving the real property interest issue, which would require no deviation from Corps policy requiring fee title, or deviation to a lesser degree than would result in the case of a lease. Selection from among the available real property interest alternatives would be made as the SLC parcel approaches a condition suitable for restoration purposes under the FUDS remediation program.

S-4.5

As indicated in response to SLC's comment S-4.4, the Corps has evaluated and generally reviewed with the SLC, the project non-Federal sponsor, and other parties several options for resolving the real property interest issue. One of the 2 options identified as potentially viable would involve a determination of "significant environmental value" as a prerequisite to placement of the parcel on the California Significant Lands Inventory. Selection of an appropriate alternative from among the available options would be made as the SLC parcel approaches a condition suitable for restoration purposes under the FUDS remediation program.

California Regional Water Quality Control Board
San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 FAX (510) 622-2460

Gray Davis
Governor

Comment Letter S-5

Date:
File No. 2158.02 (CLS)

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

RE: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project
SCH# 1998031053

Dear Mr. Gandesbery,

We have reviewed the Draft Supplemental Environmental Impact Report Statement for the above referenced project. The document presents the potential environmental consequences associated with restoring wetlands on the 1,584-acre Bel Marin Keys Unit V property as an expansion of the Hamilton Wetland Restoration Project. The Army Corps of Engineers (Corps) is the lead agency for this project under the National Environmental Policy Act (NEPA). The California State Coastal Conservancy is the lead agency for this project under the California Environmental Quality Act (CEQA). The two major objectives of the project are to create a diverse array of wetland and wildlife habitats that benefit a number of threatened and other species, and to reduce open-water dredged material disposal and beneficially re-use that material to the maximum extent practicable. First, we would like to express our support for this restoration project and commend Marin County, the Corps, and the California Coastal Conservancy for managing this large and important wetland restoration project.

The three alternatives discussed in the DSEIR/EIS would all have significant impacts on the project site. Whichever alternative is ultimately decided upon, measures must be taken to ensure minimum disruption of habitats and species within and around the project site. Because the proposed project is likely to follow a timetable of years, it is important for the project sponsors to remain diligent throughout all phases of construction in order to minimize negative impacts caused during the construction processes. The project should minimize erosion and control sediment during and after construction, by developing and implementing an erosion control or equivalent plan. S-5.1

A few suggested updates to Chapter 4, addressing water quality and the role of the Regional Board, are provided below. The California Toxics Rule (CTR) was adopted in May 2000 and Regional Board staff is currently developing amendments to the Basin Plan to incorporate the S-5.2

CTR water quality criteria values. The 1992 General Construction Storm Water Discharge Permit was reissued in 1999 and modifications made in 2001. Table 4-11 incorrectly states that the RWQCB Draft 2000 Sediment Screening Criteria for cover for PCBs is 22.7 mg/kg. The correct number should be 0.0227 mg/kg. S-5.2 Con't.

Regional Board staff is unable to offer more specific comments at this time, however, I have attached our **General Comments**, which discuss the Regional Board's areas of responsibility which should be of assistance to the project sponsor.

If you have any questions please feel free to call me at 510.622.2348 or e-mail at mll@rb2.swrcb.ca.gov.

Sincerely,

Marla Lafer
Water Resource Control Engineer

Enclosed: General Comments
cc: State Clearinghouse

General Comments

The San Francisco Regional Water Quality Control Board (Regional Board or RWQCB) is charged with the protection of the Waters of the State of California in the San Francisco Bay Region, including wetlands and stormwater quality. The Regional Board is responsible for administering the regulations established by the Federal Clean Water Act. Additionally, the California Water Code establishes broad state authority for regulation of water quality. The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) explains the Regional Board's strategy for regulating water quality. The Basin Plan also describes the range of responses available to the Regional Board with regard to actions and proposed actions that degrade or potentially degrade the beneficial uses of the Waters of the State of California.

NPDES

Water quality degradation is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and nonpoint discharges. In California, the program is administered by the California Regional Water Quality Control Boards. The Regional Board issues NPDES permits for discharges to water bodies in the San Francisco Bay Area, including Municipal (area- or county-wide) Stormwater Discharge Permits.

Projects disturbing more than five acres of land during construction must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). This can be accomplished by filing a Notice of Intent with the State Water Resources Control Board. An NOI and the General Permit can be obtained from the Board at (510) 622-2300. The project sponsor must propose and implement control measures that are consistent with the General Permit and with the recommendations and policies of the local agency and the RWQCB.

Projects that include facilities with discharges of Storm Water Associated with Industrial Activity must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity. This may be accomplished by filing a Notice of Intent. The project sponsor must propose control measures that are consistent with this, and with recommendations and policies of the local agency and the RWQCB. In a few cases, the project sponsor may apply for (or the RWQCB may require) issuance of an individual (industry- or facility-specific) permit.

The RWQCB's Urban Runoff Management Program requires Bay Area municipalities to develop and implement storm water management plans (SWMPs). The SWMPs must include a program for implementing new development and construction site storm water quality controls. The objective of this component is to ensure that appropriate measures to control pollutants from new development are: considered during the planning phase, before construction begins; implemented during the construction phase; and maintained after construction, throughout the life of the project.

Impacts and Mitigation Measures

Wetlands

Wetlands enhance water quality through such natural functions as flood and erosion control, stream bank stabilization, and filtration and purification of contaminants. Wetlands also provide critical habitats for hundreds of species of fish, birds, and other wildlife, offer open space, and provide many recreational opportunities. Water quality impacts occur in wetlands from construction of structures in waterways, dredging, filling, and altering drainage to wetlands.

The Regional Board must certify that any permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (covering, dredging, or filling of Waters of the United States, including wetlands) complies with state water quality standards, or waive such certification. Section 401 Water Quality Certification is necessary for all 404 Nationwide permits, reporting and non-reporting, as well as individual permits.

All projects must be evaluated for the presence of jurisdictional wetlands and other Waters of the State. Destruction of or impact to these waters should be avoided. If the proposed project impacts wetlands or other Waters of the State and the project applicant is unable to demonstrate that the project was unable to avoid those adverse impacts, water quality certification will most likely be denied. 401 Certification may also be denied based on significant adverse impacts to wetlands or other Waters of the State. In considering proposals to fill wetlands, the Regional Board has adopted the California Wetlands Conservation Policy (Executive Order W-59-93, signed August 23, 1993). The goals of the Policy include ensuring "no overall net loss and achieving a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values." Under this Policy, the Regional Board also considers the potential post-construction impacts to wetlands and Waters of the State and evaluates the measures proposed to mitigate those impacts (see Storm Water Quality Control, below).

The Regional Board has adopted U.S. EPA's Clean Water Act Section 404(b)(1) "Guidelines for Specification of Disposal Sites for Dredge or Fill Material," dated December 24, 1980, in the Board's Basin Plan for determining the circumstances under which fill may be permitted.

Section 404(b)(1) Guidelines prohibit all discharges of fill material into regulated waters of the United States, unless a discharge, as proposed, constitutes the least environmentally damaging practicable alternative that will achieve the basic project purpose. For non-water dependent projects, the guidelines assume that there are less damaging alternatives, and the applicant must rebut that assumption.

The Section 404(b)(1) Guidelines sequence the order in which proposals should be approached. First, impacts to wetlands or Waters of the State must be avoided to the maximum extent practicable. Second, the remaining impacts must be minimized. Finally, the remaining unavoidable adverse impacts to wetlands or Waters of the State must be mitigated. Mitigation will be preferably in-kind and on-site, with no net destruction of habitat value. A proportionately greater amount of mitigation is required for projects that are out-of-kind and/or off-site. Mitigation will preferably be completed prior to, or at least simultaneous to, the filling or other loss of existing wetlands.

Successful mitigation projects are complex tasks and difficult to achieve. This issue will be strongly considered during agency review of any proposed wetland fill. Wetland features or ponds created as mitigation for the loss of existing jurisdictional wetlands or Waters of the United States cannot be used as storm water treatment controls.

In general, if a proposed project impacts wetlands or Waters of the State and the project applicant is unable to demonstrate that the project was unable to avoid adverse impacts to wetlands or Waters of the State, water quality certification will be denied. 401 Certification may also be denied based on significant adverse impacts to wetlands or other Waters of the State.

Storm Water Quality Control

Storm water is the major source of fresh water to creeks and waterways. Storm water quality is affected by a variety of land uses and the pollutants generated by these activities. Development and construction activities cause both site-specific and cumulative water quality impacts. Water quality degradation may occur during construction due to discharges of sediment, chemicals, and wastes to nearby storm drains or creeks. Water quality degradation may occur after construction is complete, due to discharges of petroleum hydrocarbons, oil, grease, and metals from vehicles, pesticides and fertilizers from landscaping, and bacteria from pets and people. Runoff may be concentrated and storm water flow increased by newly developed impervious surfaces, which will mobilize and transport pollutants deposited on these surfaces to storm drains and creeks. Changes in runoff quantity or velocity may cause erosion or siltation in streams. Cumulatively, these discharges will increase pollutant loads in creeks and wetlands within the local watershed, and ultimately in San Francisco Bay.

To assist municipalities in the Bay Area with complying with an area-wide NPDES Municipal Storm Water Permit or to develop a Baseline Urban Runoff Program (if they are not yet a co-permittee with a Municipal Storm Water Permit), the Regional Board distributed the *Staff Recommendations for New and Redevelopment Control for Storm Water Programs* (Recommendations) in April 1994. The Recommendations describe the Regional Board's expectations of municipalities in protecting storm water quality from impacts due to new and redevelopment projects, including establishing policies and requirements to apply to development areas and projects; initiating appropriate planning, review, approval, and inspection procedures; and using best management practices (BMPs) during construction and post-construction.

Project impacts should be minimized by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). A SWPPP is required by the State Construction Storm Water General Permit (General Permit). The SWPPP should be consistent with the terms of the General Permit, the Manual of Standards for Erosion & Sedimentation Control Measures by the Association of Bay Area Governments (ABAG), policies and recommendations of the local urban runoff program (city and/or county), and the Recommendations of the RWQCB. SWPPPs should also be required for projects that may have impacts, but which are not required to obtain an NPDES permit. Preparation of a SWPPP should be a condition of development. Implementation of the SWPPP should be enforced during the construction period via appropriate options such as citations, stop work orders, or withholding occupancy permits.

Impacts identified should be avoided and minimized by developing and implementing the types of controls listed below. Explanations of the controls are available in the Regional Board's construction *Field Manual*, available from Friends of the San Francisco Estuary at (510) 286-0924, in BASMAA's *Start at the Source*, and in the *California Storm Water Best Management Practice Handbooks*.

Site Planning

The project should minimize impacts from project development by incorporating appropriate site planning concepts. This should be accomplished by designing and proposing site planning options as early in the project planning phases as possible. Appropriate site planning concepts to include, but are not limited to the following:

- ξ Phase construction to limit areas and periods of impact.
- ξ Minimize directly connected impervious areas.
- ξ Preserve natural topography, existing drainage courses and existing vegetation.
- ξ Locate construction and structures as far as possible from streams, wetlands, drainage areas, etc.
- ξ Provide undeveloped, vegetated buffer zones between development and streams, wetlands, drainage areas, etc.
- ξ Reduce paved area through cluster development, narrower streets, use of porous pavement and/or retaining natural surfaces.
- ξ Minimize the use of gutters and curbs which concentrate and direct runoff to impermeable surfaces.
- ξ Use existing vegetation and create new vegetated areas to promote infiltration.
- ξ Design and lay out communities to reduce reliance on cars.
- ξ Include green areas for people to walk their pets, thereby reducing build-up of bacteria, worms, viruses, nutrients, etc. in impermeable areas, or institute ordinances requiring owners to collect pets' excrement.
- ξ Incorporate low-maintenance landscaping.
- ξ Design and lay out streets and storm drain systems to facilitate easy maintenance and cleaning.
- ξ Consider the need for runoff collection and treatment systems.
- ξ Label storm drains to discourage dumping of pollutants into them

Erosion

The project should minimize erosion and control sediment during and after construction. This should be done by developing and implementing an erosion control plan, or equivalent plan. This plan should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- ξ Limit access routes and stabilize access points.
- ξ Stabilize denuded areas as soon as possible with seeding, mulching, or other effective methods.
- ξ Protect adjacent properties with vegetative buffer strips, sediment barriers, or other effective methods.
- ξ Delineate clearing limits, easements, setbacks, sensitive areas, vegetation and drainage courses by marking them in the field.
- ξ Stabilize and prevent erosion from temporary conveyance channels and outlets.
- ξ Use sediment controls and filtration to remove sediment from water generated by dewatering or collected on-site during construction. For large sites, stormwater settling basins will often be necessary.

Chemical and Waste Management

The project should minimize impacts from chemicals and wastes used or generated during construction. This should be done by developing and implementing a plan or set of control measures. The plan or control measures should be included in the SWPPP. The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the following:

- Designate specific areas of the site, away from streams or storm drain inlets, for storage, preparation, and disposal of building materials, chemical products, and wastes.
- Store stockpiled materials and wastes under a roof or plastic sheeting.
- Store containers of paint, chemicals, solvents, and other hazardous materials stored in containers under cover during rainy periods.
- Berm around storage areas to prevent contact with runoff.
- Cover open Dumpsters securely with plastic sheeting, a tarp, or other cover during rainy periods.
- Designate specific areas of the site, away from streams or storm drain inlets, for auto and equipment parking and for routine vehicle and equipment maintenance.
- Routinely maintain all vehicles and heavy equipment to avoid leaks.
- Perform major maintenance, repair, and vehicle and equipment washing off-site, or in designated and controlled areas on-site.
- Collect used motor oil, radiator coolant or other fluids with drip pans or drop cloths.
- Store and label spent fluids carefully prior to recycling or proper disposal.
- Sweep up spilled dry materials (cement, mortar, fertilizers, etc.) immediately--do not use water to wash them away.
- Clean up liquid spills on paved or impermeable surfaces using "dry" cleanup methods (e.g., absorbent materials, cat litter, rags) and dispose of cleanup materials properly.
- Clean up spills on dirt areas by digging up and properly disposing of the soil.
- Keep paint removal wastes, fresh concrete, cement mortars, cleared vegetation, and demolition wastes out of gutters, streams, and storm drains by using proper containment and disposal.

Post-Construction

The project should minimize impacts from pollutants that may be generated by the project following construction, when the project is complete and occupied or in operation. These pollutants may include: sediment, bacteria, metals, solvents, oil, grease, and pesticides, all of which are typically generated during the life of a residential, commercial, or industrial project after construction has ceased. This should be done by developing and implementing a plan and set of control measures. The plan or control measures should be included in the SWPPP.

The plan should specify all control measures that will be used or which are anticipated to be used, including, but not limited to, the source controls and treatment controls listed in the Recommendations. Appropriate control measures are discussed in the Recommendations, in:

- Table 2: Summary of residential post-construction BMP selection
- Table 3: Summary of industrial post-construction BMP selection
- Table 4: Summary of commercial post-construction BMP selection

Additional sources of information that should be consulted for BMP selection include the *California Storm Water Best Management Practice Handbooks;* the Bay Area Preamble to the *California Storm Water Best Management Practice Handbooks and New Development Recommendations*; the BASMAA New Development Subcommittee meetings, minutes, and distributed information; and Regional Board staff. Regional Board staff also have fact sheets and other information available for a variety of structural stormwater treatment controls, such as grassy swales, porous pavement and extended detention ponds.

S-5 San Francisco Regional Water Quality Control Board (SFRWQCB)

S-5.1

Comment noted. As noted in table 1-1 in the Draft SEIR/EIS, a Stormwater Pollution Prevention Plan (SWPPP) would need to be prepared pursuant to Section 402 of the Clean Water Act. This is also noted on page 4-44. The project includes the establishment of water quality detention basins (see page 3-14). In addition, Mitigation Measure WQ-4 includes a water quality monitoring program to be developed in accordance with Waste Discharge Requirements (WDRs) to be established during permitting by the RWQCB.

S-5.2

Mention of the California Toxic Rule (CTR) has been expanded to provide the reader a better overview of the rule and the amendments under development to the Basin Plan. Details regarding the General Construction Storm Water Discharge Permit have been updated. The typo on table 4-11 regarding criteria for PCBs has been corrected to 0.0227 mg/kg. The noncover criteria has been corrected to 0.180 mg/kg

Department of Toxic Substances Control

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Comment Letter S-6

September 13, 2002

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DRAFT SUPPLEMENTAL EIS/EIR, BEL MARIN KEYS-V EXPANSION OF THE HWRP, AND DRAFT GENERAL REEVALUATION REPORT SCH # 1998031053

Dear Messrs. Jolliffe and Gandesbery:

The Department of Toxic Substances Control (DTSC) has completed its review of the *"Draft Supplemental Environmental Impact Statement/Environmental Impact Report (EIR), Bel Marin Keys-V (BMKV) Expansion of the Hamilton Wetland Restoration Project (HWRP)"*, including the *"Draft General Reevaluation Report"* (GRR) (SCH# 1998031053). The enclosed comments (Enclosure 1) are being provided in our capacity as a Responsible Agency as defined under the provisions of the California Environmental Quality Act (CEQA)[1] and accompanying Guidelines.[2]

As you are aware, discussions of the remedial action plan for the Inboard Area of the Hamilton Army Airfield (HAAF) is ongoing, and only preliminary discussions have begun for determining remedial actions at the HAAF Coastal Salt Marsh and the North Antenna Field (NAF). It should be noted there have been no discussions regarding the potential remediation needed for the BMKV.

The EIR indicates the parties responsible for contamination at the HAAF and NAF are relying on the HWRP to address contamination they anticipate leaving behind. Remedial alternatives which include leaving wastes behind would include land use S-6.1

[1] California Public Resources Code Section 25000 et seq.
[2] California Code of Regulations Section 15000 et seq.

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restrictions. DTSC would implement the land use restrictions by entering into a land use covenant with the current owner, as described in California Civil Code Section 1471. Since remediation is anticipated to be accomplished, at least in part, through the design and implementation of the HWRP, DTSC needs to assure the EIR fulfills our obligations under CEQA for approval of the remedial action plans for the various properties. This approach will ensure the overall impacts associated with our respective elements of the project are fully analyzed, and allow for coordination of the wetland development with remediation of the HAAF, NAF and BMKV. We would like to work with you to assure this approach is consistent with your plans for the wetland restoration project. S-6.1 Con't.

The EIR indicates flexibility in the construction schedule for the HWRP due to uncertainties in the environmental remediation of HAAF and NAF is a key reason for expanding the HWRP to include BMKV. Since the environmental work at the BMKV parcel is at the preliminary investigation phase, please provide your schedule for completing the work. We also note the HWRP construction schedule relies on a portion of the NAF being available for wetland restoration prior to other areas. We will work with the Army to expedite the investigation and remediation of this area, and would appreciate a detailed map of the area in question. S-6.2

The EIR indicates the HAAF property may be transferred to the State Coastal Conservancy (SCC) via a Finding of Suitability to Transfer (FOST), and final remediation activities are to be completed by the HWRP. The EIR does not indicate when the transfer is to take place, but the EIR should be revised to indicate the HAAF site cannot be transferred via a FOST until the remediation activities contemplated as part of the HWRP are completed. If the remedy is not completed prior to transfer of the property to SCC, the transfer would be considered an "early transfer" and a Finding of Suitability for Early Transfer (FOSET) would be required. Prior to transfer of HAAF to a non-federal party (e.g., the SCC), the Army would need to provide a warranty pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)(3), and approval of the governor of the state of California. S-6.3

If you have any questions please call me at (916) 255-3728 or Mr. Lance McMahan at (916) 255-3674.

Sincerely,

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COASTAL CONSERVANCY
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ENCLOSURE 1

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
COMMENTS ON THE
July 2002
DRAFT GENERAL REEVALUATION REPORT
and
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL IMPACT STATEMENT
for
BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
NOVATO, CALIFORNIA

September 2002

The Department of Toxic Substances Control (DTSC) has completed its review of the *Draft Supplemental Environmental Impact Statement/ Environmental Impact Report (EIR), Bel Marin Keys-V (BMKV) Expansion of the Hamilton Wetland Restoration Project (HWRP)*, including the *Draft General Reevaluation Report* (GRR). Several aspects of the EIR are directly related to remediation of environmental contamination at areas the DTSC is working with the Army and Navy to address. DTSC is responsible for regulating hazardous substances as identified in Chapters 6.5 and 6.8 of the California Health and Safety Code (H&SC), and will be relying on the EIR to evaluate the environmental impacts associated with approval and implementation of remediation activities conducted through the HWRP construction. DTSC should therefore be identified as a *Responsible Agency* for the HWRP within the meaning of CEQA. DTSC should also be identified as a potential *Lead Agency* since it may be required to conduct additional environmental review for remediation activities that are not addressed in the EIR. We look forward to working with you as you prepare a response to these comments. S-6.4

Contamination levels within portions of the HWRP study area would, absent remediation, preclude the use of the property for its intended use. The environmental condition of the property within the HWRP study area and the work needed to address the contamination should be described in greater detail and should include the following information: 1) The investigation and remediation that has been done; 2) What contaminants have been found and the current concentrations, locations, and the potential risk they posed to receptors in a wetland environment; 3) Comparison of existing contaminant concentrations to the dredge reuse criteria presented in Table 4-11; 4) The investigation and remediation remaining to be completed; 5) Discussion of the September 27, 2000 DTSC and May 16, 2002 USFWS correspondence related to remediation of BMKV; 6) The need for a Remedial Action Plan (RAP) or RAPs approved by DTSC pursuant to Title 22 to address remediation of hazardous substance S-6.5

releases at HAAF, SLC and Navy Ballfields; 7) The need for a Remedial Design (RD) for implementation of the identified RAP (Where the RAP and RD are dependent on the HWRP for the remedy); 8) The schedule for completing all remaining investigation and remediation work in coordination with the HWRP construction schedule; 9) Evaluation of the Navy Ballfield for remediation, as DTSC is aware of several previously unidentified potential release locations (revetments) that need to be characterized; 10) The clean-up measures proposed for BMKV (these were not found in the Phase I report); and 11) A map of the entire HWRP area with the dates the parties acquired the various parcels. Contaminant issues should also be addressed in EIR Section 5, *Cumulative Impacts.* S-6.6

The EIR did not include a sufficient understanding of the relationship, including schedule, between the anticipated remediation activities and the wetland restoration activities. GRR Section 6.1.6, *HTRW*, states "The BRAC program's cleanup goals will be accomplished, in part, through the design and implementation of the ecosystem restoration Project; thus, full remediation awaits completion of HWRP construction activities on the HAAF parcel." Excavation and off-site disposal of hotspots, along with capping remaining concentrations of concern using clean imported material (e.g., dredge spoils) is being discussed as a means of mitigating hazardous materials contamination at HAAF. Any contamination at concentrations of concern remaining onsite would be subject to institutional controls, monitoring, and maintenance as part of the remedy. S-6.7

For parcels where contamination is left above cleanup goals, the EIR should indicate use restrictions recorded in the deed are needed. Generally, the state implements land use restrictions by entering into a land use covenant with the current owner as described in California Civil Code Section 1471. These use restrictions would then "run with the land" and be binding on each future owner and/or occupant of the property. The EIR implies neither of the project sponsors (Army and SCC) anticipates maintaining ownership of the HWRP properties. Please identify the party(ies) to whom the project sponsors intend to transfer the properties, and indicate whether they are willing to accept responsibility for maintaining the hazardous substances remedy. S-6.8

EIR Appendix A, *Hamilton Wetland Restoration Project Description*, page 3-6, indicates the HAAF property may be transferred via a Finding of Suitability to Transfer (FOST) while remediation activities are being undertaken by the HWRP. Until the remedy is completed, HAAF may only be transferred to a non-federal party with a warranty pursuant to CERCLA Section 120(h)(3), and with the approval of the governor of the state of California. Such a warranty is included within a Finding of Suitability for Early Transfer (FOSET). S-6.9

It is unclear whether the soils proposed for delivery to the HAAF, or the proposed manner of placement, will stabilize the wastes. GRR Section 5.9.2, *Construction Sequencing*, indicates sandy soil is the preferred material for use in the deep fills S-6.10

required in the seasonal wetland areas at HAAF. DTSC also understands the HWRP is considering direct pumping of the dredge slurry (80% water, 20% solids) onto the contaminated ground, allowing the solids to settle over a 6-12 month period, and then discharging the decant water to San Pablo Bay. DTSC is concerned contaminants may be mobilized as the result of erosion from placement of the slurry, as well as bioturbation by organisms that may be imported with the slurry or otherwise take up residence in the slurry settling basin during the settlement process. Please describe whether the fill material proposed for use at HAAF will remain stable through time for the various locations on site (e.g., upland areas, secondary channels, and primary channels). To better evaluate the activities please provide the design for the wetland, including the initial topography planned for the site following construction, and describe, using appropriate modeling, anticipated changes in that topography through time. Please also revise the EIR to require a construction process for placing the three feet of stable cover over areas of concern avoiding disturbance of contaminants, whether by erosion, bioturbation, or other mechanisms. S-6.10 Con't.

The stability of levees and the quality of levee soils should be clarified in the EIR. Some levees are currently sinking, and the rate of settlement is unclear. The anticipated stability of all levees during the life of the project should be clarified. Soil contamination on the levees adjacent to the SLC and HAAF parcels are unknown and may not be suitable for reuse as on-site final cover. Contamination of the soils at potential levee breach locations, both between parcels and adjacent to San Pablo Bay, should be discussed. Please provide the details for a work plan and schedule to determine the condition of the levee soils. Should wastes be managed on-site, certification by DTSC (or its designee) that all remedial actions have been completed will be needed prior to decommissioning the flood control system or breaching the levees. S-6.11

The EIR provides an incomplete description of environmental releases at HAAF. EIR page 4-130, *Source Areas of Hazardous Substances and Waste: Hamilton Army Airfield Site*, indicates past activities at the HAAF site have resulted in contamination associated with the JP-4 jet fuel line, Buildings 20 and 26, and the dredged spoil area west of Building 20. Over 50 sites have been evaluated at HAAF, and polynuclear aromatic hydrocarbon (PNA) contamination in various areas along with site wide pesticide contamination have been identified. Additionally, the September 2001 Archive Search Report (ASR) for HAAF identified a number of new potential release locations, including a potential burial area in Pacheco Pond. It is unclear whether this site has impacted the water or sediment quality of Pacheco Pond, as the site requires further investigation. The EIR should present the results of recent water and sediment monitoring of Pacheco Pond. In addition, the *Enhanced Preliminary Assessment*, January 1990, recommended ordnance sweeps of three areas potentially used as bombing ranges. One of the suspected ordnance areas has been identified north of the HAAF revetments (i.e., BMKV and NAF) and another is in the vicinity of Ignacio Reservoir (Pacheco Pond). Mitigation measures to address ordnance S-6.12

encounters should be an integral part of any significant intrusive activities in potential ordnance areas, and are subject to all hazardous waste investigation and treatment regulations and requirements. The Army has agreed to prepare and submit a draft preliminary assessment work plan to DTSC for the investigation of the ASR sites. S-6.12 Con't.

GRR and EIR Figures 3-1, 3-5, and 3-8 present the anticipated condition of the BMKV, SLC, Navy Ballfields, and HAAF parcels at maturity. DTSC requests further insight into the wetland design process due to concerns about the stability of contaminants that may be managed on-site from initial construction through wetland maturation. In early 2001, the project proponents made several wetland conceptual design presentations to aid in the integration of the wetland design with measures for managing contaminated soils in-place. For background previous hydrologic modeling indicates scour of the current native soils in primary and secondary channels is likely, thus suggesting wastes left in-place in some areas would be subject to tidal action. The modeling also indicated internal levees proposed for use in covering contaminated sites and "erosion" of non-erodible materials (e.g., the concrete runway) is likely to occur. This suggests the model does not properly deal with hard surfaces. In mid 2001, the Army indicated additional modeling and design information would be provided later that year. The revised modeling should also indicate the anticipated acreage of each type of habitat that would result from each scenario. Please include the updated wetland design, hydrodynamic modeling and conceptual wetland modeling for the entire HWRP in the EIR. S-6.13

Construction of the BMKV portion of the wetland in the absence of timely remediation of the SLC parcel was identified as a key desirable option of the proposed project due to uncertainties regarding remediation of contaminants at SLC and HAAF. However, all three alternatives include wetland features within the SLC parcel. Clarification of the following would help address this issue:

a) EIR page 3-18, *Construction Timing, Alternative 1*, indicates, "...the schedule is dependent, in part, upon completion of the FUDS remedial activities on certain portions of the SLC parcel (emphasis added)." DTSC is working with the Army to address potential contaminants throughout the SLC parcel, so there is currently no foundation for differentiating one portion of the SLC parcel from another.
b) Construction of the HAAF and BMKV portions of the wetland prior to remediation of the SLC parcel would have a significant impact on the ability to complete the SLC remediation, due to loss of access. Please indicate how this would be mitigated.
c) Whether soils at the SLC parcel will be covered as mitigation for soil contamination has not yet been determined, and USFWS has expressed concerns regarding this approach. Other options under consideration include: 1) removal of contaminants of concern to allow unrestricted use; and 2) removal and off-site disposal of contaminants to concentrations below the

S-6.14

non-cover criteria along with placement of three feet of stable cover to manage the remaining contamination. S-6.14 Con't.

The SF-USACE and SCC had stated there is no guarantee regarding the quantity of dredge spoil material that would be provided prior to breaching the levee after eight years of construction have elapsed. EIR page 3-16, *Phase 2 – Dredged Material Placement: Pump Dredged Material*, indicates the Corps has estimated adequate dredged material supplies are available for the HWRP/BMKV expansion project. Please prepare tabulated dredge spoils information to document whether there will be adequate dredge spoils in-place to meet remediation needs prior to breaching the levee. This tabulation should include the placement of three feet of stable cover across all contaminated areas within the HWRP as part of the anticipated remedy for environmental contamination. Contingency plans should be identified to provide three feet of stable cover material from alternate sources if dredge spoil material is not available for remediation needs. Additionally, EIR page 3-12, *Excavate and Manage Topsoil*, indicates the final foot of cover material for the non-tidal habitat areas would be either dredged material or the preferred alternative of salvaged onsite topsoil. This section should be revised to discuss where the topsoil would come from in light of the presence of contaminated soils. S-6.15

Cleanup levels are normally determined with the aid of a risk assessment. EIR Appendix A, *Hamilton Wetland Restoration Project Description*, page 3-9, *Level to Which the Site Will Be Cleaned*, states "An ecological risk assessment will be used to set the acceptable levels for contamination, and soil bioassays will be used to determine toxicity." There is currently no agreed upon risk assessment for HAAF, SLC, or Navy Ballfields parcels. The soil bioassays for HAAF were inconclusive, and the HAAF risk assessment did not incorporate the regional pesticide and PNA contamination or the potential release areas identified in the ASR. EIR page 4-126, *Hazardous Substances and Waste*, needs to be clarified to indicate remedial cleanup values for the SLC will be determined following completion of the remedial investigation and feasibility study, including the SLC risk assessment. Whether the SLC cleanup goals will be the same as those for the adjacent site has not been determined. S-6.16

Completion of remediation is anticipated to be part of the HWRP implementation, so costs and benefits that may affect remediation need to be considered. GRR Table 4-2, *Costs*, discussed the costs of the various alternatives, but indicates there are no costs for the "No Action" alternative and did not discuss the benefits. Please clarify that there are costs associated with owning and maintaining the property(ies) in the event the HWRP is not constructed, and identify those costs. These costs include completion of the remediation or additional investigation as well as maintaining the pumps, levees, and other systems. GRR Appendix A, *Post Authorization Changes in Total Project First Costs*, indicates cost savings associated with disposing of dredge spoils at the HWRP rather than the Deep Ocean Disposal Site (DODS) would be remitted to the HWRP. Please discuss S-6.17

the benefits accruing to the HWRP, as these funds may offset any additional expense associated with environmental remediation. S-6.17 Con't.

The proposed conversion of the Black Point Antenna Field (BPAF) to a wetland is introduced on EIR page 5-1, *Approach to Cumulative Impact Analysis.* DTSC has reviewed aerial photographs for the BPAF and determined there may be a number of landfills at the site. The Army needs to do a preliminary assessment/ investigation of BPAF to determine if remediation is necessary for the use described in the EIR (i.e., uncontrolled exposure to the Novato River and San Pablo Bay). S-6.18

The offsite transportation of remediation wastes and potential traffic impacts requires analysis. The air quality analysis needs to quantify emissions from remediation activities, including toxic air contaminants, dust, and vehicle emissions, to fully evaluate overall project impacts and the effectiveness of proposed mitigation measures. S-6.19

S-6 California Department of Toxic Substances Control (DTSC), September 13, 2002

General Response to Comment S-6 Re: Remediation Issues at HAAF, Navy Ballfields, and SLC (NAF) sites:

The comment letter makes numerous references to remediation issues on the HAAF, Navy Ballfields, and SLC (also referred to as the North Antennae Field or NAF) sites. This general response discusses the relation of these issues to the activities included or not included with the BMKV expansion of HWRP, which is the subject of the SEIR/EIS.

The BMKV expansion is a proposed addition to the HWRP. The HWRP, including the HAAF, Navy Ballfields, and SLC (NAF) sites, were analyzed in the 1998 EIR/EIS and authorized in the Water Resources Development Act of 1999.

Relevant to HAAF/Navy Ballfields portions of the HWRP, as noted on pages 3-1 and 3-2 of the Draft SEIR/EIS, The suite of restoration activities in the 3 action alternatives include the following changes:

- Replacement of the barrier levee between BMKV and HAAF, with an access berm for the NSD line
- Extension of the Bay Trail south and north from the City of Novato levee
- Potential use of diesel off-loading and booster pumps for off-loading dredged material
- Potential alternative alignment of dredged-material pipeline directly from the off-loading facility to the BMKV expansion site (Alternatives 1 and 2)

None of the proposed changes included in the BMKV expansion result in any changes to the HWRP wetland design for the HAAF or Navy Ballfields parcels. The BMKV expansion makes no determinations whatsoever regarding potential remedial activities at the HAAF or Navy Ballfields. The BMKV expansion proposes no hydrologic or physical connections between the HAAF or Navy Ballfield parcels. Remedial determinations for these sites are being addressed through the Base Realignment and Closure (BRAC) process. If the remedial determinations ultimately made through BRAC would require changes in the wetland designs proposed for the HAAF or Navy Ballfields portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. This has been clarified in the executive summary, chapter 2, and the *Hazardous Materials and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the BRAC process would not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with the present project design.

Extensive discussion of the HAAF and Navy Ballfields remedial issues in the BMKV expansion SEIR/EIS are not necessary for an adequate analysis of the effects of the proposed BMKV expansion. The summary of hazardous materials and waste relevant to the HAAF parcel and the Navy ball fields has been expanded somewhat so as to provide the reader with a contextual understanding of the remedial process at the neighboring parcels.

The SLC parcel was included in the 1998 EIS/EIR as part of the HWRP. Remedial issues at the SLC parcel are being addressed through the Formerly Used Defense Site (FUDS) process. However, the only potential changes analyzed in the BMKV expansion SEIR/EIS relevant to the SLC site are, as noted, on pages 3-1 and 3-2:

- elimination of the proposed HWRP separating levee between SLC and BMKV;
- change in location and amount of high transitional marsh;
- repositioning of the tidal breach on SLC to BMKV (in Alternative 2 and 3); and
- reduction in the amount of dredged material placement (Alternative 3 only).

A summary of remedial concerns on the SLC site is presented in the *Hazardous Materials and Waste* section in chapter 4 of the Draft SEIR/EIS. The summary of hazardous materials and waste relevant to the SLC parcel has been expanded somewhat so as to provide the reader with a better contextual understanding. However, extensive discussion of remedial concerns on the SLC parcel is not necessary to adequately assess the impacts of the BMKV expansion, because the BMKV expansion presumes that the SLC site would be appropriately remediated to a state suitable for the proposed wetland use. Further, BMKV expansion makes no determinations regarding ultimate remedial options for contaminated portions of the SLC site, which are being determined through the FUDS program. If the remedial determinations ultimately made through FUDS or the timing of remedial action would require changes in the wetland designs proposed for the SLC portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. However, an assumption that the FUDS process would not result in remediation to levels suitable for wetland reuse or would extensively delay the BMKV project such that wetland designs would need to be altered, is considered speculative at this time. This has been clarified in the executive summary, chapter 2, and the *Hazardous Materials and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the FUDS process would not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with the present project design.

S-6.1

As noted above, the remedial issues at HAAF and SLC are being addressed through the BRAC and FUDS processes, respectively. Those processes will make the determinations regarding proposed remedial decisions and any associated remedial action plans. Any CEQA/NEPA documentation associated with the remedial action plans or other related activity would derive from these remedial processes. The HWRP presumed resolution of these issues through BRAC and SLC so that the sites will be appropriate for the proposed wetland reuse while adhering generally to the present project design.

S-6.2

A specific remedial plan has not been developed by the Conservancy for the limited areas of concern identified at the BMKV parcel. However, remediation of these areas, as necessary, would occur prior to site preparation and earthworks for the wetland restoration project.

An overview map of areas of concern at the SLC site is included in the revised *Hazardous Materials and Waste* section of the SEIR/EIS. If DTSC is requesting an oversized map of the proposed conceptual design for the BMKV expansion preferred alternative, this can be provided upon request.

S-6.3

The SEIR/EIS provides a description of BRAC in chapter 2 and a brief overview of HAAF in the *Hazardous Materials and Waste* section in chapter 4. There is no discussion of Findings Of Suitability to Tranfer or Finding Of Suitability for Early Transfer . Transfer timing and modalities for the HAAF property are part of the BRAC process.

S-6.4

DTSC is identified on table 1-1 in chapter 1 as a responsible agency for approval of remediation plans for identified areas of contamination. Regarding the BMKV expansion, the state lead agency is the Conservancy. As noted above, remedial activities at the HAAF and SLC sites are under the BRAC and FUDS programs and are a separate environmental process.

S-6.5 and S-6.6

See General Response to Comment S-6 above regarding HAAF, SLC, and Navy Ballfields.

Investigations at BMKV to date are summarized in the document based on the site investigations. These studies have been incorporated by reference and have been provided to DTSC. A remedial action plan has not yet been developed at this time; however, the results of the site investigations do not identify substantial areas or amounts of hazardous materials or waste on the BMKV expansion site, and thus remedial action, as necessary is not expected to be extensive, nor hinder the reuse of the site for wetlands and other habitats. Due to the limited nature of contaminant issues identified on the site, additional detail is not necessary to adequately characterize the potential impacts and mitigation. A map showing the sampling locations and areas of concern at the BMKV expansion site has been added to the *Hazardous Materials and Waste* section of the SEIR/EIS as well as an overview map of the areas of concern at the SLC parcel. The expansion site was part of the technical appendix provided to DTSC. DTSC has also been provided copies of remedial reports for the SLC site by the U.S. Army Corps of Engineers, Sacramento District.

The discussion of cumulative impacts already discloses that remedial actions at the HAAF and SLC parcels would be conducted prior to wetland restoration (e.g. remediation to levels appropriate for the proposed wetland reuse generally in accordance with the present project design). Reference to the BRAC process and the FUDS process has been clarified in the *Cumulative Impact* section in chapter 5 of the SEIR/EIS.

S-6.7

See General Response to Comment S-6 above regarding HAAF.

Scheduling for remedial actions at HAAF ispart of the BRAC process. The BMKV expansion proposes no changes for the wetland design at HAAF. The discussion in the GRR Section 6.1.6 notes that the some of the actions proposed as part of the authorized HWRP on the HAAF parcel are being considered as part of potential remedial options. However, the BMKV expansion makes no determinations regarding the HAAF parcel regarding these potential remedial options, and thus makes no presumption of what those options might be. As noted in GRR Section 5.9.2, depending on the timing for resolution of BRAC

and FUDS remedial processes, the sequence of construction of the BMKV expansion may change, depending on timing. Since the GRR is included with the SEIR/EIS, the discussion of schedule is adequate. The lead agencies believe it is speculative at this time to consider that the BRAC or FUDS processes will not result in remediation of the sites suitable to the proposed wetland use generally in accordance with the present project design. Since the BMKV expansion presumes that remedial actions would take place to make the site suitable for the proposed uses generally in accordance with the present project design, describes the processes to be followed to resolve remedial concerns, and would not move with restoration actions on areas where the remedial processes have not been completed, further discussion about the intricacies of schedules would not add to the impact assessment of the BMKV expansion itself. In specific to the SEIR/EIS, chapter 3 notes under Construction Timing, that FUDS process completion may affect the schedule of proposed restoration actions for the SLC site and perhaps the southern tidal cell of the expansion site.

S-6.8

Comment noted regarding potential use restrictions. A remedial action plan has not yet been developed for areas of concern at the BMKV expansion site itself, thus it is premature to speculate about contamination left "above cleanup goals" and potential land use restrictions.

Regarding future property owners, successors in interest to the Conservancy for the BMKV expansion site have not been identified. Upon completion of the BRAC process, the Conservancy is the likely successor to the U.S. Army and U.S. Navy for the HAAF and Navy Ballfields sites. Upon completion of the SLC FUDS process, the Conservancy plans to lease the parcel from the California State Lands Commission. Successors to the Conservancy for the HAAF, SLC, or Navy Ballfields have not been determined at this time.

The remedial actions at HAAF, Navy Ballfields, and SLC have not been determined and thus it is speculative at this point to discuss the acceptance of deed restrictions or as-yet-undetermined remedial options. At any rate, this is the subject of the separate BRAC and FUDS processes..

S-6.9

Comment is noted.

S-6.10

This comment concerns HAAF – see General Response to Comment I-34.

S-6.11

Section 2.3.6 of the GRR and the *Geology, Soils, and Seismicity* section of chapter 4 of the Draft SEIR/EIS describe site conditions relative to the BMKV expansion area. The summary information presented in the GRR and in the SEIR/EIS is based on the data in the Geotechnical Design Requirements in GRR Technical appendix C, which has been provided to DTSC. Settlement impacts are described in Impact G-2 concerning wetland formation and levees. As noted in the discussion in this impact, detailed site-specific geotechnical investigations would be conducted to support the engineering design of levees and specifications for dredged material placement components. Site-specific design-level geotechnical investigations would include review of any locally available recent data on settling, such as at the City of

Novato levee. As noted in the Draft SEIR/EIS, the results of the design-level geotechnical investigation would be incorporated into the construction plans for levees and dredged material placement and would adequately account for anticipated settlement and this impact is considered less than significant.

See General Response to Comment S-6 above regarding soil contamination relevant to SLC and HAAF levees and a proposed breach of the HAAF/San Pablo Bay levee.

Regarding BMKV soils, as noted previously, the Conservancy intends to remediate the identified areas of concern to levels suitable to the proposed wetland reuse in coordination with DTSC, in addition to the SF RWQCB. This would need to be completed prior to any reuse of soils from the vicinity of identified areas of concern. Soil handling and transport would comply with applicable state and federal laws and regulations.

There are no proposed breach locations between the HAAF and BMKV parcel, the HAAF and SLC parcels, and the SLC and BMKV parcels. In the preferred alternative for the BMKV expansion, there is no breach on the SLC site, and the proposed breaches in the outboard levees along San Pablo Bay and Novato Creek are not in areas that to date have been indicated as areas of remedial concern.

S-6.12

See General Response to Comment I-34 below regarding HAAF. Note that the summary description of areas of concern at HAAF has been updated in the Final SEIR/EIS to better describe the concerns at the neighboring parcel.

The comment asserts that the Archives Search Report (ASR), prepared by the U.S. Army Corps of Enginers in September, 2001 identified "a number of new potential release sites including a potential burial area in Pacheco Pond." However, the ASR itself concludes (p. 2-1) that while "there is a potential for previously unidentified disposal areas to be present"..."the historical information review indicates that these areas would contain construction related debris" and "observations made during site inspection confirmed the presence of construction debris within the indentified areas". The ASR goes on to state that (p. 2-9), "the review of historical information related to the site revealed no areas of concern, in addition to those known HTRW sites." Thus the assertion of identification of new potential release sites is incorrect. The ASR also notes (p. 3-1) that "all previously documented HTRW sites are in various phases of cleanup and should continue as planned", and no additional assessment or other environmental actions were recommended.

Regarding recent Pacheco Pond sampling results from Marin County, these were summarized in the Draft SEIR/EIS in the Hazardous Materials and Waste Section in Chapter 4. Discussion of these results has been expanded in the Final SEIR/EIS to better describe them for the reader.

The Enhanced Preliminary Assessment (Weston, Roy Inc., *1990 Enhanced Preliminary Assessment, Hamilton Army Airfield, Novato California*) noted a "hearsay" report of possible bombing areas near the East Levee landfill, north of the aircraft parking areas, and in Bel Marin Keys (north of runway overrun) (Weston 1990). However, the Enhanced PA noted that "the use of any areas on or around Hamilton Army Airfield for bombing range activities could not be documented" (Weston 1990). The Enhanced PA recommended further investigation to verify the existence of any bombing ranges; if any documentation (such as written or first-hand verbal reports) of bombing ranges were located, the Enhanced PA recommended an ordnance sweeep of any such identified suspect areas (Weston 1990).

Record reviews were conducted subsequent to the Enhanced PA, but no evidence was found to substantiate the presence of the ranges (ETC 1994). Privately owned farmland to the north of the Hamilton Army Airfield was also inspected for the Community Environmental Response Facilitation Act Report (Earth Technology Corporation (ETC) 1994, *Community Environmental Response Facilitation Act Report, Hamilton Army Airfield*). Physical evidence or other records of bombing ranges were not identified during the CERFA windshield, walk-through and aerial site surveys. The CERFA report concluded that the operation of a bombing range in areas used for farming and residences is atypical. The CERFA also report concluded that "the lack of substantiating documentation or physical evidence for the ranges identified in any of the site investigations conducted since the Enhanced PA, in conjunction with the unlikelihood of the site as a bombing range due to safety considerations, support the...conclusion that there never was a bombing range at Hamilton Army Airfield" (ETC 1994).

Regarding ordnance issues, the ASR makes no mention of ordnance uses adjacent to Hamilton. There is mention in the ASR (on p. 2-1) of "gunnery training"over Hamilton Field in 1933 by a squadron from Crissy Field, which the ASR judged to be strafing training. However this was conducted during construction of the airfield and it is unlikely that such activity could be conducted safely once the field was in use. The ASR did not identify use of the Hamilton site as a "bombing range" in its review of historical use and did not identify any bombing ranges as ordnance or explosive concerns in its conclusions and recommendations (USACE St. Louis 2001).

Regarding potential further assessment of ASR sites, the Army has agreed to prepare a preliminary assessment work plan for any sites that the Army agrees that they require investigation (Keller, pers comm. 2002). However, at this time it is not known which sites, if any, may be determined to require investigation. As noted above, the ASR does not present any evidence to demonstrate identification of new potential hazardous material sites beyond those already being addressed under BRAC.

S-6.13

The referenced modeling and design information is all related to the HAAF parcel. As noted above in General Response to Comment S-6, no changes in the wetland design are proposed by the BMKV expansion. The wetland design for HAAF,was already discussed in the 1998 EIS/EIR.. Also as noted above, if remedial concerns or solutions are identified that later require a change in wetland designs, at that point, the lead agencies would determine whether or not additional NEPA/CEQA compliance would or would not be necessary for any proposed changes.

Three requests regarding modeling results for HAAF are noted.

S-6.14

a) To date, the areas of concern identified at the SLC site have been located in the southeastern portion of the site (see new figure 4-14 in the Final SEIR/EIS and *Draft Remedial Investigation Report, North Antenna Field, Hamilton Army Airfield, Novato, CA - December 2001*, Shaw Environmental & Infrastructure, Inc. prepared for U.S. Army Corps of Engineers, Sacramento District). This is the source of the reference to a "certain portion" on page 3-18 of chapter 3. However, the lead agencies recognize that the FUDS remedial process will need to be completed prior to restoration activities on the entire SLC parcel, and the text in chapter 3 has been updated to remove reference to a "certain portion."

b) At this point, the lead agencies consider it speculative to assert that the entire construction of the HAAF and BMKV portions of the HWRP would be completed or mostly completed prior to completion of the FUDS remedial process at the SLC. As noted above in General Response to Comment S-6, if the remedial determinations ultimately made through FUDS or the timing of completion would require changes in the wetland designs proposed for the SLC portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. In this event, which is considered speculative at this time, the most likely changes would include construction of an all-weather access road along the NSD levee/berm and levees to separate the SLC site (or the areas not suitable at the time for wetland reuse) from the BMKV and HAAF sites.

c) This comment is noted. The BMKV expansion makes no presumption about remedial options at SLC and no decision regarding removal of soils, cleanup levels, or site restrictions. These are to be determined through the FUDS process.

S-6.15

As noted on pages 3-18 and 3-25, the dredged material placement period for the BMKV expansion is expected to take 10 years, not 8 years. Estimates of dredged material availability are provided in tables 1 through 7 in appendix D in the Technical Appendices of the GRR, which have been provided to DTSC. The analysis in this appendix is the basis for the summary in the SEIR/EIS on page 3-16 and elsewhere that adequate dredged material supplies are available for the HWRP and the BMKV expansion.

"Stable cover" as it relates to remedial options at HAAF or SLC is a subject for the separate BRAC and FUDS processes . The BMKV expansion makes no determinations related to remediation of these sites.. At this point, since no final remedial determinations have been made regarding the areas of concern on HAAF and SLC, it is speculative to assert that there would be a lack of dredged material available, should the BRAC and/or FUDS process determine that use of dredged material as cover is part of resolution of acknowledged contamination concernss=. Thus, at this time it appears premature to identify contingency plans for alternate sources of cover.

Regarding final foot of cover material, the BMKV expansion designs for non-tidal habitats at BMKV (no non-tidal habitats are proposed at the SLC site) include both use of onsite topsoil and dredged material and does not select one as a "preferred alternative." As noted above, the Conservancy intends to remediate the identified areas of concern at BMKV to levels suitable to the proposed wetland reuse in coordination with DTSC as well as SF RWQCB. This would need to be completed prior to any reuse of soils from the vicinity of identified areas of concern.

S-6.16

Regarding HAAF or Navy Ballfields remedial activities, see General Response to Comment S-6.

Regarding SLC, the text on page 4-126 has been updated to reflect that remedial cleanup values for the SLC will be determined following completion of the remedial investigation and feasibility study, including, if necessary a risk assessment.

S-6.17

Section 6.9.1 of Appendix A to the GRR discusses the concept of transportation cost differential. As proposed, navigation dredging projects that would experience less cost to transport dredged material to the HWRP than to their least-cost environmentally acceptable alternative disposal site will transfer the cost difference to the HWRP. This source of revenue would provide a portion of the funds necessary for the authorized components of project implementation. The request for Congressional authorization reflected in the GRR is being reduced by the anticipated amount of the transportation cost differential derived from the applicable navigation projects. The transfer of transportation cost differental funding to the HWRP does not prvoide additional monies to support activities beyond those already authorized for the HWRP or proposed under the GRR. Furthermore the present project authorization does not permit environmental remediation activities to be accomplished with project funds.

S-6.18

Page 5-6 of the Draft SEIR/EIS states that there could be residual contaminated areas on the Black Point Antenna Field Restoration Project (BPAFRP). The BPAFRP is not part of the BMKV expansion and is a separate project. It is noted in the cumulative impact assessment because of its proximity to BMKV. The comment regarding a preliminary investigation/assessment is noted.

S-6.19

As noted above, the limited areas of soil contamination identified to date at the BMKV expansion site are not expected to necessitate large-scale remedial activities as the areas of concern are discrete areas. Associated air quality effects of any associated construction vehicles were assessed in the *Air Quality* section of chapter 4 based on the assumptions in appendix E. The additional construction effort associated with potential remedial activities would be less than that calculated for the earthworks and site preparation associated with the onshore restoration activity itself. The onshore construction effort was not identified to result in a significant effect on air quality, except related to PM10. Mitigation Measure A-1 is proposed to control PM10 emissions.

The remedial activity should take place prior and not at the same time as the earthworks and other site preparation. Thus, the estimate in the Draft SEIR/EIS also represents an overestimate of the air quality effects of likely construction associated with any BMKV remedial actions when they are occurring. Mitigation Measure A-1 would apply to all construction activities, including any remedial actions.

Remedial action specifics regarding cleanup controls at the individual areas of concern, including any need for dust control, would incorporate the measures in Mitigation Measure A-1 and any additional controls necessary for control for work within contaminated areas.

Similar to the analysis above of air quality, traffic impacts are discussed in the *Transportation* section of chapter 4 and identified to be less than significant. Since the remedial activity would occur prior to and be less intensive than the site preparation and earthworks phase, impacts of associated traffic are also considered to be less than significant.

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September 17, 2002

File No. 02-MA-6E

Comment Letter S-7

Tom Gandesbery
Calif. State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

re Bel Marin Keys Unit V Expansion/Hamilton Army Airfield Wetland Restoration

Dear Mr. Gandebery:

Thank you for including our office in the environmental review process for the above mentioned project. The Bel Marin Keys Unit project was surveyed by Peggy Shannon (8-92), an archaeologist. We concur with the recommendations and mitigation measures in the report. S-7.1

Sincerely,

Liz Block for

Leigh Jordan
Coordinator

cc: Eric Joffiffe

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COASTAL CONSERVANCY
OAKLAND, CALIF.

S-7 California Historic Resources Information System (CHRIS)

S-7.1

Comment noted.

Local Agencies

Comment Letter L-1

Bel Marin Keys **Community Services District**

August 21, 2002

U. S. Army Corps of Engineers, San Francisco District
333 Market Street
San Francisco, CA 94105-2197
ATTN: Lynne Galal

California State Coastal Conservancy
1330 Broadway, Suite 110
Oakland, CA 94612
ATTN: Tom Gandesbery

Jones & Stokes
268 Grand Avenue
Oakland, CA 94610-4724
ATTN: Rich Walter

DRAFT SUPPLEMENTAL EIR/EIS
BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

Dear Ms. Galal, Mr. Gandesbery and Mr. Walter:

In the process of the captioned project, you are accepting dredge spoils from other physical locations when some of the "fill" you can use is, literally, next door.

Bel Marin Keys is dredging its lagoons and will soon have dredge spoils to dispose of. We are hereby formally requesting an application that our dredge spoils be accepted for use and disposal at your "wetlands remediation" site. We ask that this application be furnished to Bel Marin Keys Community Services District by the appropriate Agency at your earliest convenience. L-1.1

To this letter, we have attached the *"Bel Marin Keys North Lagoon and Novato Creek Sediment Mercury Testing"* Report prepared by MEC Analytical Systems, Inc., of Tiburon, CA, showing results of sediment and elutriate tests at three sites on Novato Creek and five sites in the lagoons. These results show concentrations of mercury well L-1.2

4 MONTEGO KEY NOVATO CALIFORNIA 94949 415-883-4222 FAX 415-883-3683

below the RWQCB (Regional Water Quality Control Board) water-quality objectives. I believe this Report, or its Summary Analysis, in your next EIR/EIS. L-1.2 Con't.

Obviously, residents have many have concerns about this project's impact on our community, yet we are eager to maintain a cooperative relationship with our neighbors. What we ask in return is valid consideration.

Sincerely,

Mia M. Mitchell

Mia M. Mitchell
General Manager

MMM:hps
Enclosure

Copies: Board of Directors, Bel Marin Keys Community Services District

Attachment L-1

ANALYTICAL SYSTEMS, INC.
2433 Impala Drive, Carlsbad, CA 92008 / (760) 931-8081 / (760) 931-1580 FAX

14 August, 2002

Ms. Leila Tweed
Bel Marin Community Services District
4 Montego Key
Novato, CA 94949

SUBJECT: Bel Marin Keys North Lagoon and Novato Creek Sediment Mercury Testing

Dear Ms. Tweed:

MEC Analytical Systems, Inc. (MEC) is pleased to present the results of testing conducted with sediment samples collected from the Bel Marin Keys North Lagoon (Lagoon) and Novato Creek on 26 June 2002. The Bel Marin Community Services District (BMKCSD) requested that MEC prepare elutriates with the collected sediment samples, and submit whole sediments and elutriates to an anlaytical chemistry lab for total mercury analysis. This request was made to address concerns of the San Francisco Bay Regional Water Quality Control Board (RWQCB) regarding the potential for elevated mercury concentrations in run-off from the upland disposal site proposed for dredged material from the Lagoon and select areas of Novato Creek. These concerns arose because the location and design of the disposal site (Attachment A) would allow dredged material run-off to decant to San Pablo Bay, and previous Lagoon/Novato Creek dredged material evaluations (ABT 1997a, 1997b and 1997c) reported elevated mercury concentrations in representative sediment samples (up to 0.97 mg/kg dry wt.).

Procedures performed by MEC for this evaluation followed those outlined in the informal Sampling and Analysis Plan submitted to the RWQCB on 19 June 2002. MEC field personnel collected four continuous sediment cores from random locations within the Lagoon and Novato Creek dredge areas. Exact horizontal positions of all sample locations were determined with a differential Global Positioning System (dGPS) and are depicted in Attachment A. Sediment core lengths are presented in the table below. Lengths reported for the Novato Creek samples were normalized to Mean Lower Low Water (MLLW).

Composite ID	Location ID	Latitude (NAD 83)	Longitude (NAD 83)	Mudline Depth (ft.)[a]	Core Length (ft.)	Segment Analyzed (ft.)
Creek	CR1	38° 06.029'	122° 29.195'	3.0	3.0	3.0
	CR2	38° 05.756'	122° 29.319'	-0.1	4.5	4.5
	CR3	38° 05.232'	122° 30.175'	-0.3	4.5	4.5
Lagoon	L1	38° 05.212'	122° 31.179'	4.0	3.0	3.0
	L2	38° 05.268'	122° 31.072'	5.0	4.0	4.0
	L3	38° 05.091'	122° 31.056'	6.0	3.0	3.0
	L4	38° 04.987'	122° 30.796'	5.9	3.5	3.5
	L5	38° 04.961'	122° 30.975'	5.2	4.0	4.0

[a] Creek depths normalized to MLLW.

Three core samples from Novato Creek area and five core samples from the Lagoon area were thoroughly homogenized and composited to form two representative composites identified as "Creek" and "Lagoon". Subsamples from both composites were mixed to form a third composite identified as "Mixture". Elutriates were

ANALYTICAL SYSTEMS, INC.
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created from all three composites using 0.2-um filtered, U.V. treated seawater following guidelines provided in Appendix B of the Inland Testing Manual (USACE/EPA 1998). Sediment and elutriate samples were shipped on ice overnight to EnviroMatrix Analytical Services (EMAS) of San Diego, CA. EMAS performed mercury analysis with sediment and elutriate samples following U.S. EPA methods 7471 and 7470, respectively. All samples were also analyzed for methylated mercury by U.S. EPA method 1631. Results of all analyses are presented in Attachment B. EMAS analytical reports are available upon request.

Results of the sediment analyses show mercury concentrations ranging from 0.31 to 0.37 mg/kg dry weight, which are below the SF Bay ambient level of 0.43 mg/kg reported for fine-grained sediments (RWQCB 1998). Results of elutriate analyses show mercury concentrations ranging from 4.78 to 6.71 ng/L, which are below the RWQCB water quality objective of 25 ng/L (RWQCB 1995).

Chemical analyses of sediment samples were validated through the use of QC samples. Method or reagent blank, laboratory control sample (LCS), and laboratory control sample duplicate (LSCD) analyses; and matrix spike (MS) and matrix spike duplicate (MSD) analyses were conducted where applicable to the methodology. Percent recovery (%R) of surrogate standards added to each sample as well as the %R of analytes from LCS and MS samples are used to assess laboratory accuracy. The relative percent difference (RPD) between duplicate analyses was used to assess laboratory precision. All QC parameters were measured within acceptable limits.

REFERENCES

ABT 1997a. Results of Chemical Testing of Sediments for Maintenance Dredging in Novato Creek and the North and South Lagoons Bel Marin Keys. Applied Biological Testing. February, 1997.

ABT 1997b. Results of Mercury Testing of Sediments for Maintenance Dredging in Novato Creek, Lagoon, and San Pablo Bay Bel Marin Keys. Applied Biological Testing. April, 1997.

ABT 1997c. Results of Retesting of Fourteen Sediments from Bel Marin Keys, Novato Creek, and San Pablo Bay. Applied Biological Testing. May, 1997.

RWQCB 1995. Water Quality Control Plan: San Francisco Bay Region. California Regional Water Quality Control Board San Francisco Bay Region; 1995.

RWQCB 1998. Staff Report - Ambient Concentrations of Toxic Chemicals in San Francisco Bay Sediments. California Regional Water Quality Control Board San Francisco Bay Region; 1998.

USEPA/ACE 1998. Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual.

Please contact me at (415) 435-1847 or bodensteiner@mecanalytical.com, should you have any questions or comments regarding the data or test procedures.

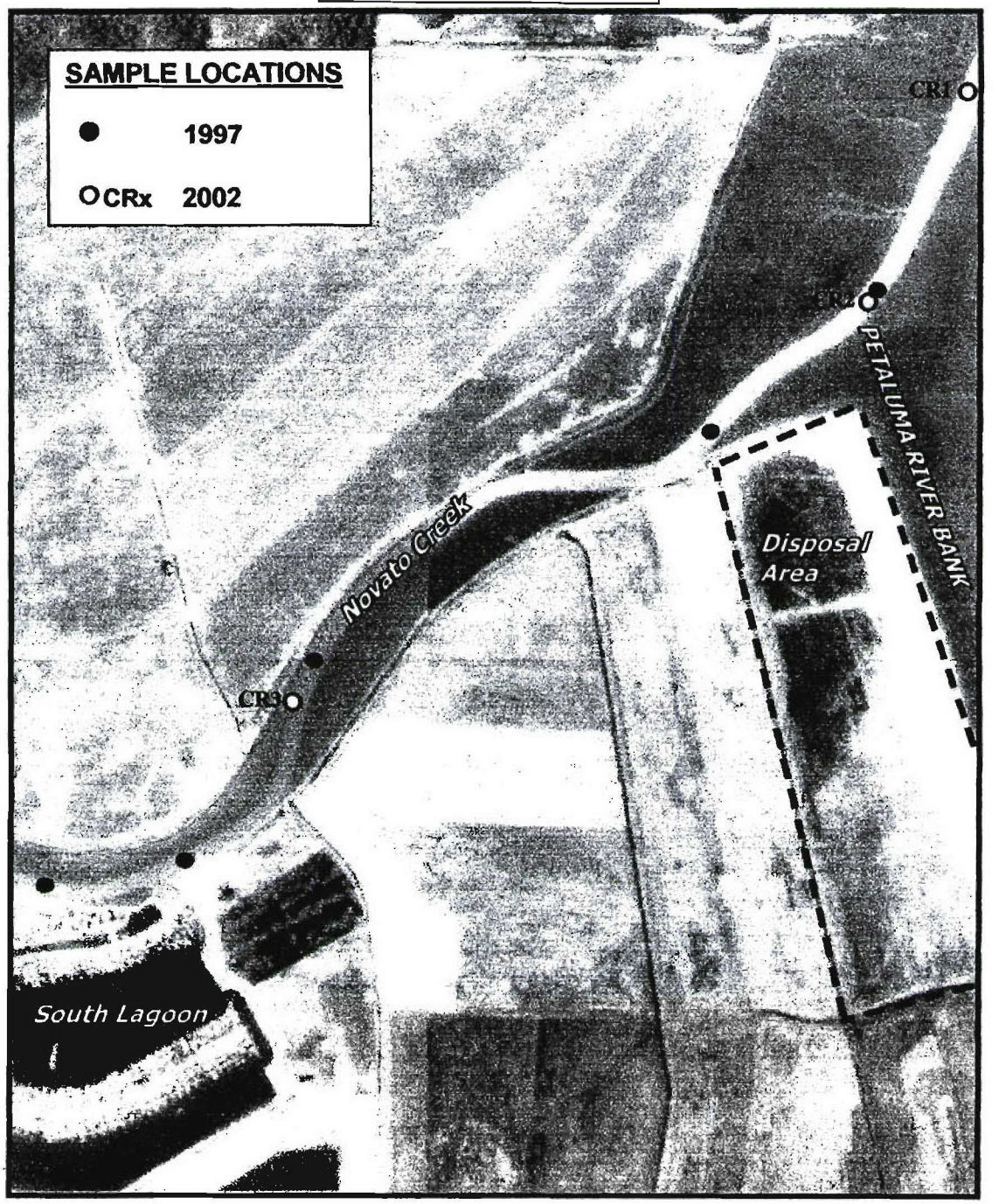
Sincerely,

Scott Bodensteiner
Associate Program Manager

Enclosure

Cc: Mr. Gary Deghy, Huffmann-Broadway Group
Mr. Al Cornwell, CSW Stuber Stroeh

Attachment L-1



Sample Locations in Novato Creek.

Attachment L-1



Sample Locations in the Bel Marin Keys North Lagoon.

MERCURY LEVELS IN SEDIMENT SAMPLES COLLECTED FROM THE BEL MARIN KEYS NORTH LAGOON AND NOVATO CREEK JULY 2002 – MEC ANALYTICAL SYSTEMS, INC.

ANALYTE	SEDIMENT (mg/kg)					ELUTRIATE[a] (ng/L)				
	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[b]	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[c]
Hg	0.11	0.31	0.34	0.37	0.43	0.5	6.51	5.25	4.78	25
MeHg	NT	NT	NT	NT	NA	0.08	ND	ND	ND	NA

[a] Elutriate samples prepared with sediment samples and SF Bay seawater according to recommended procedures in the Inland Testing Manual (USACE/EPA 1998).
[b] Ambient concentration in fine-grained SF Bay sediments (RWQCB 1998)
[c] San Francisco Bay water quality objective (RWQCB 1995)
MDL = Method Detection Limit
NT = Not Tested
ND = Not Detected
NA = Not Applicable

Attachment L-1

Attachment L-1

FAX MEMO

MEC ANALYTICAL SYSTEMS, INC.
Tiburon T&C Laboratory
98 Main St. - Suite 428
Tiburon, CA 94920
Voice: (415) 435-1847 FAX (415) 435-0479

August 7, 2002

TO: Ms. Leila Tweed — **FAX:** (415) 883-3683
Bel Marin Keys Community Services District
FROM: Scott Bodenstciner — **PAGES TO FOLLOW:** 1
CC:

SUBJECT: Mercury Study Results

Dear Leila:

MEC is pleased to present the results of mercury testing conducted with sediment samples collected from the North Lagoon of Bel Marin Keys and Novato Creek. The attached table includes results for total mercury (Hg) detected in the lagoon, creek, and lagoon/creek mixture sediment composites. This table also shows total Hg and total methylated mercury (MeHg) detected in elutriates prepared with these three composites. A formal report summary letter will follow via USPS delivery.

Please review and feel free to contact me with any questions or comments you may have. It's been a pleasure providing you with our service.

Sincerely,

Scott Bodensteiner

MERCURY LEVELS IN SEDIMENT SAMPLES COLLECTED FROM THE BEL MARIN KEYS NORTH LAGOON AND NOVATO CREEK JULY 2002 – MEC ANALYTICAL SYSTEMS, INC.

ANALYTE	SEDIMENT (mg/kg)					ELUTRIATE[a] (ng/L)				
	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[b]	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[c]
Hg	0.11	0.31	0.34	0.37	0.43	0.5	6.51	5.25	4.78	25
MeHg	NT	NT	NT	NT	NA	0.08	ND	ND	ND	NA

[a] Elutriate samples prepared with sediment samples and SF Bay seawater according to recommended procedures in the Inland Testing Manual (USACE/EPA 1998).
[b] Ambient concentration in fine-grained SF Bay sediments (RWQCB 1998)
[c] San Francisco Bay water quality objective (RWQCB 1995)
MDL = Method Detection Limit
NT = Not Tested
ND = Not Detected
NA = Not Applicable

Attachment L-1

Bel Marin Keys **Community Services District**

August 29, 2002

Chairman
California Coastal Conservancy, Attn: Tom Gandesbury
1330 Broadway, 11th Floor
Oakland, California 94612-2630

District Engineer
U.S. Army Corps of Engineers, Attn: Eric Jolliffe
333 Market Street, 8th Floor
San Francisco, California 94105

Reference: **Bel Marin Keys Community Services District Response - SEIR/EIS Proposed BMK V Wetland Restoration Project**

In response to the SEIR/EIS Proposed BMK V Wetland Restoration Project, what does Bel Marin Keys want?

No loss of community PRIVACY, SAFETY & LIFESTYLE

Retain F2 flood/easement of 300 acres exclusively for BMK Unit 4

Retain Pacheco Pond discharge to Novato Creek

Retain Views – Lagoon perimeter levee not over 5'. Locate BMK V bayfront levee 1,500' – 2,000' from existing levee. L-1.3

BMK V - Wetland Project to accept BMK dredge spoils

BMK V - Interpretative Center to be located at Hamilton

BMK V – Public trail location must not invade community privacy or create an intrusion.

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BMK V - No breach of Novato Creek

BMK V - Dredge Novato Creek and use spoils for Creation of the natural 1850's wetland shoreline

L-1.3 Con't.

BMK V – Monitor, mitigate and remediate negative impacts to the BMK community

As the community most impacted by this project, we believe that our inputs to the environmental evaluation process are not being given due and adequate consideration. The Bel Marin Keys community is very environmentally aware, and our citizens support wetland restoration. However, the current design alternatives in the Draft SEIR/EIS contain significant *avoidable impacts* on our community with no justification for creating such impacts. We feel as if the entire project is rolling along over our objections and concerns and without any real attempts to develop more desirable alternatives. Your time schedule for submission appears to be driving this project more than comments from concerned parties.

L-1.4

We look forward to working in a cooperative effort achieving a successful wetlands restoration project with no loss of BMK community privacy, safety, and lifestyle. Detailed concerns are attached.

Sincerely,

BEL MARIN KEYS COMMUNITY SERVICES DISTRICT

Leila I Tweed
President of the Board

LIT:ths

Enclosure: SEIR/EIS Proposed BMK Unit V Expansion of the
Hamilton Wetland Restoration Project
Bel Marin Keys Community Services District Response
Dated 8/29/02

File: 020829 BMK V CSD Response coverletter

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COASTAL CONSERVANCY
OAKLAND, CALIF.

Bel Marin Keys **Community Services District**

August 29, 2002

Tom Gandesbery
California Coastal Conservancy
1330 Broadway, 11th floor
Oakland, CA 94612-2630

Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market St., 8th floor
San Francisco, CA 94105

[Re: SEIR/EIS Proposed BMK Unit V Expansion of the Hamilton Wetland Restoration Project]

Dear Mr. Gandesbery and Mr. Jolliffe,

Thank you for the opportunity to comment on the Draft SEIR/EIS for the Proposed Bel Marin Keys Expansion of the Hamilton Wetland Restoration Project. Members of the Bel Marin Keys Community Services District Planning Advisory Board have the following concerns related to effects on the Bel Marin Keys Community (BMK), which will be greatly impacted by the BMK V restoration project adjacent to our Southern, Eastern and a portion of our Western borders.

Comments from The Bel Marin Keys Community Services District (BMK CSD) to the NOI/NOP for the SEIR/EIS are included in Appendix G- Final Scoping Report, however, none of the concerns have been adequately addressed in the SEIR/EIS or incorporated into the design alternatives. The BMK-CSD has also responded previously to draft sections of the SEIR/EIS that were released for review. Some concerns were addressed in the current SEIR/EIS and other impact discussions have been removed from the document altogether. L-1.5

The BMK-CSD requests a written response from the U.S. Army Corps of Engineers on how the Corps responded to the CSD comments. Such response to be provided before the project is forwarded for further approval or funding.

In general the concerns have to do with 1.) FLOODING, 2.) CHANGES TO NOVATO CREEK HYDROLOGY, 3.) IMPACTS TO NAVIGATION, 4.) SEDIMENTATION, 5.) LEVEE HEIGHTS - LOSS OF VIEW, 6.) TRAFFIC/PARKING-- Proposed Bay Trail Interpretive Center and access to the Bay Trail near the entrance to Bel Marin Keys, 7.) LOSS OF EXISTING HABITAT, 8.) PEST CONTROL & PUBLIC HEALTH, 9.) DUST, NOISE & ROAD DAMAGE, 10.) PRIVACY, SAFETY & SECURITY--Public access to foot traffic on the South Lagoon levee easement, 11.) LOSS OF AGRICULTURE, 12.) DREDGE SPOILS DISPOSAL, 13.) SEA LEVEL INCREASES, 14.) MONITORING, MITIGATION & REMEDIATION, 15.) PROPOSED PREFERRED ALTERNATIVE.

1.) **FLOODING**--None of the proposed alternatives provides the ponding area currently available and required by Marin County Flood Control. Mechanical pumps are part of the proposed alternatives contrary to the first stated Project Objective," To design and engineer a restoration project that stresses simplicity and has little need for active management. L-1.6

a) F-2 FLOOD ZONE--Nearly the entire BMK V project site is zoned as an F-2 Secondary Floodway District by Marin County Ordinance No.2001, the balance being zoned F-1, Primary Floodway

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District. The F-2 flood control zoning was established to protect life and property within the zone, and states, " No building, dredging, filling or levee or dike construction shall be permitted in an F-2 District if it would reduce or eliminate the ponding area and capacity of land within the F-2 District."(BMK Unit 5 FEIR/EIS, 1993)

The F-2 District for the BMK-5 site requires that developments retain 75 percent of the existing effective overflow storage capacity. The existing effective overflow storage capacity is that area which would be available to receive overflow from Novato Creek between the elevations 0.0 feet and 7.0 feet NGVD. These elevations are based upon present flood control criteria. The 7.0 foot elevation is the latest FEMA estimate of the 100 year flood. The 0.0-foot elevation has been established as the lower limit of available storage volume. Any volume below 0.0-foot elevation would likely be inundated prior to an overflow of Novato Creek.(BMK Unit 5 FEIR/EIS, 1993) L-1.6 Con't.

The current SEIR/EIS draft plan does not satisfy the zoning regulation and considers reducing the F-2 Flood Zone to be a less than significant impact. Flooding conditions in Bel Marin Keys during periods of coincidental storms, high tides and wind have been well documented since 1997. Diversion to Novato Creek at those times is not feasible to mitigate flooding. Overflow water must be released to our dedicated ponding area until the tide and creek elevations subside.

We request that the project incorporate mitigation to comply with the requirements in Marin County Code Chapter 22.95. A 72-hour duration storm with a peak discharge of 8000 cfs must be used in coincidence with a 7.0 flood tide to evaluate the efficacy of flood control systems. (BMK Unit 5 FEIR/EIS, 1993)

b) DRAINAGE AGREEMENTS--Of the 1,610 acres at the BMK V site, 300 have been reserved for ponding of flood waters as a result of a 1971 drainage agreement with Marin County for development of flood protection for BMK Unit 4. The total area on the site to be reserved is 1,282.5 acres, (300 acres under the existing ponding covenant and 982.5 additional acres under F-2 zoning), leaving 327.5 acres for development. Full use of the parcel would be permitted only if "ultimate flood control channel improvements" or "alternate methods of providing flood control facilities which are equal in capacity to that of the ultimate flood control channel improvements" are constructed. (BMK Unit 5 FEIR/EIS, 1993)

If the ultimate channel or its equivalent is not constructed, BMK is entitled to retain the 300 acre flood pond area. Any substitute area must be at the same elevation as the existing 300 acres in order to maintain the same ponding capacity. L-1.7

We request the proposed project comply with the two drainage agreements filed in he Marin County Recorder's Book 3717, page 183 and as Document No. 87-35671. The SEIR/EIS should document by calculation how the ponding capacity will be maintained or mitigated.

Alternative 3 and any plan utilizing mechanical pumps or culverts with flap gates is not acceptable to the BMK community due to lack of reliability and required maintenance. Under present conditions pumping and flap gates are not required therefore we do not consider any change requiring pumps and/or flapgates to be beneficial improvements to drainage conditions.

c) FLOOD INSURANCE--Any change to the floodplain will create an economic impact on the BMK residents that are now exempt from flood insurance because of the existing zoning. This issue requires further investigation and documentation. We request that the Project Sponsor provide a mitigation plan to address economic impact. L-1.8

No current or proposed study of the surface water hydrology and tidal hydraulics for the BMK V expansion is comprehensive enough to determine that the decrease of capacity of secondary floodplains to receive overflow waters will not result in an increased flood risk to people or property at times of 8,000 cfs flow in combination with a 100 year tide. L-1.8 Con't.

The BMK-CSD considers removal or reduction of area for overflow ponding, or reliance on mechanical pumping as proposed in the design alternatives a Significant Negative Impact which is avoidable.

2.) **CHANGES TO NOVATO CREEK HYDROLOGY**-- Proposed alternatives would breach the levee along the Southern shore of Novato Creek a few thousand feet from the mouth and route water from Pacheco Pond into the new marshland. Both alterations pose major changes to hydrology. Modeling assumptions being used to evaluate these alterations are based on old and inaccurate data, and flow models that do not take the contours of the creek into consideration. L-1.9

The Basin Description given in the Hydrological and Hydraulic Modeling Assessment of Existing and Project Alternatives at Bel Marin Keys V is incorrect. Historically, Pacheco Creek and Arroyo San Jose did not discharge into the tidal marsh to the South of the Bel Marin Keys development.The correct history is provided in 2-11 of the General Reevaluation Report: Historically, these streams were part of a network of natural channels that drained through the low-lying area, where Pacheco Pond (also known as Ignacio Reservoir) is now located, to Novato Creek.

a) REDIRECTION OF PACHECO POND FLOW--The proposed modifications to Pacheco Pond and the proposed diversion of flow away from Novato Creek considered in the design alternatives will present substantial effects on creek hydrology. Historically this area is part of the Novato Creek watershed. No study is provided to examine impacts to Novato Creek resulting from loss of potential tidal prism useful in scouring the creek to maintain channel equilibrium.

Loss of scouring flows will impact both creek viability and navigation. The latter has significant financial impacts to the BMK Community. Include predicted cost impacts on the BMK community to maintain a viable navigation channel.

Please provide a hydrological model to study the following questions during high and low water throughout the course of the year: L-1.10

What impacts will diversion of Pacheco Pond have on water quality, sedimentation, navigability and existing endangered species habitat as opposed to greater tidal exchange during seasons of low flood threat?

The hydrographs show a more pronounced effect on low water conditions. Will there be an impact on low water levels during normal, non-flood, hydraulic events?

It appears that the redirection of the Pacheco Pond flow will have a larger impact on low water levels in the creek than on high water levels. What is the normal hydrology of Pacheco Pond flow into the creek through the flap gates? Will the redirection of Pacheco Pond flow during normal conditions reduce water levels in the creek? If it does, then navigation in the creek could be negatively impacted.

b) NOVATO CREEK LEVEE BREACH-- Alternatives 1 & 2 include a marsh basin connection to Novato Creek through a single levee breach of the Novato Creek levee to provide for tidal exchange into a created wetland. L-1.11

b-1. There is no analysis of the potential impacts of the levee breaching in the immediate vicinity of the breach. While the added tidal prism in general could increase the channel cross section, the condition of the channel in the vicinity of the breach could be negatively impacted. Provide documentation of the expected increase in the channel cross section.

There is no analysis of impacts to normal existing tidal hydraulics. There is no study determining present creek flow. Provide verification of creek flow in the lower reaches of Novato Creek using a flow gauge or equivalent. Existing conditions must be documented prior to project approval or construction.

Resultant channel widening of between 10 and 25 feet along the channel corridor of Novato Creek may have significant negative impacts to the navigation channel. The navigation channel must continue beyond marker 33 to marker 1 of the Petaluma River. Provide cross section data to show impacts on navigability.

Where will the corresponding "10-20 acres of eroded marsh flood plain" occur? This sediment will most likely be carried up Novato Creek to deposit in other areas and will increase the economic impacts to BMK by precipitating the need to dredge the creek to provide a healthy flow. Please provide an analysis of impacts.

The Bel Marin Keys Community Services District (BMK-CSD) currently exchanges water in the lagoons once or twice a month to maintain water quality and scour the creek. There is no analysis of impacts of the proposed breach on flush flow volume and water flow sufficient to refill the lagoons on slack tide. Please supply a study and/or analysis of the impacts of water quality to the existing BMK Community Lagoons.

L-1.11 Con't.

Modeling in the SEIR/EIS is not based on specifics relative to Novato Creek. Data from various sloughs may not provide data consistent with erosion due to upstream and tidal effects and may not incorporate effects of bank soil composition.

b-2. Added tidal prism. Breaches also occur along San Pablo Bay. The wetland cells vary in size from approximately 400 to 600 acres. The hydraulic analysis contained in the Appendix discusses the basis and methodology for the conclusion that the added tidal prism should increase the channel cross-section downstream from the breach. While in general this may be a sound conclusion, there are some questions regarding this statement.

a. The modeling results discussed in the Appendix refer to an expected increase in channel width of 10-25 feet. The methodology for this conclusion is discussed, but the actual calculations are not provided. What is the added tidal prism for each alternative, and what numbers (existing topography and tidal elevations) were used to calculate the tidal prism? How was the increased width calculated from the added tidal prism?

b. Does the expected increase in channel width of 10-25 feet relate to the increased range in created wetland acreage of 400-600 acres? The Hydrology/Hydraulics Appendix refers to an expected increase of 10-25 feet based on 350 acres of new tidal marsh. The basis for the expected increase should be clarified as requested above.

c. The main text of the SEIR/EIS refers to the expected increase in channel width. Additionally, the text (Impact TH-8) refers to a projected increase in channel depth of 0.5 feet. A similar conclusion was not made in the Hydrology/Hydraulics Appendix. In the Appendix there was a general discussion of channel erosive mechanisms, but no relation of the alternatives

to an eroded channel depth from the increased tidal prism. How was the projected increase in channel depth determined? Provide data, assumptions and calculations for each alternative and its impacts.

d. There are two statements in the document that are possibly inconsistent. In the discussion of Impact TH-8, relative to an expected increase in the channel cross-section, it is stated that "These changes would be expected to occur along the existing main channel." In the discussion of Impact LU-6, in a similar discussion, it is stated "These changes in morphology of the lower portion of Novato Creek are expected to occur directly adjacent to the existing main channel of Novato Creek, from the breach to the mouth, and the subtidal channel, beyond the mouth." It is significant whether the impacts are in the existing channel, or adjacent to the existing channel. If the impacts are along (assumed to be in) the channel then there likely could be a positive impact to navigation of the channel. If the impacts are adjacent to the existing channel (assumed to be a separate channel) then there could be a negative impact to navigation in the existing channel. These statements should be clarified. However, we don't believe sufficient study has been performed to clarify this concern. L-1.11 Con't.

e. Impact TH-1 states "Tidal fluctuations into and out of the restored tidal wetlands under Alternatives 1, 2, and 3 would generate large tidal currents in an around the perimeter levee breaches. The subtidal channels connecting the basins to the Bay would convey flows of up to 3,000 cfs in areas where no tidal currents exist today." This statement relates to potential impacts due to breaching levees directly toward San Pablo Bay. Since the created wetland cells in each alternative are similar in size, would a similar flow be expected from the Novato Creek levee breach in Alternatives 1 and 2? If so, this conflicts with the Hydrology/Hydraulics Appendix Modeling Results and Discussion where it is stated "The velocity increases predicted by the hydraulic model in the main Novato Creek channel were themselves relatively small." Further, the Appendix, Section 1.7, refers to a Corps of Engineers projected 10-year Novato Creek discharge at the Highway 101 crossing of 3,420 cfs. Therefore, an increase of 3,000 cfs from the created wetland, if applicable, would be substantial. The estimated flow into Novato Creek from the levee breach, and the resulting velocities compared to the existing condition, should be clarified.

3.) IMPACTS TO NAVIGATION– No commitment has been made to study impacts to the navigation channel within Novato Creek that has been maintained by the residents of Bel Marin Keys for 40 years.

Of great concern is the impact to the existing channel from the breached levee in the localized area where the two flows (Novato Creek and wetland tidal prism) diverge. We believe additional studies are necessary to quantify potential impacts to the channel at this location. Changes to flow patterns could alter in the long term, and potentially on a regular basis, the location of the navigable channel. L-1.12

Section 3 of the Hydrology/Hydraulics Appendix states, "It is recommended that during future project studies the potential navigational changes to Novato Creek be evaluated and quantified." We agree with this recommendation, especially as it relates to the localized area around the levee breach, but preliminary study of navigational changes is needed now, before the project goes forward. This is a requirement prior to final EIR/EIS approval.

4.) SEDIMENTATION –Short term vs. long term impacts. The SEIR/EIS assumes that sediment transport will be from San Pablo Bay to the created wetlands. This may be the effect in the long term, but immediate and short term impacts could be different as the wetland is being established. The creation of internal channels in the wetland (erosion of freshly deposited dredged material) could L-1.13

cause sediment transport into Novato Creek and the development of shoals or deltas which would adversely impact navigation.

Identify the potential impacts of shoaling in the creek from the initial breaching of the levee prior to the equilibrium condition of the created wetland? This potential sedimentation deposition should be evaluated and quantified.

Provide "Modification to Sedimentation Processes and Morphology" in Novato Creek due to relocation of Pacheco Pond outlet and breach and/or lowering of BMK/Novato Creek Levee.

Provide "Modification to Sedimentation Processes and Morphology" in Novato Creek Navigation Channel due to breach of BMK/Novato Creek Levee and loss of potential tidal prism caused by relocation of Pacheco Pond outlet. L-1.13 Con't.

Identify the morphologic adjustments and changes within San Pablo Bay and Novato Creek that could develop over time as a result of construction of tidal outlet channels through the existing salt-marsh and mudflats. Please supply a study and/or analysis of impacts to the existing BMK Community.

Demonstrate that reduction of flow and therefore scour due to relocation of Pacheco Pond outlet will not have significant negative impact, especially during low flow summer months. Please supply a study and/or analysis of impacts to the existing BMK Community.

5.) **LEVEE HEIGHTS -LOSS OF VIEWS**--A proposed seaward levee along the South Lagoon, up to 13 feet higher than the existing levee (Pg. 5-9 BMK UNIT V SEIR/EIS, 2002) would obstruct views from many homes causing a negative economic impact. Additional upland and transition area would provide more varied habitat, add required flood ponding and move the levee further from our community causing less visual impairment.

San Pablo Bay is currently visible from first story, main living area, windows and yards in some private residences. Proposed levee heights in all alternatives would have a Significant Negative Impact to BMK home owners, that is avoidable. The greater the distance of new levees from the homes and existing levee the less impact. A levee 1,500-2,000 feet away would mitigate this impact. L-1.14

Accurate and clear photographic modeling of view impacts, showing the proposed levee in each Alternative must be provided in the final EIR.

The easement on the South Lagoon levees mentioned on page 4-116 is "an easement in gross for ingress and egress and drainage purposes and for the installation, construction, maintenance of, repair of replacement of, removal of channels, levees, bulkheads, pumps, dikes, seawalls, culverts, pipes and gates". Residents of the BMK Community have used this levee for hiking and dog walking for the past 20 years. Building the new levee against the existing perimeter levee as proposed in Alternative 3 is unacceptable.

6.) **TRAFFIC/PARKING-- Proposed Bay Trail Interpretive Center and access to the Bay Trail near the entrance to Bel Marin Keys** would increase traffic on Bel Marin Keys Blvd. and create parking, safety and security concerns as this is the only outlet for 703 homes and an industrial park. This road is already the third busiest thoroughfare in Marin County. L-1.15

Interpretive center location in Alternatives 2 and 3 would cause the BMK residential community Significant Negative Impacts of traffic, noise and privacy issues conflicting with private residential

use. This location is unacceptable. Any use of Bel Marin Keys Blvd. would require construction of a secondary access road. L-1.15 Con't.

7.) LOSS OF EXISTING HABITAT--Elimination of barns, groves of large trees and open fields used for avian foraging will adversely impact resident and migratory raptors such as Redtail Hawk, Red Shouldered Hawk, Whitetailed Kite, Kestrel, Peregrine Falcon, Great Horned Owl and Barn Owl. L-1.16

The existing eucalyptus tree stand at Pacheco Pond which is used for roosting and nesting by significant numbers of Great Egrets, Snowy Egrets, some Great Blue Herons, Turkey Vultures, Osprey and other raptors should remain standing. Destruction of this habitat is an adverse impact that has not been addressed.

8.) PEST CONTROL & PUBLIC HEALTH--Approximately 135-550 acres of potential mosquito habitat would be created by the restoration project. Reliance on pesticide spraying could have grave impacts on children and senior residents.

Characterization of existing conditions described in the SEIR/EIS are misleading. Land currently used for agriculture is tallied as ponding area. This should be corrected.

An accurate prediction of potential mosquito production and necessary vector control required is a very serious concern due to the western migration of the West Nile virus, the dangers of mosquito borne encephalitis and the very close proximity to a residential community with large numbers of seniors and young children. How will MSMAD access the site for monitoring and management of mosquito production? L-1.17

The FEIR/EIS must address displaced rodent and predator populations, including Red Fox and Coyote.

Why is no Maintenance, Monitoring, and Adaptive Management Plan similar to the one provided in Appendix-B of the Hamilton Army Airfield Wetland Restoration Feasibility Study applied to the BMK V project?

The final EIR/EIS should specify "public health effects associated with creation of wetland habit" referred to on 4-61 of the SEIR/EIS.

9.) DUST, NOISE, & ROAD DAMAGE--The restoration project may take 19 years to build and will require heavy construction equipment. Address potential damage to the existing public streets. Use of Bel Marin Keys Blvd. would require construction of a secondary access road. L-1.18

10.) PRIVACY, SECURITY & SAFETY--Pedestrian access on the South Lagoon levee easement will bring new, unmonitored access to the BMK community with views into homes and yards.

Bay trail alignments along the existing South Lagoon levee in Alternatives 2 and 3 would cause significant impacts to residential privacy, security, noise, and levee maintenance. Project developers must mitigate any cost impacts due to increased maintenance L-1.19

The South Lagoon Levee is an easement held by the BMK CSD for egress, ingress and maintenance. The BMK-CSD is opposed to use of the South Lagoon levee for public access.

11.) LOSS OF AGRICULTURE-- The finding here of less than significant impact and no mitigation required for loss of agriculture is not supported by the previous final EIR/EIS for BMK V development (1993). The loss of local oat hay product and conversion of potential prime agricultural land to other L-1.20

uses were both considered to be class I impacts, which are unavoidable significant impacts. Most of this site has historically been and is currently farmed. Please address the inconsistency with the prior FEIR. L-1.20 Con't.

12.) DREDGE SPOILS DISPOSAL--Bel Marin Keys most recent sediment tests meet the criteria set by the Regional Board for use in Wetlands Restoration. No commitment has been given to accept our spoils at this time.

L-1.21

Priority should be given to the acceptance of BMK sediments due to their close proximity and native seed content. Furthermore, the scope of this project should be expanded to include utilization of sediment from Novato Creek which is listed by the EPA as a threatened waterway due to excessive sedimentation (SRWQCB).

13.) SEA LEVEL INCREASES--In the next 50-100 years, our sea levels will increase. A sensitivity analysis is needed which tests the project against the lowest prediction, medium prediction and highest prediction of raised water levels due to global warming. L-1.22

14.) MONITORING, MITIGATION, & REMEDIATION --Provide a management plan for monitoring, maintenance and funding for repairs to all levees existing and proposed, changes to hydrological features and flood control improvements.

L-1.23

Funds should be secured to guarantee the state's ability to pay for remediation for damages caused by this project.

15.) PREFERRED PROPOSED ALTERNATIVE--The alternatives provided do not adequately explore methods of achieving the stated project goals.

Alternative 3 would remove all flood zoning, disregard legal flood ponding easements removing all flood ponding capacity from the BMK V property and cause the 703 homes in the BMK residential community to be dependent on a pump for all flood control. Alternative 3 would not fulfill the LTMS aspect of the restoration project, would take an unacceptable length of time to create and would present no diversity of habitat. The BMK-CSD is adamantly opposed to Alternative 3.

Why was Alternative 3 put forward and not the alternative proposed in the BMK-CSD response to the NOI/NOP maintaining the 300 acre flood ponding easement, and constructing the new outboard levee 1500-2000 feet from the existing levee.

L-1.24

The BMK-CSD preferred alternative would respect current flood control easements, provide more diverse habitat, provide greater upland and transitional habitat and allow for beneficial reuse of more dredge spoils than any of the proposed alternatives in the SEIR/EIS. This alternative would avoid several of the Significant Negative Impacts in the proposed project alternatives and would reduce the aesthetic impacts of the new levee heights by moving the levees farther away from the homes.

The proposed rerouting of Pacheco Pond would have dramatic repercussions for Novato Creek for no benefit. Changes to peak water stage in Novato Creek when Pacheco Pond flow is diverted is a negligible drop of less than 0.1 foot (Hydrological and Hydraulic Modeling, pg. 7, BMK V SEIR/EIS). Previous urban development and related mitigation projects have diverted much of the historical ponding and drainage area that once contributed to Novato Creek. Removing or rerouting this significant historical link is not conducive to restoration and would not be included in our preferred alternative.
The proposed Bay Trail Interpretive Center and access to the Bay Trail should be located northwest of the HWRP as proposed in Alternative 1, and not near the entrance to the Bel Marin Keys community.

No breach of the Novato Creek levee would be included in our preferred alternative unless Project Sponsors would agree to provide ongoing dredging, monitoring and maintenance of Novato Creek. L-1.24 Con't.

Valuable habitat currently existing on the BMK V site would be maintained or mitigated for use by current species populations in our preferred alternative.

Thank you for addressing our concerns.

Sincerely,

Leila Tweed, President
BMK-CSD Board of Directors

Madeline Swartz, Chairman
BMK-CSD Planning Advisory Board

cc: Cynthia Murray, Marin County Board of Supervisors
Craig Tackabery, Marin County Department of Public Works
Jennifer Barrett, City of Novato Planning Department
Steve Wallace, City of Novato
Tom Selfridge, Novato Sanitary District
Chris De Gabriele, North Marin Water District
Eric Tattersall, California Dept. of Fish & Game

L-1 Bel Marin Keys Community Services District (BMK CSD)

L-1.1

The project is currently in the conceptual design phase and would not be able to physically accept any dredged material for placement until the project has been authorized by Congress and all engineering design, regulatory compliance has been completed, and site preparation and dredged material placement infrastructure has been completed.

The project sponsors, the Corps and the Conservancy, have identified that they would be willing to accept material from BMK CSD dredging projects provided the material has been determined to be suitable for use as cover material by the Dredged Material Management Office (DMMO), its reuse is cost-effective to the project, and the timing and other parameters of the material's availability are consistent with project implementation. This has been added to the alternative description. The DMMO is a joint program of the BCDC, RWQCB, SLC, the Corps, and the U.S. EPA.

Proposals for placement of dredged material must be submitted first to the Corps' Regulatory Division as part of dredging permitting pursuant to the Clean Water Act Section 404. Sediment quality analytical data is reviewed by the DMMO. The purpose of the DMMO is to cooperatively review sediment quality sampling plans, analyze the results of sediment quality sampling and make suitability determinations for material proposed for disposal in San Francisco Bay. This includes proposals for reuse in wetland restoration such as the BMKV expansion.

L-1.2

A summary of the results provided for recent sediment and elutriate tests has been included in the Final SEIR/EIS. However, it should be noted that the lead agencies have made no determination as to the adequacy of the sampling and analysis or the suitability of the material at this time. That determination, as noted above, would need to be made by the DMMO.

L-1.3

The issues raised in the preface are responded to in the subsequent comments that the BMK CSD provided for each constituent issue.

L-1.4

The lead agencies have made a substantial effort to involve the BMK community and the representatives of the BMK CSD, the planning advisory board. This has included the invitation of community representatives and the public to technical workshops in fall 2001 concerning the conceptual design, the holding of a public scoping meeting in December 2001, the periodic meetings of a stakeholder group in 2001 and 2002, attendance by project sponsor representatives at several CSD meetings, the involvement of CSD and other community members in ongoing discussions with the City of Novato and MCFCWCD, and solicitation of input on portions of the administrative draft of the SEIR/EIS. Much of this effort is

beyond the technical requirements of NEPA and CEQA and reflect the interest of the project sponsors in the input and concerns of the local community. While identified CSD or community concerns may not be resolved to the satisfaction of the CSD or individual residents as of the Draft SEIR/EIS, the lead agencies believe that community input and concerns are being given adequate consideration.

Responses to BMK CSD and local resident comments are provided in this document. As noted above, project changes have been implemented in part to address community concerns. The specifics are noted in the description of the preferred alternative, Alternative 2, and in specific responses to comments.

The project sponsors look forward to the continued involvement and input of the BMK CSD and the local community with the project.

L-1.5

The BMK CSD comments on the NOI/NOP in December 2001 were reviewed prior to selection of the alternatives for analysis in the Draft SEIR/EIS and prior to the analysis of environmental effects of the alternatives. The scoping process is intended to solicit input on the nature and extent of issues to be discussed in the SEIR/EIS from interested agencies and the public. Lead agencies are not required to respond to comments received during scoping.

The BMK CSD comments provided on portions of the administrative draft of the SEIR/EIS in June 2002 were reviewed prior to preparation of the Draft SEIR/EIS. The lead agencies explained to the BMK CSD that formal responses would not be provided to any comments provided on the administrative draft and that NEPA and CEQA do not require the preparation of such responses. It should be noted that it is not normal Corps procedure to provide administrative drafts for outside agency review prior to the public draft; this was done in the case due to the lead agency's interest in the input of the BMK CSD. This was explained in the meeting held by the lead agencies with the BMK CSD on July 31, 2002.

L-1.6

See Master Response 2 regarding flooding and modeling assumptions for the Draft SEIR/EIS.

See Master Response 3 regarding flood zoning and MCFCWCD drainage easements.

See Master Response 4 regarding the BMK south lagoon overflow and the BMK CSD easement for that overflow.

Regarding mechanical pumps, these are only included in the conceptual design for Alternative 3, which is not the lead agencies' preferred alternative.

L-1.7

See Master Response 3 regarding flood zoning and MCFCWCD drainage easements.

Regarding the use of culverts with flapgates, the specific design of the overflow structures from the BMK south lagoon to the swale on BMKV would be decided during the detailed design phase. Because the overflow structures are included in the design to accomodate with the existing BMK CSD overflow easement, the Corps and Conservancy will consult with BMK CSD during the detailed design phase

concerning the design of the structures and potential associated maintenance. It is expected that the new overflow structures would be more effective in delivering overflow from the south lagoon than the existing structures.

L-1.8

See Master Response 5 regarding flood insurance.

See Master Response 2 regarding flooding and studies conducted to date.

See prior responses regarding mechanical pumping.

L-1.9

See Master Response 2 regarding flooding and hydrologic and hydraulic study methodology.

See Master Response 6 regarding Novato Creek channel changes due to breaching of the Novato Creek/BMKV levee and data used in the hydraulic modeling.

See Master Response 7 regarding the Pacheco Pond outflow diversion.

The *Surface-Water Hydrology and Tidal Hydraulics* section has been updated in the SEIR/EIS to be consistent with the GRR description of past hydrology concerning Arroyo San Jose.

L -1.10

See Master Response 7 regarding Pacheco Pond outflow diversion.

L-1.11

See Master Response 6 regarding Novato Creek/BMKV levee breach.

Regarding lagoon flushing, the preferred alternative (with a breach on Novato Creek) would not change the amount of tidal flow in the portion of Novato Creek at the inlets to the BMK lagoons. Impact HYD-5 (page 4-28 of the Draft SEIR/EIS), discusses the effect of diversion of Pacheco Pond outflow on drainage capacity in the BMK lagoons. This impact also noted that the restoration alternatives are not expected to result in any increased sedimentation of the lagoons themselves. As noted in Master Response 7, the Pacheco Pond outlet contributes only minor flow to Novato Creek; diversion of some or all of the flow is not expected to significantly affect the ability to fill the BMK lagoons.

Regarding inconsistencies between Impact TH-8 and LU-6, the text has been clarified to identify that in the expected increase in width of 10-40 feet and depth of 0.5 to 1.0 feet (i.e. lower) is expected to occur in the Novato Creek channel itself between the breach and Marker 25. A new figure, figure 4-7 has been added to identify the expected locations of morphological changes.

Regarding tidal velocities, a new impact discussion (TH-10 in Final EIS/EIR) has been added to identify the flows expected through the breach in the Novato Creek/BMKV levee and to identify the expected increases in tidal current velocities. As noted in the new discussion, the addition of tidal prism to lower

Novato Creek would increase peak tidal flows and velocities, however these flows are expected to amplify, but not change circulation patterns in lower Novato Creek. As noted in the Impact TH-8, this increase in flow would result in some additional scour on this part of the creek, and some limited widening and deepening of the channel.

L -1.12

See Master Response 6 regarding Novato Creek/BMKV levee breach.

The monitoring and adaptive management plan for the HWRP has been updated to include the BMKV expansion and includes monitoring of the Novato Creek channel upstream and downstream of the levee breach. This updated plan is included as an appendix to the Final SEIR/EIS.

The referenced Section 3 of the hydrology and hydraulic portion of the GRR Technical Appendices also states that the tidal breaches will likely have a small positive effect on the channel width and depth in Novato Creek below the breaches, which the comment fails to note. Post-construction monitoring of creek morphology has been incorporated into the adaptive management plan noted above.

L-1.13

See Master Response 6 regarding Novato Creek/BMKV levee breach, which includes discussion of both short-term and long-term sedimentation.

See Master Response 7 regarding Pacheco Pond outflow diversion, which includes discussion of sedimentation and morphology.

Impact TH-3 in the Draft SEIR/EIS discusses changes in Novato Creek morphology due to potential diversion of Pacheco Pond outflows. Impact TH-8 discusses changes in Novato Creek morphology due to potential Novato Creek/BMKV levee breach.

The MCFCWCD tidal flapgates are designed to prevent tidal flow into Pacheco Pond. Thus the baseline against which the restoration project is to be assessed is no tidal prism in Pacheco Pond. Effects of diversion of pond outlet flow are discussed in Master Response 7.

Impact TH-7 discusses changes in San Pablo Bay sedimentation processes and San Pablo Bay.

See Master Response 1 regarding the preferred alternative, which notes that the Pacheco Pond outlet would not be permanently closed and water would not be diverted from the existing outlet in the dry season.

L-1.14

See Master Response 8 regarding levee heights and locations. The new levee adjacent to the tidal restoration area has been moved to a location 1,500 feet from the south lagoon.

See Master Response 9 regarding visual resources, which discusses the aesthetics analysis and methodology used for impact assessment.

See Master Response 13 regarding trail routing, which includes a discussion of the existing BMK CSD easements. As noted in the Master Response, the easements provide for ingress and egress for the purposes of drainage and maintenance, not for recreational access. The preferred alternative does not include building a new levee against the existing lagoon levee, but does include improvement of the existing levee primarily to provide for a consistent and competent levee adjacent to the BMKV swale area.

L-1.15

See Master Response 14 regarding the interpretive center location, which has been moved to the City of Novato parcel on Hamilton.

L-1.16

See Master Response 12 regarding existing wildlife habitat.

L-1.17

See Master Response 15 regarding mosquito breeding habitat and pest displacement.

Contrary to the comment assertion, ponding does occur within the agricultural fields due to poor drainage. This is verified by the analysis in the wetland delineation conducted by LSA in 1997, which identified that observed ponding areas (both direct and via aerial photography review) in the agricultural fields varied from 0 to 675 acres depending on year (LSA 1997). Inadequate agricultural drainage can give rise to increased mosquito breeding habitat.

The Marin-Sonoma Mosquito Abatement and Vector Control District agrees with the analysis provided in the Draft SEIR/EIS that properly constructed wetlands would reduce mosquito breeding habitat and district mosquito control operations on the expansion site particularly related to elimination of miles of existing drainage ditches (See Comment L-6). Mitigation Measure PH-1 requires the project sponsors to coordinate restoration design, and implementation and operation phases with the District to implement mosquito control and management measures.

As noted above, the monitoring and adaptive management plan for the HWRP has been updated for the BMKV expansion and is provided as an appendix to the Final SEIR/EIS. Mitigation Measure PH-1 has been added to the plan.

L-1.18

See Master Response 16 regarding construction impact on traffic, air, and noise. In the preferred alternative, the primary access route is now via HAAF, which would reduce effects on Bel Marin Keys Boulevard during construction.

L-1.19

See Master Response 13 regarding Bay Trail routing. No spur trail is included in the preferred alternative. It should be noted that the easements that the BMK CSD hold related to the south lagoon are located on state-owned property and do not entitle community residents to access the levee for recreational purposes.

L-1.20

See Master Response 17 regarding agriculture.

L-1.21

See Master Response 10 regarding dredged material quality and sources. As noted in the master response, the project sponsor's are willing to accept BMK CSD dredged material if it is determined to be suitable by the DMMO, its reuse is cost-effective to the project, and the timing and other parameters of the material's availability are consistent with project implementation process.

It should be noted that the SWRCB has not yet designated Novato Creek as an impaired water body under Section 303(d) of the Clean Water Act for sedimentation. The SWRCB is currently revising the 303(d) impaired waterbody list and plans to release its draft final list on October 15, 2002. In addition to a revision of the formal list, the SWRCB is proposing to create a "watch list" for potentially impaired waterbodies. Novato Creek is proposed for inclusion on the watch list for sedimentation and siltation concerns. The watch list is intended for RWQCB identified waters where minimal, contradictory, or anecdotal information suggests standards are not met but either (1) the available data or information are inadequate to draw a conclusion, or (2) a regulatory program is in place to control the pollutant but data are not available to demonstrate that the program is successful. In many cases, the data or information is not of adequate quality and quantity to support a listing under Section 303(d). In these cases, a finding is warranted that water quality appears impacted and more information must be collected to resolve whether standards and beneficial uses are attained. Placement of Novato Creek on this watch list is not a formal designation but requires SWRCB to consider listing the creek in relation to sedimentation/siltation (SWRCB 2002).

It should also be noted that dredging of Novato Creek in proximity to BMK would not necessarily improve the suspended solid concentrations of Novato Creek (waters which are most heavily influenced by watershed conditions upstream in the upper watershed) and suspended solid concentrations in the Petaluma River and San Pablo Bay.

L-1.22

See Master Response 18 regarding climate change.

L-1.23

See the updatedmonitoring and adaptive management plan for the HWRP which has been updated for the BMKV expansion and is provided as an appendix to the Final SEIR/EIS. The plan includes monitoring of project levees and water management structures.

L-1.24

The lead agencies examined a wide range of potential alternatives including that proposed by the BMK CSD in the comment letter on the NOP prior to selecting the alternatives for analysis in the Draft SEIR/EIS. While there are an infinite number of potential alternatives that could be analyzed for a project with as many design parameters as this project, the selected alternatives represent a reasonable range of alternatives considering the project's goal and objectives. As noted in the executive summary of the Draft SEIR/EIS, not all features within each alternative meet the project objectives in an equal fashion, and some features, such as the lack of beneficial reuse of dredged material in Alternative 3, do not meet certain project objectives.

The comments regarding Alternative 3 are noted. It should be noted that the lead agencies have selected Alternative 2 as the preferred alternative, which is fairly similar to the alternative suggested by the BMK CSD in regards to swale size and outboard levee location. The preferred alternative includes an outboard levee that is 1,500 feet from the existing south lagoon levee. The levee location in the revised Alternative 2 was moved further from the existing levee compared to the location analyzed in the Draft SEIR/EIS.

Regarding Pacheco Pond outlet diversion, see Master Response 7. The preferred alternative has included changes to water management to retain the existing outlet for outflow during the dry season and for potential dual use in the wet season along with the new outlet to BMKV. As noted in Master Response 7 and in the analysis in the Draft SEIR/EIS, the proposed diversion of Pacheco Pond outflow during the wet season would not have significant adverse effect on Novato Creek morphology, navigation, water quality, or habitat.

Regarding the interpretive center, in the preferred alternative it has been located on City of Novato property at Hamilton and the Bay Trail route on the east side of Pacheco Pond has been moved to the west side of Headquarters Hill to reduce the effect on the BMK residential area. No spur trail is included in the preferred alternative.

Regarding the breaching of the Novato Creek/BMKV levee, the preferred alternative retains this feature because of the enhanced ecological value of linking the tidal restoration site to Novato Creek and because the environmental analysis in the Draft SEIR/EIS has not identified significant adverse effects on Novato Creek morphology, navigation, or habitat. As no significant adverse effects on the creek have been identified, dredging of the creek as mitigation is not proposed. The updated monitoring and adaptive management plan for the HWRP is provided as an appendix to the Final SEIR/EIS. The plan includes monitoring of the Novato Creek channel upstream and downstream of the levee breach location both prior to and after breaching.

Comment Letter L-2

PORT OF OAKLAND

August 29, 2002

RECEIVED
SEP 0 1 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

Mr. Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612

Dear Mr. Gandesbery:

RE: DRAFT GENERAL REEVALUATION REPORT AND SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT, BEL MARIN KEYS UNIT V EXPANSION HAMILTON ARMY AIRFIELD WETLAND RESTORATION PROJECT

Thank you for the opportunity to review the document referenced above. The Port supports the development of dredged material disposal options, especially those such as the Hamilton Project that provides benefits to the Bay ecosystem. We are especially pleased to see that the addition of the Bel Marin Keys Unit V area to the Hamilton project will ensure that the site is available for placement of dredged material from the Oakland Harbor Navigation Project. However, we do have some concerns about the project as outlined below.

Draft General Reevaluation Report

We do not agree with the statement on page 6-10 of the Draft General Reevaluation Report, that certain maintenance dredging projects "must now pay the costs of SFDODS disposal as their least-cost environmentally acceptable disposal option." Our understanding of the LTMS plan is that in-Bay disposal remains an acceptable and permitable disposal option. Although we, and others have agreed to support the LTMS goal of beneficially using dredged materials, funding for federal maintenance dredging projects is dependent upon yearly federal appropriations and cannot be assumed to cover additional costs. L-2.1

In addition, the report assumes that the cost of dredged material disposal at the Hamilton Wetland Restoration Project (HWRP) will be comparable to disposal at SFDODS. This appears to be optimistic. In 1999, when the Final Feasibility Study for the Oakland Harbor Navigation Improvement (-50 Foot) Project was prepared, the anticipated unit cost for disposal at the HWRP exceeded the unit cost for SFDODS disposal. Now that the cost estimate for HWRP implementation (without the addition of Bel Marin Keys V) has increased by 87% from that estimated in 1998 (Table 6-9), we assume that the cost differential has also increased. Thus the statement on page 6-10 that "the HWRP presents a beneficial reuse opportunity at no extra premium provides those projects the incentive to choose to place material at Hamilton in lieu of offshore disposal," (emphasis added) appears inaccurate. This optimistic assumption also leads the authors to make the conclusion on page 6-12, that navigation projects will pay to the HWRP the cost differential between HWRP and SFDODS disposal. Based upon the feasibility analysis for the Oakland Navigation project, the cost differential may be negative. Thus, this anticipated source of funding may not be available. L-2.2

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Draft Supplemental Environmental Impact Report/Statement

San Francisco Bay has been determined to be an impaired water body under Section 303 of the Clean Water Act due to the presence of certain contaminants. As such, discharges of return water containing even very low concentrations of contaminants from the restoration site to the Bay may be problematic. Although we support the reuse of dredged materials for the restoration of wetlands throughout the Bay, the 303 listing is in conflict with the LTMS policies. This issue should be addressed in the EIR/S. L-2.3

The report evaluates emissions from terrestrial sources for construction of the wetlands restoration site. However, emissions from the transport of dredged material can also be significant. If the dredging project emissions (including transport) exceed the NOx emission threshold of 100 tons/year, then the dredging project will be required to completely mitigate those emissions through offsets. In practice, mitigation to this extent is not possible, and could greatly reduce feasibility and the number of projects that are able to transport dredged material to the Hamilton facility. Due to the method of measurement, air quality impacts for 50ft Project material disposal at the San Francisco DODS are actually less than disposal at Hamilton. Distance, volume and equipment will all greatly affect the feasibility of the reuse at Bel Marin Keys. This issue should be addressed in the EIR/S because it may have a very substantial effect upon the volume or timing of dredged material available for wetland restoration. L-2.4

Alternatives 1 and 2 assume an ambitious schedule for construction of the wetland restoration project with dredged material. However, because of limited funding (addressed under Reevaluation Report, above), or air quality restrictions, or lack of available sediments that meet the site acceptance or discharge criteria, that schedule may not be met. The EIR/S should address impacts, if any from a longer construction schedule, or the unavailability of sufficient dredged material to meet the design goals. L-2.5

Editorial Comments

1. Draft General Reevaluation Report, Page v. The total project costs should be listed as $142,300,000, and the federal share should be listed as $105,600,000.
2. Draft Supplemental Environmental Report/Statement, page 4-81. The discussion of burrowing owl mitigation should include a discussion of what measures will be taken if active nest sites are found during the spring surveys. L-2.6

Please contact Jody Zaitlin at (510 627-1179) if you have any questions regarding these comments.

Sincerely,

Joseph K. Wong
Director of Engineering

cc: Environmental Dept. File: 2002114

L-2 Port of Oakland

L-2.1

The comment letter objects to the conclusion reflected in the Draft GRR that prescribed maintenance dredging projects will pay the costs of San Francisco Deep Ocean Disposal Site (SF-DODS) disposal as their least-cost environmentally acceptable disposal option.

The concept of comparison of HWRP disposal costs against the least-cost environmentally acceptable disposal option derives from the Chief of Engineer's Report for the HWRP, which now forms part of the legislative authorization for the Hamilton Project. It is also reflective of general Corps policy, as documented in Section 8-2.a. of "Navigation and Dredging Operations and Maintenance Policies" (ER 1130-2-520).

The HWRP Project Cooperation Agreement, at Article II.F., confirms that, for each maintenance navigation project contributing dredged material to the Hamilton site, the determination of the least-cost environmentally acceptable disposal option will be consistent with the Long-Term Management Strategy for Disposal of Dredged Sediments in San Francisco Bay (LTMS). This LTMS Management Plan was formally adopted by the Corps and the other Executive Committee agencies in January 2002, and reflects underlying "enforceable policies to achieve the adopted goals of the LTMS program." In brief, the LTMS Management Plan implements a process of limiting the quantity of material dredged from Bay Area navigation projects to be disposed at in-Bay aquatic disposal sites, and designates goals for the utilization of ocean disposal sites and beneficial use upland sites in lieu of in-Bay sites. The limitation on use of in-Bay sites is to be phased in gradually over a transition period that began in 1999 and will continue over 12 years. Over this transition period, the volume of in-Bay disposal will be reduced from their 1999 levels of approximately 2.8 million cubic yards (mcy) per year to 1.0 mcy per year. Thus, as the comment indicates, some in-Bay disposal is presently, and will remain, a permissible option under the LTMS Management Plan, albeit an increasingly restricted option as the transition period progresses.

Through its Record of Decision on the LTMS EIS/EIR and its adoption of the LTMS Management Plan, the Corps demonstrated its commitment to accomplishment of the goals of the Management Plan. In manifestation of this commitment, and in recognition of the commencement of the Management Plan transition period, the Corps has for several years disposed of material dredged from the Oakland Harbor and Richmond Harbor Federal annual maintenance projects at SFDODS. It is expected that material dredged from other Federal maintenance projects will also be designated for SFDODS disposal as the transition period progresses. The analysis reflected in the Draft GRR anticipates continued Corps commitment to the goals of the LTMS Management Plan.

The Draft GRR relies on reasonable projections as to the disposal locations designated in accordance with the LTMS Management Plan for the Oakland Harbor, Richmond Harbor, and several other Bay maintenance dredging projects, in calculating estimated costs for the HWRP. The Draft GRR reasonably concludes – based on present disposal designations, on recent past history, and in recognition of the increasingly restricted opportunity for in-Bay disposal under the LTMS Management Plan as its transition period progresses – that disposal at SFDODS now represents the least-cost environmentally acceptable disposal option for Oakland and Richmond maintenance material, and that additional maintenance projects will also be designated for SFDODS disposal throughout the 12-year period.

It is important to note that these projections are made in the Draft GRR for the sole purpose of calculating the consequent effect on HWRP project costs. The Draft GRR projections do not predetermine future Corps decision making regarding disposal of material derived from maintenance dredging projects. In order to calculate the required project cost estimates, the Draft GRR reasonably projects that the least-cost environmentally acceptable disposal option will be determined in view of recent past disposal practice and further guided by the Management Plan. Although future maintenance dredging program funding levels cannot be predicted with certainty, the Draft GRR may – and does – rely on the Corps' expressed commitment to the Management Plan in projecting which Federal maintenance projects would dispose of material at SFDODS, absent availability of the HWRP. The Corps recognizes that, in practice, allocations of in-Bay disposal opportunity are made to Federal dredging projects on a collective basis annually—not to individual projects—based on volume, and that the Corps determines which of its maintenance projects will utilize a portion of the in-Bay disposal allocation and which will not. To reduce complexity and uncertainty in making HWRP cost projections, the Draft GRR does not attempt to anticipate those future project-specific Corps decisions but presumes the volume of material represented by the Oakland and Richmond maintenance dredging projects as designated for SFDODS disposal in accordance with the Management Plan.

The Draft GRR also accurately reflects that the Oakland and Richmond Harbors maintenance projects presently pay the costs of SFDODS disposal as a component of the annual maintenance dredging. The Draft GRR projects the costs of dredging, transportation, and disposal of material to SFDODS for the Oakland and Richmond projects, as well as other projects that are reasonably anticipated, in light of the goals of the Management Plan, to transition to offshore disposal as the 12-year period progresses. These projected SFDODS disposal costs are then compared with the applicable components of HWRP implementation costs to derive a comprehensive estimate of the net costs of the HWRP.

L-2.2

The comment letter also challenges the purported conclusion that costs of disposal of dredged material at Hamilton would be comparable to the costs of SFDODS disposal, and thus questions the derivative conclusion that maintenance dredging navigation projects would enjoy a savings—or a transportation cost differential—that is available for transfer to the HWRP as supplemental funding. The comment appears to misapprehend the nature of the dredging costs comparison conducted in the Draft GRR.

As indicated in the last sentence on page A-4, the Draft GRR compares the costs to dredge and transport material to Hamilton against the costs to dredge and transport material offshore to SFDODS for ocean disposal. Thus, the critical comparison, resulting in a conclusion that funding represented by the transportation cost differential is available for transfer from the navigation project to the HWRP, is between the transportation costs of one disposal option versus the other.

As demonstrated in figure 6-1 of appendix A, and in the accompanying discussion on page A-5, the Draft GRR does not assume that the costs of dredged material disposal at Hamilton are comparable to the costs of disposal at SFDODS, as the comment claims. The Draft GRR reflects an estimated cost for an illustrative navigation project of $16.63/cy to dredge, transport to, offload at, prepare, and operate the Hamilton site, as compared with an estimated $14/cy to dredge, transport to, and dispose of material at SFDODS. The total estimated costs of Hamilton disposal for each cubic yard of dredged material are thus 19% greater than the total estimated costs of SFDODS disposal. The difference between estimated Hamilton disposal costs and estimated SFDODS disposal costs has increased as compared with the

respective estimates articulated in the 1998 HWRP Feasibility Report; the Draft GRR's updated cost differential reflects reevaluated and adjusted estimates for HWRP and SFDODS disposal costs, both of which have increased since promulgation of the Feasibility Report.

Of the estimated $16.63/cy in disposal costs at Hamilton for the navigation project selected as an illustration, the Draft GRR projects that the Federal maintenance dredging contract will cost $8/cy to dredge and transport material to Hamilton for subsequent offloading by the HWRP; all further disposal activities (reflected in the $8.63/cy balance) will be direct costs of the HWRP. This $8/cy cost to dredge and transport material to Hamilton is substantially less than the $14/cy estimate of SFDODS disposal costs that maintenance dredging project would have experienced, if the federally cost-shared HWRP did not exist. The Draft GRR concludes that it is appropriate, and recommends, that this estimated $6/cy "transportation differential cost" be transferred from the maintenance dredging project to the HWRP, for the reasons specified on pages A-8 through A-10.

L-2.3

Table 4-4 in the *Water Quality* section in chapter 4 of the Draft SEIR/EIS identifies the contaminants for which San Pablo Bay has been listed as an impaired water body pursuant to Section 303(d)of the Clean Water Act.
As noted in mitigation WQ-4, a water quality monitoring program would be developed in compliance with the WDRs established by the SFRWQCB for the project. The WDRs would be expected to include any relevant TMDL considerations, if they are adopted at the time the project WDRs are reviewed and adopted by the RWQCB for the BMKV expansion.

L-2.4

As explained in the Impact Mechanism portion of the *Air Quality* section in chapter 4, emissions associated with the transport of dredged material to the site are not included as they are presumed to be analyzed in the environmental compliance documentation associated with dredging projects that may propose to use BMKV as a dredged material placement location.

Further, the EIR/EIS document for the 50-foot dredge project concluded that the air quality impacts of transportation of dredged material from the Port of Oakland to the HWRP were adverse, but less than significant (Oakland Harbor Navigation Improvement (-50 Foot) Project, Final Environmental Impact Statement/Environmental Impact Report, U.S. Army Corps of Engineers/Port Of Oakland, May 1998).

The key source of project-related NOx emissions is the dredged material offloading activity. Mitigation Measure A-2 provides a number of different options to reduce the air quality impact of this activity to a less-than-significant level.

L-2.5

Section 5 of the GRR provides the rationale for the assumption of the construction schedule described in both the GRR and the SEIR/EIS for the various alternatives. Funding and air quality comments were responded to above. While absolute prediction of precise quantities and timing of available material for placement at HWRP/BMKV cannot be made, available data supports the schedule as feasible.

L-2.6

GRR typos concerning costs have been corrected.

Mitigation Measure BIO-5 identifies that the project sponsors would consult with DFG to determine appropriate mitigation measures and these may include establishment of buffers or timing to avoid breeding season impacts. This is standard practice for pre-construction burrowing owl surveys.

Comment Letter L-3

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AUG 22 2002

COASTAL CONSERVANCY
OAKLAND, CALIF.

NORTH MARIN WATER DISTRICT
999 RUSH CREEK PLACE • POST OFFICE BOX 146 • NOVATO, CALIFORNIA 94948 • (415) 897-4133 • FAX (415) 892-8043

August 21, 2002

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Eric Jolliffe
U. S. Army Corps of Engineers
San Francisco District
333 Market Street, 7th Floor
San Francisco, CA 94105

Subject: Draft General Reevaluation Report and Draft Supplemental Environmental Impact Report/Environmental Impact Statement (EIR/EIS)
Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project
SCH #1998031053

Dear Messrs Gandesbery and Jolliffee:

North Marin Water District (NMWD) is in receipt of the subject reports and appreciates the opportunity to comment. We note that the General Reevaluation Report (GRR) makes no mention of the NMWD's participation as a stakeholder in the Wetland Restoration Project group meetings, nor does the GRR mention NMWD's needed water transmission pipeline extension from the Ammo Hill water tank at Hamilton Field to the Bel Marin Keys residential area near Headquarters Hill. We are pleased to see that the draft supplemental EIR/EIS does comment on NMWD's needed water transmission line within the Introduction and Summary of the Description of Alternatives (Chapter 3, page 3-4). That description states:

> "It is conceivable that the waterline could be built during construction of the proposed BMK V expansion. The likely location of the line would be along the new or improved levees constructed along the western side of the BMK V parcel. The NMWD would need to obtain an easement from the Conservancy.
>
> Simultaneous construction of the waterline and the restoration project is feasible within the designs proposed. Neither constructing the waterline nor granting the easement is included as part of the proposed BMK V expansion. However, the design alternatives do not preclude granting the easement or constructing the waterline. The Corps and Conservancy will work with the NMWD to examine how the waterline planning can be incorporated into the final design of the BMK expansion. If the proposed waterline extension is later determined to result in any additional impacts beyond those analyzed in this document for

L-3.1

DIRECTORS: GEORGE A. AMAROLI • JACK BAKER • STEPHEN PETTERLE • DENNIS RODONI • JOHN C. SCHOONOVER
OFFICERS: CHRIS DeGABRIELE, General Manager • JOYCE S. ARNOLD, Secretary • DAVID L. BENTLEY, Auditor-Controller • DREW McINTYRE, Chief Engineer

earthworks construction and habitat restoration, a supplemental environmental compliance document may be necessary." L-3.1 Con't.

NMWD formally requests to begin work on easement language to accommodate the proposed waterline and to address any potential construction impacts within the scope of the subject EIR/EIS prior to its finalization. NMWD will agree to fund the reasonable incremental cost necessary to address the waterline within the environmental document now being prepared. L-3.2

Should you have any questions regards this comment, please contact me.

Sincerely,

Chris DeGabriele
General Manager

cc:
Supervisor Cynthia Murray, Fifth District
Marin County Board of Supervisors
3501 Civic Center Drive, Suite 329
San Rafael, CA 94903

Tom Selfridge, General Manager/Chief Engineer
Novato Sanitary District
500 Davidson Street
Novato, CA 94945

Steve Wallace, City Engineer
City of Novato
900 Sherman Avenue
Novato, CA 94945

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L-3 North Marin Water District (NMWD)

L-3.1

The GRR has been corrected.

L-3.2

As noted in chapter 3 of the SEIR/EIS, the Corps and Conservancy are willing to work with NMWD to examine how waterline planning can be incorporated in the final design of the project. As part of this future planning, the Conservancy is willing to work with NMWD on an easement for the waterline.

However, there is currently no easement for the waterline and the waterline represents a separate project proposed for purposes outside those authorized for the HWRP and the BMKV expansion. As such, analysis of the waterline is outside the authority and scope of the project and thus is outside the scope of analysis in the SEIR/EIS.

Nevertheless, depending on timing, construction impacts of a future waterline may be reduced by coordination with construction proposed for wetland restoration. In addition, future environmental compliance, as necessary for the waterline, can tier off the information presented in the BMKV expansion SEIR/EIS and can incorporate many of the mitigation measured adopted therein. This is likely to reduce the costs that NMWD may incur for environmental compliance.

The Corps and Conservancy are willing to share relevant information developed for the wetland restoration project with NMWD during design and permitting phase that will also likely benefit NMWD in its planning.

Comment Letter L-4

August 30, 2002

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Re: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project
Draft Supplemental Environmental Impact Report / Environmental Impact Statement

Dear Tom:

I am writing to submit comments on behalf of the San Francisco Bay Trail Project on the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project Draft Supplemental EIR / EIS, dated July 2002. The Bay Trail Project is an organization administered by the Association of Bay Area Governments (ABAG) that coordinates implementation of the Bay Trail. When complete, the Bay Trail will be a continuous 400-mile network of bicycling and hiking paths that will encircle San Francisco and San Pablo bays in their entirety.

The following comments relate to the EIR:

Bay Trail Plan

On page 2-8 it states that "the Bay Trail Plan is not legally mandated and relies on implementation by local government and other agencies." While it is true that construction of the trail is the responsibility of the local jurisdictions along the adopted alignment, there is a legal mandate for the plan. Senate Bill 100, adopted by the State legislature in 1987, directed the Association of Bay Area Governments to develop a plan and implementation program. The Bay Trail Plan was adopted by the ABAG Executive Board in 1989 and has been incorporated into the City of Novato and County of Marin General Plans. L-4.1

Wildlife and Public Access Study

The study conducted by independent consultants to the Bay Trail Project addressing the relationship between trail use and shorebird behavior in foraging habitat is described on pages 4-93 and 4-94. It should be made clear that the three locations studied in the Bay Area included trail sites and control sites. L-4.2

In addition, final study results from will be available in 2003. The recommendations from the study should be considered in design and implementation of the trail in the Hamilton and Bel Marin Keys restoration projects.

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Administered by the Association of Bay Area Governments
P.O. Box 2050 • Oakland California 94604-2050
Joseph P. Bort MetroCenter • 101 Eighth Street • Oakland California 94607-4756
Phone: 510•464•7935
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Construction of Trail

Figures 3-3, 3-7, and 3-10 identify construction timing of the Bay Trail and spurs in Phase III "Earthwork, Revegetation and Tidal Connection." Instead, we recommend that trail construction be part of Phase I "Site Preparation." In order to minimize impacts to future sensitive habitats created as part of the restoration effort, trail construction should occur **before** wetland creation and levee breaching. This recommendation is described in Impact BIO-36. A description of trail construction details should be included in the Construction Approach for each alternative. L-4.3

The three alternatives propose trail alignments along existing and new levees. The cross sections for the three alternatives in Figures 3-2, 3-6, and 3-9 show the trail along the slope of the levee, but it is not clear how the trail will be incorporated into the levee design. If a step in the levee is proposed to accommodate the trail, as implied in the cross section drawings, this design element should be incorporated into levee construction. Figure 3-12 "Typical New and Improved Levee Cross Sections" does not show the trail step. L-4.4

Mitigation Measures

The following mitigation measures BIO-12, BIO-16a, BIO-16b, BIO-17b, and BIO-18b recommend establishment of seasonal trail closures during peak breeding seasons of special-status species. This recommendation is premature, and should instead read "consider seasonal closures..." Mitigation Measure BIO-11 requires development of a coordinated trail design and management plan with BCDC, DFG, USFWS, City of Novato, County of Marin and the Bay Trail Project. It is through this process that specific design and management requirements will developed along the adopted trail alignment.

L-4.5

It is premature to require seasonal closure of a proposed trail before the wetland habitat has been established. Physical buffers such as vegetation, fencing and stepped trail design will be incorporated into the trail design as required, and seasonal closures will be considered as a tool to reduce significant impacts. Instead, we suggest ongoing monitoring of wetland restoration development as stated in the above mitigation measures:

> *Monitor wetland restoration development to determine if and when California Clapper Rails, California Black Rails, or other sensitive bird species begin using restored tidal marsh for breeding.*

The following mitigation measures for Bay Trail spurs BIO-16b, BIO-17b, and BIO-18b state:

> *Locate trail a minimum of 300 feet from tidal marsh habitat.*

There is no reference in the document where this standard comes from. It is not clear from this statement whether the buffer distance refers to existing or future tidal marsh. The trail design and management plan required in Mitigation Measure BIO-11 will consider specific standards along the alignment. We recommend removal of this requirement since the mandated trail design plan will incorporate buffers and physical barriers to reduce impacts. L-4.6

If you have additional questions I can be reached at (510) 464-7909 or laurat@abag.ca.gov.

Sincerely,

Laura Thompson

Laura Thompson
Bay Trail Planner

L-4 Association of Bay Area Governments, Bay Trail Project

L-4.1

The phrase "legally mandated" has been deleted and background information provided in the comment added to chapter 2 discussion of the Bay Trail Plan.

L-4.2

Discussion of the wildlife and public access study has been modified to note the use of both trail sites and control sites. As noted in chapter 3, the project includes trail design and development of a trail management plan in coordination with BCDC, CDFG, USFWS, Marin County, the City of Novato, and the Bay Trail project for any proposed trails. The coordination between the agencies would be informed by any new trail study results and recommendations available at that time.

L-4.3

Construction approach has been changed to note that trail construction would occur before levee breaching, which would be prior to the formation of tidal marsh in the tidal cells. In the design phase, the Corps and Conservancy will consider the timing of trail construction and whether or not proposed trails or portions of trails can be conducted in Phase I, as suggested. While trail routing is included in the conceptual design, specific design of the trails has not been conducted and thus trail construction details are not available at this time.

L-4.4

As noted in Master Response 1, the preferred alternative, Alternative 2, does not include a spur trail to Novato Creek. As such, the preferred alternative does not include a trail along the new or improved levees proposed as part of the conceptual design. The Bay Trail location adjacent to the expanded Pacheco Pond is proposed on the east slope of the existing levee. The specific design details of the "step" on the levee would be identified in the design phase.

L-4.5

Mitigation Measures BIO-12, 16a, 16b, and 18b have been altered to read "consider seasonal closures," instead of requirement establishment of closures, prior to the coordination with relevant agencies concerning trail design and management. Mitigation Measure BIO-17b has been deleted as Spur Option 2A has been removed from Alternative 2.

L-4.6

As noted above, the preferred alternative, Alternative 2, does not include a spur option, and thus the referenced mitigation, would not apply if the preferred alternative is implemented. The source of the 300-foot distance is a conservative interpretation of a 250-foot buffer that has been previously recommended

in the LTMS Biological Opinion and for activities that have occurred as a result of restoration activities under the HWRP. This mitigation is retained for the spurs included in Alternatives 1 and 3. It should be noted that this mitigation was only proposed for the spur trails to Novato Creek (which contains existing occupied California Clapper Rail habitat), but not for the Bay Trail itself.

Comment Letter L-5

September 4, 2002

Mr. Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530
email: belmarinkeys@jsanet.com

RE: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project Draft Supplemental EIR/EIS

Dear Mr. Gandesbery:

The Novato Sanitary District (District) appreciates the opportunity to provide comments on the Draft Supplemental EIR/EIS for the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project. As you know, the District has a 54" diameter outfall pipe and a Dechlorination Facility in the immediate vicinity of the project. The replacement, relocation and/or improvements to those facilities are authorized in the existing Hamilton Wetlands Restoration Project.

District staff have met with the project sponsors on several occasions during development of the project and discussed the impact of the project on District facilities. As you know, it is imperative that these facilities be completely protected both during and after construction of the restoration project. Any disruption of these facilities could result in the failure of the community's wastewater treatment and disposal system.

The District's comments on the Draft EIR/EIS follow.

Pages 3-8, 3-21 and 3-28: Outfall access berm

The DEIS/EIR states that the top of the access berm for the outfall in all three alternatives would be built to between 4 and 6 feet NGVD. At the 4-foot elevation, equipment could only use the berm for emergency situations or scheduled or permitted repair of leaks in the pipeline. The access road would not be an "all weather" road. If the top of the access berm were built to approximately 6 feet NGVD, it would provide access for regular maintenance or inspections. L-5.1

The District has previously identified the need for an all weather access road in its response to the Hamilton Wetlands Restoration Project EIR/EIS. The outfall is a critical facility that needs to be accessible during the wet weather period when the District discharges to the

bay. The District requests that the berm be maintained at or above the 6-foot elevation with an appropriate surface for all-weather access. L-5.1 Con't.

Page D-7

Alternatives 1 and 3 include the installation of a new sanitary outfall pipeline along the eastern side of the expanded Pacheco Pond. This will extend the outfall by approximately 500 lineal feet. The evaluation of this alternative should include an analysis of this increased pipeline length on the District effluent pumping capacity and cost. L-5.2

Thank you for the opportunity to comment on the DEIR/EIS. We look forward to working with the project staff to resolve the constraints presented by District facilities in the project area.

Please contact me if you have any questions or need additional information.

Sincerely,

Thomas S. Selfridge
Manager-Engineer

L-5 Novato Sanitary District (NSD)

L-5.1

The project sponsors understand the District's need for continued access to the outfall pipeline. The determination of access road height would be made during the detailed design phase. The Corps and Conservancy would consult with NSD during design regarding the access road height and features.

L-5.2

Comment is correct that Alternatives 1 and 3 would include increased outfall length of approximately 500 feet. Alternative 2, as revised, would include increased outfall length of approximately 400 feet. The addition of a minor extra length to a 13,070-foot pipeline is not expected to contribute to increased pumping needs or pumping costs. It is likely that the replacement pipe would be HDPE, which has far less friction than the existing concrete pipe, and thus any effects of increased length are likely to be outweighed by the decrease in interior pipe friction.

Comment Letter L-6

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

September 11, 2002

Re: Bel Marin Keys Unit V
Expansion of the Hamilton
Army Airfield Wetland Restoration
Project
Novato, Marin County, CA

Thank you for the opportunity to comment on your project to restore this important wetland area. While it is not the purview of our agency to select a preferred alternative, although we would probably select the alternative that creates the least acreage of mosquito breeding habitat (Table 4-6, page 4-61), however you acknowledge that each alternative is a decrease from the existing 1,556 acres of potential breeding habitat. We are advocates of restoration projects and do not want to make a recommendation on a particular alternative based on the least number of acres of mosquito breeding habitat, but rather would select the alternative that made the most of the land for a variety of objectives and goals. Consultation with the district once a particular alternative is selected could then further minimize and eliminate vector producing sites. The Marin/Sonoma Mosquito & Vector Control District has always prided itself on working together with agencies to implement both restoration and marsh creation projects. A fully functioning and properly maintained tidal or seasonal wetland can be produced with a minimum of mosquito problems. Changes in design structure can preclude certain species of mosquitoes from making these areas their home. L-6.1

We would like to commend you for your thorough treatment of the potential for mosquito production and methods of control in your document. I believe this is one of the most complete treatments of this issue I have seen in EIR/EIS documentation in recent years. While the district has had a long history of controlling mosquitoes, especially *Culex tarsalis* in miles of field ditches over many decades in this area, properly constructed wetlands would L-6.2

stop or minimize this aspect of our operation. With the recent human case of West Nile Virus (WNV) in Los Angeles, the district must redouble its efforts to minimize the creation of *Culex tarsalis* and *Culex pipiens pipiens* habitat. These two species are implicated as the primary and secondary vectors of WNV. More species of local mosquitoes may be found to be competent vectors of WNV. Bel Marin Keys Unit V has a long history of producing *Culex tarsalis*, therefore we must be diligent in not creating additional habitat for this particular mosquito. *Culex pipiens pipiens* breeds in foul water and is commonly found in catch basins and under homes with broken sewer pipes. It is commonly found in the Bel Marin Keys housing development. In addition we would like to say that Pacheco Pond has not been a source of mosquitoes due the fact that minimal vegetation surrounds the perimeter of the pond and the steeper slope of the pond discourages invasives such as cattails and tules. Finally our agency may sound like a broken record on this issue, but it is an important one. That is the issue of operations and maintenance for the wetlands. Usually there is a five-year evaluation period in which to correct certain problems, but after the five-year period the O&M budget no longer exists and if problems arise someone needs to assume the responsibility for the problem. We would like to see a plan to provide for long term operations and maintenance to exceed the five year post construction date.

L-6.2 Con't.

L-6.3

We look forward to working with you to minimize mosquito production once an appropriate alternative is selected and we can discuss these issues. Thank you again for the opportunity to comment on the project.

Sincerely,

Ronald D. Keith
Assistant Manager/Vector Ecologist

cc: Eric Jolliffe, U.S. Army Corps of Engineers, San Francisco District, Jim Wanderscheid, Chuck Krause, Piper Kimball

L-6 Marin-Sonoma Mosquito and Vector Control District (MSMVCD)

L-6.1

Mitigation PH-1 in the Draft SEIR/EIS includes consultation with MSMVCD during the detailed design phase.

L-6.2

Comments noted.

L-6.3

See the updated adaptive management plan in an appendix to the Final SEIR/EIS. The Corps monitoring period for this project is 13 years as noted on page 5-16 in the GRR. Longer-term responsibility for operations and maintenance will be the responsibility of the owner of the site (Conservancy and/or its successor in interest).

City of Novato

September 12, 2002

Comment Letter L-7

Tom Gandesbery
Coastal Conservancy
1330 Broadway #100
Oakland, CA 94612

Lyn Galal
U.S. Army Corps of Engineers
333 Market St. RM 721
San Francisco, CA 94105

RE: Review of Draft General Reevaluation Report and Draft Supplemental EIR/EIS for Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project

Dear Tom and Lyn;

The City of Novato appreciates the opportunity to review the Draft Reevaluation Report and EIR/EIS for the Bel Marin Keys Expansion of the Hamilton Restoration Project. The City of Novato fully supports the inclusion of the Bel Marin Keys (BMK) property into the Hamilton Restoration Project and is looking forward to working with the Coastal Conservancy and the U.S. Army Corps to implement the vision for restoring the bayfront. The City strongly supports the public access and interpretive components that will serve to manage the overwhelming public interest in the project and serve to educate the public about the importance of our water resources and valuable functions that wetlands provide for flood plain management, water quality and wildlife purposes.

This letter summarizes our comments and suggestions resulting from our review. The comments are grouped into EIR/EIS comments, followed by comments on the Alternatives and recommendations for the project.

EIR/EIS

Construction Phasing

The EIR/EIS describes the proposed phasing of the project in Figures 3-3, 3-7 and 3-10 in which the construction of the public access elements (Bay Trail and Spur Trail) is proposed in Phase III. Likewise, cross-sections shown in Figures 3-2, 3-6 and 3-9 indicate a trail along the slope of the levee, but do not reflect a bench in the levee design to accommodate the public access improvements. These cross-sections should be modified to more accurately reflect the proposed access improvements, which would be benched into the levee design so as to minimize wildlife disturbance. L-7.1

Because the public access components are to be constructed primarily along the existing and proposed levee system around the perimeter of the site, these improvements should be included in Phase I, rather than Phase III. While the City recognizes the need to limit public access during the construction phase of the project for obvious safety reasons, the construction of public access improvements would be the most cost efficient if these were included in the initial design and construction of the levee system. Phase III improvements should include gates, signs, benches, kiosks and other interpretive elements that are required to support opening the trail to public access. L-7.2

Mitigation Measures for Potential Wildlife Disturbance

On page 4-92 the connection of the Bay Trail through the project area is described and mitigation measures are defined to address potential disturbance. Mitigation measure BIO-11 calls for development of a coordinated trail design and management plan with all of the responsible agencies including the City of Novato and the County of Marin. The City recently adopted a Hamilton Bay Trail and Public Access Plan in conjunction with the Coastal Conservancy, which encourages adaptive management through an interagency consultation process – which is consistent with the intent of this mitigation measure. However, the wording of the mitigation measures on page 4-96 appears to mandate seasonal closures.

Seasonal closure of the trail spur was not viewed as necessary by the interagency group that assisted in preparing the Bay Trail Plan, which included representatives from the Dept. of Fish and Game, Fish and Wildlife Service, Bay Conservation and Development Commission, Marin County Open Space District, County of Marin, as well as, the cities of Novato and San Rafael. Because the recommended design would bench the trail below the levee top, limiting the visibility of trail users to the wetland area, and providing limited view access at the end of the trail spur, seasonal closures were not determined as a necessary element, but rather were identified as an adaptive management measure. The potential impact is mitigated by design. The City would support seasonal closures through an adaptive management process involving the interagency team. The mitigation measure should be revised to indicate that seasonal closures may be implemented through the adaptive management interagency consultation process. L-7.3

REEVALUATION REPORT

Recommended Plan

The City of Novato's General Plan designates the Bay Trail along the eastside of Pacheco Pond as shown in Alternative 2 and for these reasons L-7.4

the City supports the Recommended Plan (Alternative 2) as consistent with the City's General Plan. The option to provide a spur trail to Novato Creek is also supported in the City's General Plan and would provide a unique opportunity for public access to Novato Creek which is currently extremely limited. L - 7 Con

Construction Timing

The option of constructing the sites in cells is preferable for several reasons: 1) construction of each cell in series will limit the area of construction activity at any one time and the resultant disturbance to both residents and wildlife during the estimated 13-year construction period; 2) as each cell is constructed the design team will undoubtedly learn from the results of the completed tidal cell and can apply these findings in the subsequent phases; and 3) the completed cell can provide more immediate habitat value and serve as a demonstration project for other restoration efforts as well as an educational opportunity for the public. L-7.5

Interpretive Center

An Interpretive Center and trailhead is identified in Alternative 2 to be constructed in the northwestern portion of the BMKV parcel, with access from Bel Marin Keys Blvd. The site in Alternative 2 is within a narrow strip of land adjacent to the unincorporated community of Bel Marin Keys with very limited room for expansion and the potential to disturb the adjacent residential area. This facility is described as approximately 1,000-sq. ft. building housing exhibits and information on wetland restoration projects and local flora and fauna.

The City hosted a workshop with a wide range of agencies and non-profit funding sponsors regarding the possibility of developing an interpretive center at Hamilton last spring. The outcome of the workshop provided a vision for the Interpretive Center to also serve as a broader Watershed Science Program integrating stewardship projects throughout the area, coordinating volunteer activities, and providing for an educational program that could be utilized throughout the North Bay. The City has designated a preferred site as shown in Alternative 1 as the location for the Interpretive Center off of Hamilton Parkway within the Hamilton Community Park site. This site is a more appropriate location for an interpretive facility as it provides greater opportunities for an expanded program. L-7.6

Real Estate Requirements

As part of the project, the Reevaluation Report outlines the real estate requirements as the responsibility of the local sponsor. The City recently received title to a portion of the project site area within the former Navy Ballfields on Hamilton. This land will be necessary for the Hamilton Restoration Project, and the City will work with the Coastal Conservancy to L-7.7

ensure that the project can be implemented in a manner consistent with our mutual objectives. L-7.7 Con't.

Project Support

The City of Novato supports the addition of the Bel Marin Keys parcel to the Hamilton Wetland Restoration Project and welcomes a partnership approach in implementing this vision of a restored bayfront at Hamilton. City staff is available to work with your project team to refine the project further in the design process and assist in its implementation. The City of Novato requests that any funding authorization for the project include an educational program and interpretive element to manage the public interest in this project and maximize public benefits as a model for other restoration efforts. L-7.8

Please feel free to contact Hans Grunt, Principal Planner at 415-897-4342 or Steve Marshal, Project Planner at 415-899-1446 to discuss or clarify these comments.

Sincerely,

Jennifer Barrett,
Planning Manager

cc: City Council
Rod Wood, City Manager
Shirley Gremmels, City Clerk
Harry Graves, Community Development Director
Steve Wallace, Director of Public Works
Hans Grunt, Principal Planner
Steve Marshal, Project Planner
Steve Goldbeck, Bay Conservation and Development Commission
Rich Walter, Jones and Stokes, 268 Grand Ave, Oakland, CA 94610-4724
Craig Tackeberry, Marin County Flood Control District
Brian Crawford, Marin County Community Development Agency
Cynthia Murray, Marin County Board of Supervisors
Tom Selfridge, Novato Sanitary District
Chris DeGabrielle, North Marin Water District
Madeline Swartz, Chairman, Bel Marin Keys Community Services District, 4 Montego Key, Novato, CA 94949

L-7 City of Novato

L-7.1

The comment suggests adding a bench to the existing cross-sections to reflect specifics of trail design. While such a bench may be the ultimate design, details regarding specific trail design would be determined during the detailed design phase, during which the City of Novato would be consulted.

L-7.2

Suggestion for trail construction in phase I is noted and would be considered during detailed design. Trail improvements would be determined during the detailed trail design phase. As noted in chapter 3, the City of Novato would be consulted during detailed design of the proposed trails and during development of the trail management plan.

L-7.3

The preferred alternative does not include a trail spur; as such, seasonal closure of a spur is no longer included as mitigation relative to Alternative 2. Text in the SEIR/EIS has been changed to note that seasonal closures are not mandated, but should be considered during the development of a trail management plan for other project proposed trail segments.

L-7.4

Comments regarding the preferred alternative are noted. The Bay Trail in Alternative 2 has been modified to match the alignment shown in the City's General Plan, in regards to going around the west side of Headquarters Hill. Regarding the deletion of the spur from Alternative 2, a spur trail would have provided a unique public access opportunity to Novato Creek. However, given the concerns about sensitive habitat and species in Novato Creek at present and in the restored wetland areas in the future and local residential concerns about the proximity of access to residential areas, the spur has been deleted.

L-7.5

A phased approach was noted in the construction timing discussion of each of the 3 alternatives and would be considered during the detailed design phase of the project.

L-7.6

Refer to Master Response 14. The preferred alternative includes the interpretive center location on City property at Hamilton.

L-7.7

The comment is noted and the project sponsors look forward to working with the City regarding this aspect of the HWRP.

L-7.8

Comments noted. Funding authorization language is outside the scope of the SEIR/EIS, but the comment has been noted by the project sponsors.

Regarding the interpretive center, because it will be located on lands not required to achieve the project purpose, and because recreation development policy at ecosystem restoration projects dictates austerity in the planning and design of recreational facilities at proposed Civil Works projects, the interpretive center is outside the Federal project. The Corps will participate in facility development to provide access to and along project features, including a parking area, restrooms, trail and display boards (referred to as the "access area"). The Corps cannot petition for inclusion of an educational program in the authorization language.

Comment Letter L-8

September 16, 2002

Tom Gandesbery
California Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market Street, 7th Floor
San Francisco, CA 94105

Subject: Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project Draft Supplemental Environmental Impact Report/Environmental Impact Statement

Dear Mr. Gandesbery and Jolliffe:

Thank you for the opportunity to provide input on this project. We have the following concerns:

General Reevaluation Draft

- ξ Page 2-12 incorrectly states that the District built Pacheco Pond. It is correctly described in SEIR/EIS on Page 4-15. L-8.1
- ξ Page 2-18 does not list the Marin County Flood Control and Water Conservation District as a potential source of dredged material. L-8.2

EIR/EIS

- ξ Page 4-57 indicates that the District is currently preparing a water management plan. We are not currently preparing one, but would like to work with the project sponsors as they prepare one in the methods described Pages 3-8 and 4-23. L-8.3
- ξ Page 4-140 describes access to the site off of Bel Marin Keys Boulevard, a county maintained road. It is not clear what type of surface is proposed for the access road. Incorporate the requirement to pave the approach in accordance with MCC 24.04.290. Incorporate a review of sight distance. Any work within the right-of-way will require an encroachment permit from the County of Marin. L-8.4
- ξ Page 3-21 describes an interpretive center, trailhead and parking area. The above comments regarding Page 4-140 also apply to these L-8.5

improvements. The interpretive center should provide adequate onsite parking that meets or exceeds the requirements of MCC 24.04.340. L-8.5 Con't.

- Page 3-9 describes the bay trail. Similar to the above comments on the access road, a review of sight distance should be included. Any work within the right-of-way will require an encroachment permit. L-8.6
- The District has a need for ongoing disposal of dredge spoils. We request that provisions be incorporated into the project for the District to dispose of material on an ongoing basis. We understand that the project sponsors prefer local material, since it contains local seeds. We request that protocols be set up now on how local spoils can be placed through an agreement. L-8.7
- We request that the Conservancy/Corps keep the community informed of any changes that may affect the community status as a participant in the National Flood Insurance Program. L-8.8
- Novato Creek and its floodplain are not fully evaluated as part of restoration process. Novato Creek is one of the main drivers for flooding/sediment processes that are critical to establishment and maintenance of the marsh in conjunction with San Pablo Bay. The ***Baylands Ecosystem Habitat Goals*** Report states that this segment of Novato Creek provides a unique opportunity to recreate natural marsh/upland transitions. It also has the potential to enhance flood protection by expanding the tidal prism. NHC's report concludes that with the current restoration design the increase in tidal prism is really insignificant from a hydraulic standpoint. It is important to look at the entire system from a process approach. True restoration efforts attempt to mimic and recreate the natural processes-Novato Creek is integral to this mechanism. The Goals report also mentions that treated wastewater may be used to create freshwater managed wetlands. The needs of the Novato Sanitary District should be considered. L-8.9

-

Very Truly Yours,

MARIN COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

Craig Tackabery
Senior Civil Engineer

c: Pat Balderama

C:\WINDOWS\TEMP\LET-184.doc

Liz Lewis
Jason Nutt
Tim Haddad, CDA

L-8 Marin County Flood Control and Water Conservation District

L-8.1

The description in the GRR has been corrected to match that in the SEIR/EIS.

L-8.2

MCFCWCD dredged material from Novato Creek has been noted as a potential source of dredged material in the GRR if the material is determined to be wuitable for use as wetland cover by the DMMO, its reuse is cost-effective to the project and the timing and other parameters of the dredged material's availability are consistent with the project implementation process. The transport of dredged material, if accepted, to the appropriate project site location would be the responsibility of the dredged material supplier.

L-8.3

Text in the SEIR/EIS has been updated to reflect that the water management plan is not currently being prepared.

L-8.4 & 8.5

Refer to Master Response 14. In the preferred alternative, the interpretive center would be located on City of Novato property on Hamilton. Access road and specific requirements would be determined during the design phase. Since the interpretive center is within the City of Novato, City of Novato development standards would apply.

L-8.6

In the preferred alternative, the only permanent access from Bel Marin Keys Boulevard would be via the Bay Trail west of Headquarters Hill. There is no proposal to provide a permanent vehicular access route to BMKV from Bel Marin Keys Boulevard). If it is determined during the detailed design phase that trail construction would require encroachment into the public right of way, then an encroachment permit would be obtained.

L-8.7

See response L-8.2 regarding MCFCWCD dredged material from Novato Creek. Environmental review of dredging or transportation of dredged material is outside of the scope of the SEIR/EIS and is presumed to be conducted by the lead agency or agencies for dredging projects that may proposes to place material at the BMKV site.

L-8.8

See Master Response 5 regarding flood insurance. The project sponsors do not expect that project changes would affect community status as a participant in the NFIP.

L-8.9

The BMKV expansion is limited to the land owned by the Conservancy adjacent to the HWRP and is proposed as an expansion of the HWRP to take advantage of some of the efficiencies available in pursuing restoration of the 2 areas together. While restoration of other former diked baylands in the lower Novato Creek watershed, such as the Black Point Antennae Field on the north side of Novato Creek, or other locations may be consistent with the Goals Report and may have potential gains for overall restoration of natural processes, these areas are not owned by the Conservancy and are outside the scope of the HWRP and the BMKV expansion.

While other portions of the Novato Creek watershed may offer opportunities to recreate marsh/upland transitions, as noted in Master Response 11 concerning habitat design, there were no uplands on the expansion site prior to 1850, and the site was entirely tidal in nature. Thus, while the project does include an upland component in the swale along the BMK south lagoon so as to provide a buffer between development and restored wetlands and to provide diverse components of habitat, the purpose of including upland is not to create a former upland/marsh transition that was present on the site. Re-creation of such transitions may be appropriate in other portions of the watershed where restoration is considered

The preferred alternative does increase the tidal prism of the lower reach of Novato Creek by opening a breach onto Novato Creek and lowering the BMKV/Novato Creek levee and opening the northern tidal cell to tidal action. The analysis of tidal hydraulics in the Draft SEIR/EIS concludes that the addition of tidal prism would result in an increase of the equilibrium tidal channel width and depth in lower Novato Creek. Further, the design of the preferred alternative, with an opening onto Novato Creek does restore the creek to its former marsh floodplain, in the areas adjacent to the expansion site.

Regarding the potential use of treated wastewater, this was considered as a potential alternative feature (Alternative Feature 14). As described in chapter 3 of the Draft SEIR/EIS, this alternative was dismissed from consideration in the Draft SEIR/EIS because reuse of treated wastewater is not a purpose or objective of the project, is not necessary to create or support wetland habitats onsite, and raises potential concerns about water quality and odor in areas adjacent to a residential area.

Comment Letter L-9

MARIN COUNTY
COMMUNITY DEVELOPMENT AGENCY

ALEX HINDS, DIRECTOR

September 11, 2002

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612

Eric Jolliffe
U.S. Army Corps of Engineers, San Francisco District
333 Market St., 8th Floor
San Francisco, CA 94105

SUBJECT: COMMENTS ON BEL MARIN KEYS UNIT V WETLANDS RESTORATION SEIR/EIS

Dear Messrs. Gandesbery and Jolliffe

Thank you for the opportunity to comment on the SEIR/EIS for the Bel Marin Keys Unit V Wetlands Restoration Project. After reviewing the SEIR it appears that concerns related to the Countywide Plan (CWP) and other adopted plans have generally been addressed although there are lingering issues related to flood control and view preservation. Comments below are based issues identified in our December 31, 2001 letter and additional issues that arose in review of the SEIR/EIS.

Bay Trail

Alternative alignments for the Bay Trail are shown in each of their alternative scenarios and appear to reflect the best alignment (either east or west of Pacheco Pond) based on the ultimate design of the wetlands area. Any adopted plan needs to provide a trail connection. L-9.1

Agricultural Use

As mentioned in the initial comment letter from last year, conversion of the area to wetlands does not conflict with policies contained in the Countywide Plan related to agricultural preservation. Policies related to agricultural preservation in the BFC do discuss preservation as a desirable outcome, but primarily in the context of a development. It is staff's position that this project is not a 'development' in the context of the CWP and therefore is not subject to this policy. That said, if the project design is modified to include seasonal wetland habitat or other suitable lands, we would recommend that agriculture could be continued, to the extent it is viable. L-9.2

Flood Protection

There have been issues about maintaining the +/- 300 acre flood easement within the project area as additional flood event capacity for Bel Marin Keys. It appears that this area has been designed into the restoration scenarios as seasonal wetlands separated from the rest of the tidal wetland area by a levee and, therefore, there should not be problematic. Of course, there needs to be considerable additional analysis of potential impacts as part of the hydrologic study. L-9.3

Additionally, the F2 floodway designation, a zoning overlay in our code, is in place to ensure that sufficient flood capacity is maintained. Staff of the County's Department of Public Works/Flood Control staff will need to evaluate in detail your hydrologic study analysis of flood storage capacity as it relates to L-9.4

SEP 12 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

3501 CIVIC CENTER DRIVE, ROOM 308 – SAN RAFAEL, CA 94903-4157 – 415-499-6269 – FAX 415-499-3880

compliance with F2 provisions and whether it is appropriate to remove the designation. Arguably, without removing the F2 designation, it is not clear from the SEIR documentation that the F2 flood control requirements will be met with the proposed restoration alternatives. The hydrologic study needs to address this issue. L-9.4 Con't.

Levee Location and Views

The EIR/S Appendix C, Section 5.1 suggests alternative techniques to compensate for settlement, which include "(a) placement of additional fill above the intended finish grade of levees to compensate for anticipated settlement and sea level rise; (b) application of surcharge loads or other settlement acceleration techniques; or (c) avoidance of excessive fill placement." These are also included on Page 4-8 of the EIR/S. The view analysis on Page 4-182 is based only on the technique listed above under (a), which is a 4-foot surcharge. Please provide a more detailed analysis of the other options to determine if a lower surcharge can be accommodated. L-9.5

Thank you in advance for addressing the concerns outlined above. If you have any questions, please contact me at 415-499-6287.

Sincerely,

DAN DAWSON, AICP
Senior Planner

c: Tim Haddad, Environmental Coordinator

L-9 Marin County Community Development Agency (MC CDA)

L-9.1

Comment noted.

L-9.2

The lead agencies agree with the CDA assessment that overall, the proposed project does not conflict with the CWP in relation to agricultural preservation in the context of the overall goals for the Bayfront Conservation Zone. The discussion of agriculture in the Final SEIR/EIS notes the CDA staff comment that the project does not represent "development" in the context of the CWP, and therefore is not subject to the agricultural preservation policies. The comment about continuance of agriculture is noted. However, given that existing agriculture (see Master Response 17 concerning agriculture) is not considered economically sustainable and considered the disruptance that agriculture would cause to the seasonal wetland and upland areas that would be also be adjacent to either Pacheco Pond or to the tidal wetland restoration area, continued agricultural use is not considered compatible with the proposed habitat restoration.

L-9.3 and L-9.4

See Master Response 2 regarding flooding and Master Response 3 regarding flood zoning and flood easements. As noted in the master responses, the project is not expected to worsen flooding, and would connect the site to adjacent water bodies in ways that would either result in no increase in peak flood levels or in the case of Pacheco Pond would actually lower peak stage, relative to the existing condition. This indicates that the effective role that the site plays in terms of flood control is at least being maintained and in part is actually being improved.

The Conservancy has entered into an Agreement with the City of Novato and MCFCWCD to conduct an additional hydrologic and hydraulic study that is expected to confirm the results of the studies conducted to support the SEIR/EIS impact assessment and allow the County toresolve the F2 zoning consistency issues prior to construction. The Agreement has been added as an appendix to the Final SEIR/EIS.

L-9.5

As noted in Master Response 1, the preferred alternative includes a lower initial construction height of 10 feet NGVD and a return levee raising at the end of the construction period, as an alternative to lower the overall visual impact of the new levees. Also, the location of the new outboard levee has been moved to a location further away from the BMK south lagoon to further reduce the potential aesthetic impact.

Individuals and Organizations

Comment Letter I-1

Leila Tweed
68 Caribe Isle
Novato, Ca 94949

August 21, 2002

U. S. Army Corps of Engineers, San Francisco District
California State Coastal Conservancy
The SF Bay Conservation and Development Commission

Reference: BMK Unit V Expansion of the Hamilton Wetland Restoration Project

Gentlemen:

Of great concern to the boating community of Bel Marin Keys is the outer navigable channel maintained by the Bel Marin Keys Community Services District. This channel starts where Novato Creek meets San Pablo Bay (more commonly known as Marker #25), proceeding to Marker #1 where the channel meets the Petaluma River.

The lagoon flushing research and procedural study developed by noted hydrologist Dr. Ray Krone has provided our community the professional guidelines necessary to keep the navigable channel open for many years. I cannot be in favor of breeching the Novato Creek levee unless your project will fund the future dredging of the outer channel to the Petaluma River. I-1.1

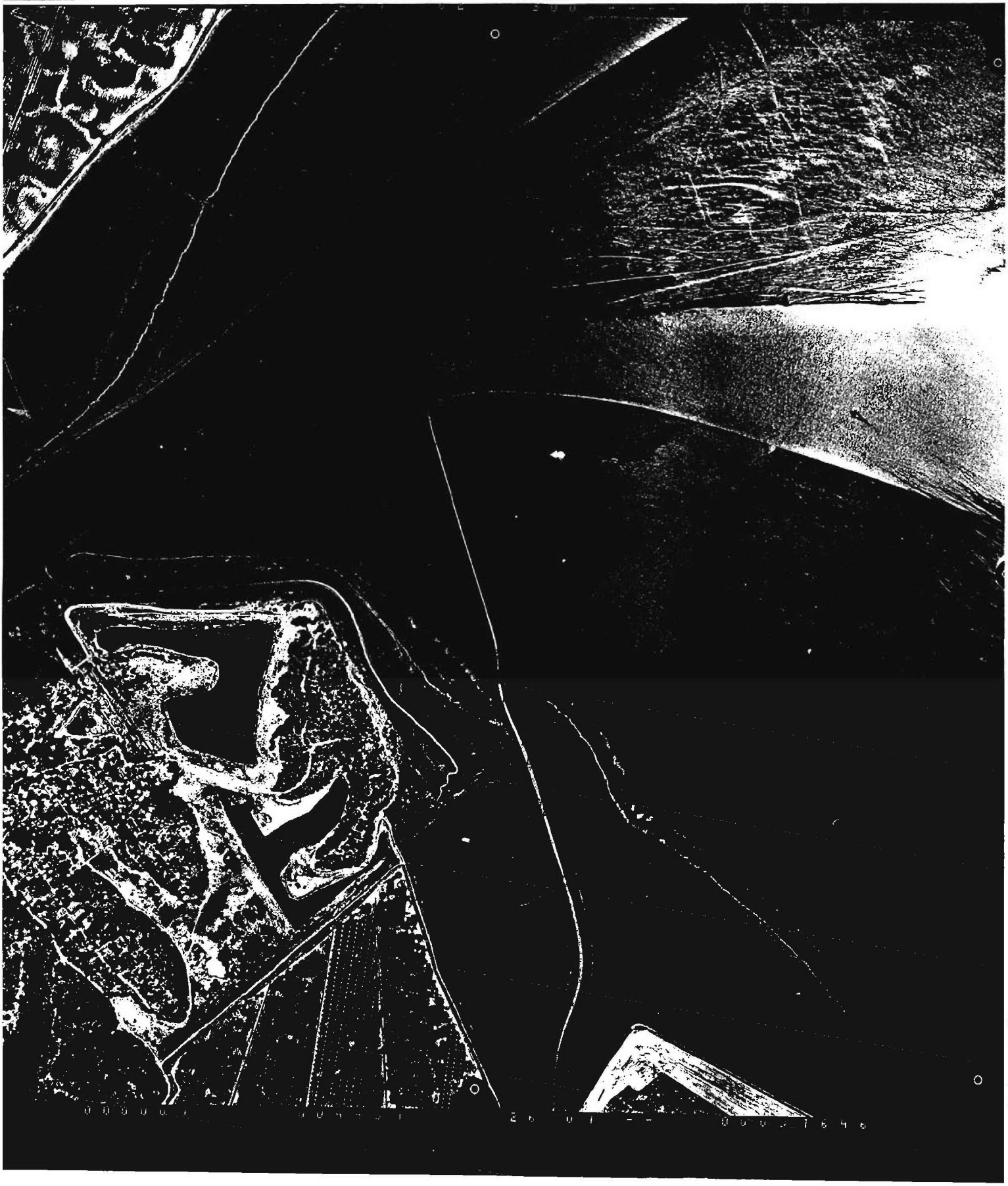
Your Draft EIR has not sufficiently addressed any significant changes to our outer navigable channel. Please illustrate how your proposed changes will affect this very important waterway.

Attached are aerial photos showing the Bel Marin Keys outer channel.

Thank you,

Leila Tweed

Attachment: Aerial Photos (2)
Dr. Ray Krone "Evaluation of Modified Procedure for Flushing Sediment from Novato Creek" 10-6-89.



Attachment I-1



Attachment I-1

RAY B. KRONE & ASSOCIATES
SEDIMENTATION • TIDAL HYDRAULICS

Attachment I-1

October 6, 1989

Mr. Robert Matson
Bel Marin Keys Community Services District
4 Montego Key
Novato, CA 94947

Dear Bob:

Five copies of the report, "Evaluation of Modified Procedure for Flushing Sediment from Novato Creek," are enclosed. It confirms our expectations that the procedure is effective, and Gene will be pleased to learn that releasing water from the dam by opening the gates and lock wide works as well as the gradual program that I recommended previously.

Two concerns surfaced during the study. One is the importance of maintaining the gates and lock at the dam so that they can be opened wide. The entire flow is needed for flushing. The second is the importance of maintaining channel depths at the mouth so that there is little restriction to the flushing flows. It would be advisable to monitor water depths from the mouth to station 00+00 particularly to assure a low tide at the mouth. I would check the water depths all the way to the mouth of the Petaluma River every six months.

Please keep me informed on your observations of water depths and any interesting developments. This is an interesting project, and I enjoyed working on it.

Sincerely,

Ray B. Krone

Ray B. Krone

1966

June, 1977

10/6/89 Krone Lower # 1 - 1.85 ft
" #4 - .72 feet

530 753 2555

P.O. BOX 694 • DAVIS, CA 95617 • TELEPHONE (916) 753.2555/752.8384

530-753-2555

Attachment I-1

INTRODUCTION

The revised procedure for flushing Novato Creek that was proposed by Messrs. Matson and Majors was modeled to evaluate its effectiveness in scouring the channel. This procedure, for flushing during the greater fall of a spring tide, consists of opening the gates at the dam as the tide level there fell to mid-tide to hold the water elevation upstream while the tide continued to fall at the mouth then, after a time, closing the gates at the dam and opening wide the gates at the culvert from Unit 4 to obtain the maximum slope to the flow. Advantages of flushing from Unit 1 and Unit 4 lagoons in conjunction include a greatly extended duration of flushing flow to carry eroded material to the Bay, and possibly a steeper slope to enhance the bed erosion rate. The model was exercized to find the schedule that provided the maximum benefit and to determine the bed shear stresses under that schedule.

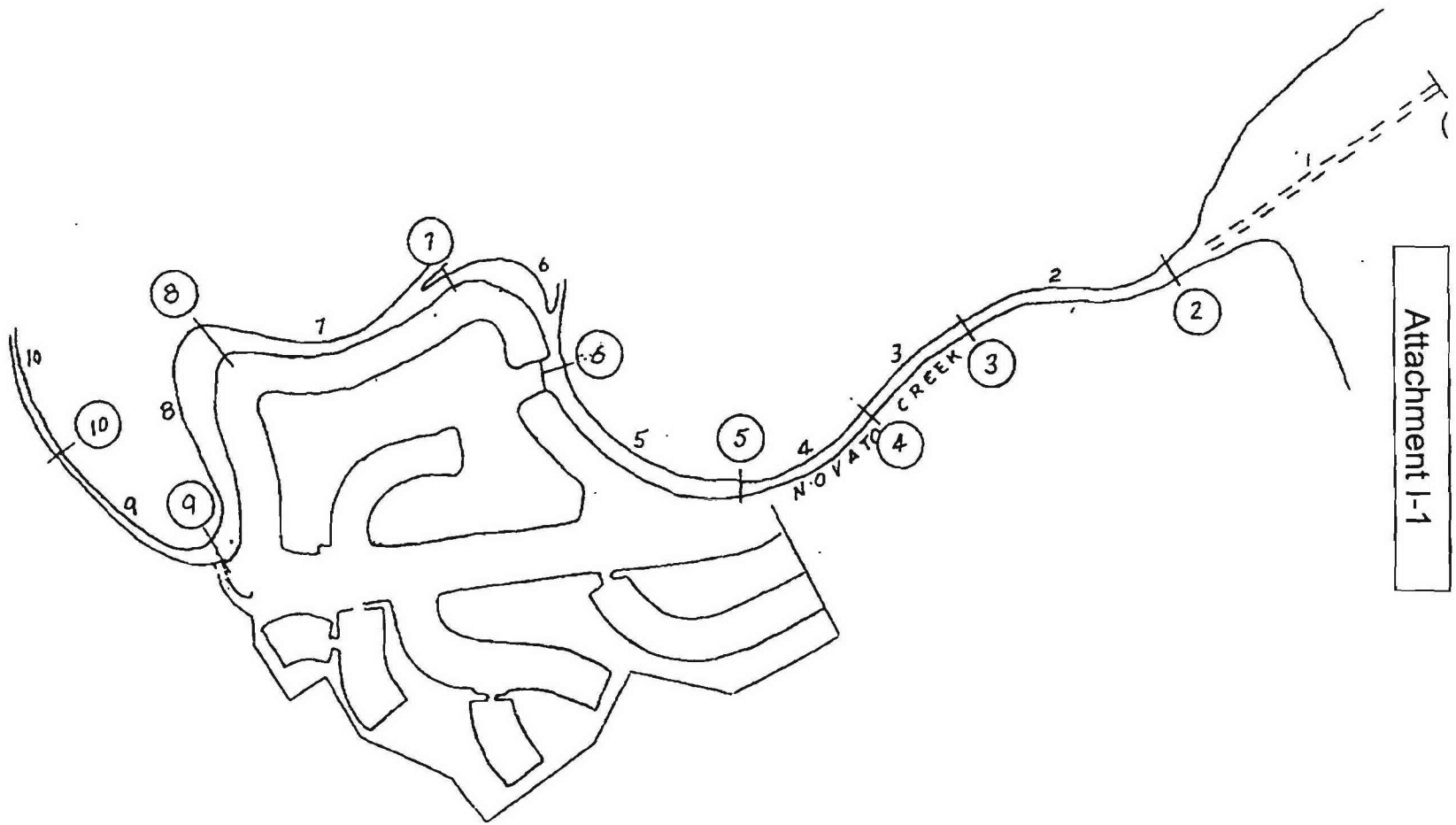
HYDRAULIC COMPUTATIONS

The mathematical model utilized the water depths provided by Mr. Matson and the falling tide of May 5 to calculate the currents in the channel and the bed shear stresses in ten reaches from the Unit 4 outlet to the mouth of the creek. These reaches and the nodes at their junctions are shown in Figure 1. Each reach was represented as a prismatic channel with side slopes of 1 on 4, and average depths were calculated from the soundings provided by Mr. Matson.

The tide used in the model was the predicted tide at the mouth of Petaluma River, and it was input to the model as the tide at node 1 (Station 00+00 on the John A. Blume plots). Initial water surface elevations in the lagoons were 2.3 ft NGVD in Unit 1 and 1.5 ft in Unit 4.

The model calculated the water surface elevations at each node and the currents in each reach every 60 seconds throughout two consecutive 24.6 hour tide cycles. The first cycle was run without opening either lagoon outlet to eliminate any effect of the initial condition then, during the greater fall of the second cycle, the dam gates were opened when the water surface in the creek at the dam fell to a selected elevation. After a time that is limited by the amount of water available through the dam gates and the open lock, these facilities were closed and the gates on the culverts from the Unit 4 lagoon were opened wide. The latter gates were left open until the flow reversed at the creek mouth. Optimum water surface elevation in the creek at the dam and the time to close the dam gates and lock were sought by exercizing the model under a variety of conditions and comparing peak bed shear stresses.

Two procedures for opening the gates and lock at the dam were investigated. The first consisted of opening the gates and lock gradually as needed to maintain the selected water surface elevation in



Attachment I-1

FIGURE 1. REACHES AND NODES OF THE NUMERICAL MODEL OF NOVATO CREEK

the creek at the dam. This procedure prevents loss of lagoon water upstream. The second procedure consisted of opening the gates and lock wide open when the water surface in the creek fell to the selected elevation. This procedure has the advantage of simpler operation. The effectiveness' of the two procedures were found to have negligeable difference. The latter procedure is recommended, and the results of this procedure are described below.

OPTIMUM OPERATION

The optimum procedure for flushing the channel during the larger fall of a spring tide was found to be:

1. Open the dam gates and lock wide when the water surface elevation falls to -0.5 to -0.7 ft MTL (2.7 to 2.5 ft MLLW, or -0.1 to -0.3 ft NGVD). This level will occur about 3.7 hours after the highest tide at the mouth of Novato Creek.

2. Close the dam gates and lock and open the culvert gates from Unit 4 wide 5.2 to 5.7 hours after the highest tide.

3. Close the culvert gates at the time ebb flow at the mouth begins to reverse, approximately 2.0 hours after the lowest tide at the mouth of Novato Creek or 9.4 hours after the highest tide.

This procedure will provide 5.7 hours of flushing at high shear stresses and flush about two volumes of water from the creek.

Water surface elevations (as ft Mean Tide Level, which is 3.17 ft above Mean Lower Low Water and +0.43 ft above NGVD) during a falling tide are shown in Table 1. The hours column is the hours since an earlier high tide, and is arbitrary. Highest tide occurred at 11.3 hours, and the dam outlets were opened at 14.9 hours. The dam is located at node 6, and the table shows that the water surface elevation upstream from the dam did not rise significantly after the dam outlets were opened and that there is a steep gradient toward San Pablo Bay until 21.5 hours.

Calculated currents and bed shear stresses for the same period are presented in Table 2. The negative sign indicates flow and stress toward the Bay. This table shows that the currents and bed stresses between the dam and Bay increased sharply at hour 15, when the dam outlets were opened, and that the currents and stresses above the dam increased sharply after the culvert gates were opened at 17 hours. These velocities are averages across the cross section of the channel. Higher velocities occur near the center of the channel at the surface. The table shows that high velocities occur in the upper channel until hour 21.

The bed shear stresses shown in Table 2 are sufficient to erode unconsolidated sediment, and should very slowly erode typical

Attachment I-1

Table 1. Water Surface Elevations, ft MTL

	Node									
Hours	1	2	3	4	5	6	7	8	9	
10.0	+2.42	+2.40	+2.38	+2.37	+2.35	+2.32	+2.29	+2.24	+2.18	+2.12
10.5	+2.95	+2.93	+2.90	+2.89	+2.87	+2.84	+2.79	+2.73	+2.67	+2.60
11.0	+3.31	+3.30	+3.29	+3.29	+3.28	+3.26	+3.22	+3.17	+3.12	+3.05
HT 11.5	+3.47	+3.47	+3.46	+3.46	+3.45	+3.44	+3.41	+3.37	+3.32	+3.25
12.0	+3.40	+3.40	+3.41	+3.41	+3.41	+3.41	+3.39	+3.36	+3.32	+3.26
12.5	+3.09	+3.10	+3.11	+3.12	+3.12	+3.13	+3.13	+3.11	+3.09	+3.05
13.0	+2.56	+2.57	+2.58	+2.59	+2.60	+2.61	+2.63	+2.63	+2.64	+2.62
13.5	+1.83	+1.84	+1.86	+1.88	+1.89	+1.91	+1.93	+1.95	+1.97	+1.99
14.0	+0.94	+0.96	+1.00	+1.03	+1.06	+1.10	+1.14	+1.19	+1.25	+1.30
14.5	-0.06	+0.01	+0.09	+0.14	+0.21	+0.28	+0.38	+0.52	+0.66	+0.73
start 15.0	-1.10	-0.97	-0.86	-0.74	-0.47	+0.08	-0.23	-0.22	-0.01	+0.11
15.5	-2.13	-1.56	-1.26	-1.06	-0.77	-0.34	-0.24	-0.07	+0.03	+0.09
16.0	-3.08	-2.06	-1.71	-1.49	-1.17	-0.73	-0.61	-0.44	-0.27	-0.16
16.5	-3.89	-2.34	-2.01	-1.80	-1.49	-1.06	-0.93	-0.73	-0.53	-0.41
stop 17.0	-4.51	-2.45	-2.16	-1.98	-1.70	-1.30	-1.16	-0.95	-0.37	-0.59
17.5	-4.90	-2.71	-2.49	-2.34	-2.10	-1.81	-1.15	-0.32	+0.38	+0.47
LT 18.0	-5.05	-2.67	-2.45	-2.32	-2.10	-1.82	-1.15	-0.33	+0.31	+0.39
18.5	-4.95	-2.69	-2.47	-2.34	-2.12	-1.86	-1.21	-0.41	+0.22	+0.30
19.0	-4.61	-2.79	-2.57	-2.43	-2.20	-1.93	-1.28	-0.49	+0.13	+0.22
19.5	-4.06	-2.93	-2.70	-2.56	-2.33	-2.04	-1.37	-0.57	+0.04	+0.13
20.0	-3.34	-2.94	-2.77	-2.64	-2.42	-2.14	-1.45	-0.63	-0.02	+0.08
20.5	-2.49	-2.50	-2.47	-2.43	-2.31	-2.12	-1.49	-0.70	-0.11	-0.01
end 21.0	-1.59	-1.59	-1.61	-1.61	-1.61	-1.60	-1.39	-0.92	-0.54	-0.30
21.5	-0.69	-0.72	-0.76	-0.78	-0.82	-0.86	-0.90	-0.89	-0.80	-0.70
22.0	+0.15	+0.12	+0.10	+0.09	+0.08	+0.07	+0.06	+0.07	+0.05	+0.06
22.5	+0.87	+0.88	+0.89	+0.89	+0.90	+0.91	+0.92	+0.92	+0.92	+0.91
23.0	+1.44	+1.45	+1.45	+1.45	+1.45	+1.45	+1.45	+1.45	+1.43	+1.42
23.5	+1.81	+1.82	+1.81	+1.81	+1.81	+1.81	+1.80	+1.79	+1.78	+1.76
24.0	+1.98	+1.98	+1.98	+1.97	+1.97	+1.96	+1.95	+1.94	+1.91	+1.89
24.5	+1.94	+1.95	+1.96	+1.97	+1.97	+1.98	+1.98	+1.97	+1.97	+1.95

Table 2. Currents, ft/s, (Upper number) and Bed Shear Stresses, dyn/cm^2

Attachment I-1

Hours	Reach 1	2	3	4	5	6	7	8	9	10
14.0	-0.8	-0.9	-0.9	-0.9	-0.7	-0.8	-0.8	-0.6	-0.4	-0.4
	-2.3	-2.9	-2.8	-2.5	-1.5	-2.1	-2.2	-1.1	-0.5	-0.5
14.5	-1.2	-1.4	-1.4	-1.4	-1.1	-1.5	-1.6	-1.4	-1.1	-1.8
	-5.1	-6.5	-6.9	-6.5	-4.6	-8.1	-10.3	-7.0	-4.6	-13.1
15.0	-1.4	-1.6	-1.7	-1.9	-2.3	-0.5	-1.9	-1.7	-1.4	-2.3
	-7.9	-9.1	-10.4	-13.0	-19.0	-0.9	-14.2	-11.1	-7.3	-23.1
15.5	-2.3	-2.7	-2.9	-2.9	-2.6	-1.2	-1.4	-1.3	-1.0	-2.2
	-23.4	-26.3	-29.7	-30.3	-24.3	-5.2	-8.3	-7.1	-4.3	-21.1
16.0	-2.6	-2.7	-2.9	-2.9	-2.6	-1.4	-1.7	-1.5	-1.3	-2.4
	-31.1	-27.9	-31.6	-32.1	-25.3	-7.6	-11.5	-8.9	-6.8	-26.5
16.5	-2.7	-2.5	-2.8	-2.8	-2.5	-1.4	-1.7	-1.6	-1.4	-2.6
	-36.7	-24.6	-28.8	-30.0	-24.1	-8.1	-12.7	-9.9	-7.8	-30.7
17.0	-2.7	-2.3	-2.5	-2.6	-2.4	-1.4	-1.8	-1.6	-1.4	-2.7
	-40.1	-20.3	-24.6	-26.5	-22.0	-8.2	-13.4	-10.5	-8.4	-33.9
17.5	-2.5	-1.9	-2.2	-2.3	-2.1	-3.2	-3.6	-2.9	-1.0	-1.8
	-35.0	-13.9	-18.2	-20.7	-18.2	-43.9	-52.6	-33.9	-3.6	-14.5
18.0	-2.5	-1.9	-2.1	-2.2	-2.1	-3.2	-3.6	-2.9	-1.0	-1.9
	-36.8	-13.5	-17.4	-19.8	-18.0	-44.4	-52.4	-32.2	-3.9	-16.5
18.5	-2.5	-1.8	-2.1	-2.2	-2.1	-3.2	-3.5	-2.8	-1.0	-2.0
	-35.9	-13.4	-16.9	-19.0	-17.2	-42.4	-50.5	-31.1	-4.2	-17.9
19.0	-2.4	-1.9	-2.1	-2.2	-2.0	-3.1	-3.4	-2.8	-1.1	-2.1
	-31.3	-14.0	-17.2	-19.1	-16.9	-41.6	-49.2	-30.2	-4.5	-19.3
19.5	-2.1	-1.9	-2.1	-2.2	-2.0	-3.1	-3.4	-2.7	-1.1	-2.2
	-22.4	-14.3	-17.5	-19.4	-17.0	-41.6	-48.5	-29.6	-4.8	-20.7
20.0	-1.4	-1.7	-2.0	-2.1	-2.0	-3.1	-3.4	-2.7	-1.1	-2.2
	-10.4	-12.2	-16.0	-18.4	-16.7	-41.9	-48.4	-29.3	-4.9	-21.4
20.5	-0.5	-1.2	-1.5	-1.8	-1.8	-3.0	-3.3	-2.7	-1.2	-2.3
	-1.3	-5.2	-9.1	-12.4	-13.6	-38.6	-46.7	-28.4	-5.3	-23.0
21.0	0.1	-0.3	-0.6	-0.9	-1.1	-2.2	-2.7	-2.1	-1.8	-2.5
	+0.0	-0.4	-1.5	-2.9	-5.0	-20.6	-31.4	-18.3	-13.6	-27.8
21.5	0.5	0.4	0.3	0.1	-0.1	-0.6	-1.1	-1.3	-1.4	-2.8
	+1.1	+0.6	+0.3	+0.1	-0.0	-1.3	-5.1	-7.3	-8.0	-36.8

consolidated material. These stresses, applied every two weeks, should maintain channel depths.

Lagoon water surface elevations (NGVD) calculated for this example were:

	Start	End
Unit 1:	+2.3	+0.45 = lowering 1.85
Unit 4:	+1.5	-0.78 = lowering .72

The lagoons should be refilled to these starting elevations after flushing.

ADDITIONAL CONSIDERATIONS

The strong currents that occur during flushing can exacerbate damage caused by floats and boats whose mooring is inadequate to withstand the higher velocities. An educational program would be advisable, possibly augmented by periodic inspection of mooring facilities. Dennis

Erosion of a channel bend by strong currents is concentrated on the bed and bank on the outside of the bend. This phenomenon is universal and results from secondary currents that are caused by the inertia of the flow. These same currents promote deposition on the inside of a bend at lower velocities. It is possible to restrain channel migration by armoring the outside of a bend.

As flushing flows exit the creek mouth, the velocities slow, and a portion of the suspended sediment will deposit. The effectiveness of flushing depends on the fall of the tide at the mouth of the creek to its lowest level. If the channel across the shoal becomes shallow, it will reduce flushing flows in the creek and contribute to sediment accumulation in the creek channel. The depths of the channel across the shoal area should be monitored, particularly that portion near the mouth of the creek, and maintenance dredging provided when needed.

Periodic measurements of channel cross-sections will provide data that can be valuable for management of flushing procedures. Sedimentation rates in the channel are highest when the suspended sediment concentrations in San Pablo Bay are high, such as during summer onshore winds and sediment-laden storm runoffs. Suspended sediment concentrations are lower during calm fall days. It may be possible to flush monthly during calm periods. In any case, periodic measurements will show the efficacy of the flushing procedures.

CONCLUSIONS

This model study shows that the coordinated flushing will provide scouring flows over the entire length of the Novato Creek channel from

the Unit 4 outlet to the creek mouth and flush about two volumes of the creek channel. Optimum flushing procedures were found. Because of the importance of the timing of the gate openings, a tide staff at the dam is recommended. It should be used for initiating the flushing procedure.

Periodic measurements of water depths across sections along the channel are recommended to verify the efficacy of the flushing procedure. Measurements of water depths from the creek mouth to the Bay end of the dredged channel are also recommended to determine navigation impediments and to anticipate needs for maintenance. Maintaining water depths in this channel, particularly near the creek mouth, is essential to effective flushing.

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

LEILA TWEED

I'm Leila Tweed, current president of Bel Marin Keys Community Service District. I'm not speaking on behalf of the Community Services District tonight but as a concerned citizen and one who will hopefully enjoy living alongside a good project. And that's why we're all here tonight -- to make sure it's a project that we can live with and enjoy and be good neighbors with, too.

First, I want to have everybody from Bel Marin Keys stand up, so you know who came from our community. I want to say thank you very much. Give a hand to yourselves. Thank you. I want to say thank you to Madeleine Swartz and Ben Flacante [phonetic] for holding the education seminars that they did on Sunday -- I'm trying to talk quickly.

This is my personal concern after reading portions of your large document. And a great concern to the boating community of Bel Marin Keys is the outer navigable channel maintained by the Bel Marin Keys Community Services District. This channel starts where Novato Creek meets San Pablo Bay, more commonly known as Marker 25, and proceeds to Marker 1, where the channel meets the Petaluma River.

The lagoon flushing research and procedural studies by noted hydrologist Dr. Ray Crone has provided our community the professional guidelines necessary to keep the navigable channel open for many years. I-1.2

So I cannot be in favor of breaching Novato Creek unless your project will fund the future dredging of the outer channel to the Petaluma River.

Your draft EIR does not sufficiently address any significant changes to our outer navigable channel. Please illustrate how your proposed changes will affect this very important waterway. I've attached aerial photos showing the Bel Marin Keys outer channel. And I've also attached the Ray Crone report for your review.

LEILA TWEED, continued

So that's my personal comment. And I'd like to introduce Mia Mitchell, our new general manager. She'd like to make a couple of comments.

I-1 Leila Tweed

I-1.1

See Master Response 6 regarding Novato Creek morphology and Master Response 8 regarding navigation.

The Krone report identifies optimum flushing procedures to provide scouring flows along the Novato Creek channel to favor navigation of the channel. While these procedures may promote scour in the channel, it is evident by the current planning by the BMK CSD to dredge Novato Creek that these flushing procedures alone are insufficient, in absence of periodic dredging to maintain navigability all the way to the Petaluma channel.

I-1.2

This comment is identical to I-1.1 and the response is provided above.

Kristine Jackson
141 Bahama Reef

Subject: Hamilton/BMK V DSEIS/EIS Impacts to Flood plain

Comment Letter I-2

Currently the Bel Marin Keys V properties are zoned as F-2. The full description of the F-2 Zoning is attached for reference. The county of Marin has placed a requirement of 300 acres for Flood Ponding in accordance with Zoning Ordinance 22.95.030. All of the previous developments planned for this property had to comply with this ordinance. This proposed project to construct tidal wetlands must be required to comply with the County of Marin's zoning ordinances the same as any other construction project. I-2.1

The F-2 zoning allows the community of Bel Marin Keys to be exempt from federally mandated flood insurance. Any changes in the F-2 Zoning would require the entire Bel Marin Keys Community to be covered by flood insurance. This insurance including a $1000 deductible would cost approximately $1000 per home per year subject to escalation. The cost to the community is about $750,000. This is in addition to the potential damages that could be caused by actual flooding. How do you plan to address this long term cost? I-2.2

There are three main sources of flood water including rainfall; Novato Creek flood water; and San Pablo Bay high tides combined with wave action. During major storm events rainfall accumulates in the BMK lagoon system causing the water level to rise. There is a drainage culvert installed in the levy wall of the south lagoon to help drain this water onto the existing flood plain. When the flows in Novato Creek reach a certain level BMK experiences some local flooding around the tennis courts, overtopping the north lagoon lock, and overtopping the levy at the end of Bel Marin Keys Boulevard. High flow levels in Novato Creek get relief when the levy protecting the BMK V property is overtopped causing water to pond in the flood plain. Finally, during the very high tide and wind action we observed in the el Nino of 1997 the seawall along San Pablo Bay was overtopped and damaged by waves followed by flooding onto the flood plain. While it took the property owners less than two days to repair the worst damage the acreage of ponding available in the flood plain was effective in storing the excess flood waters. The 300 acre flood plain is the key to maintaining public safety from flooding in Bel Marin Keys. We will not accept any degradation of this protection of public safety. How do these proposed alternatives address these requirements to protect our property rights? I-2.3

Attachment I-2

Chapter 22.95 F-2 SECONDARY FLOODWAY DISTRICT

Section 22.95.010 Purpose and scope.

The purpose of these regulations is to insure that life and property will be protected within the designated zone and to prevent increased flooding within the zone due to random and uncontrolled development which will impede the capacity of secondary floodplains to receive overflow floodwaters.

The F-2 district classification shall apply to those lands lying within the secondary floodway zone, which for the purposes of this chapter shall be defined as the portion of a natural floodway between the limits of the primary floodway zone, defined in Section

22.94.010 of this code, and the limits of the floodplain where inundation may occur, but where depths and velocities are generally low. (Ord. 1930 § 2 (part), 1972)

Section 22.95.020 Permitted uses.

Those uses authorized by other zoning classifications imposed on lands within an F-2 district shall be permitted within the district, subject to the restrictions contained herein. (Ord. 1930 § 2 (part), 1972)

Section 22.95.030 Restrictions.

(a) No buildings or structures shall be constructed within an F-2 district, nor shall any leveeing, diking, filling or other activity which would reduce the ponding area and capacity of any parcel of land within an F-2 district be permitted, except within a specified encroachment area, or up to a specified percentage of the ponding capacity of each parcel, as shown on the assessor's records provided that the remaining area of each parcel is held as a ponding area to absorb the overflow of the primary floodway. The specified encroachment area or percentage of the ponding capacity shall be designated at the time of the adoption of an F-2 district for a specific area.

(b) Prior to the performance of any activities on the specified encroachment area or specified percentage of the ponding capacity, an agreement shall be entered into between the landowner and the county, the Marin County flood control and water conservation district, or other appropriate public agency. The agreement shall include the following provisions:

(1) That the remaining area or percentage of the parcel shall be subject to ponding and overflow;

(2) Lands within any F-1 district included in the property involved shall be dedicated to the county, the Marin County flood control and water conservation district or other appropriate public agency;

(3) Drainage improvements which will enable the remaining area or percentage to serve as a ponding and overflow area shall be constructed by the landowner;

(4) A bond may be required to guarantee performance of the agreement by the landowner;

(5) Other provisions reasonably required to fulfill the purposes of Chapters 22.94 and 22.95.

(c) Full use of the entire remaining area of each individual parcel shall be permitted at such time as both of the following conditions are met:

(1) Ultimate flood control channel improvements are constructed through the parcel or parcels being developed; and

(2) The ultimate flood control channel section is constructed from the parcel to be developed, downstream to the mouth of the primary floodway.

Ultimate flood control channel improvements shall be indicated in the ordinance adopting an F-2 district for a specific area.

Subject to the review and approval of the Marin County flood control and water conservation district or other appropriate agency, alternate methods of providing flood control facilities which are equal in capacity to that of the ultimate flood control channel improvements as mentioned above, may be permitted by the county in lieu of the ultimate improvements. (Ord. 1930 § 2 (part), 1972)

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KRISTINE JACKSON

Good evening.

Currently, the Bel Marin Keys V properties are zoned F-2. The County of Marin has placed the requirement of 300 acres for flood ponding in accordance with zoning ordinance 22.95.030. All of the previous development planned for this property had to comply with this ordinance. This proposed project to construct tidal wetlands must be required to comply with the County of Marin's zoning ordinance, the same as any other construction project. I-2.4

The F-2 zoning allows the community of Bel Marin Keys to be exempt from federally mandated flood insurance. Any changes in the F-2 zoning would require the entire Bel Marin Keys community to be covered by flood insurance. This insurance, including a $1,000-deductible, would cost approximately $1,000 per home per year subject to escalation. The cost to the community is about $750,000. This is in addition to the potential damages that could be caused by actual flooding. How do you plan to address this long-term cost? I-2.5

There are three main sources of flood water including rainfall, Novato Creek floodwater, and San Pablo Bay high tides combined with tidal action. During major storm events, rainfall accumulates in the Bel Marin Keys lagoon system, causing water levels to rise. There's a drainage culvert installed in the levee wall south of [inaudible] to help drain this water into the existing flood plain. When the flows in the Novato Creek reach a certain level, Bel Marin Keys experiences some local flooding around the tennis courts overtopping the north lagoon and overtopping the levee at the end of Bel Marin Keys. High flow levels in Novato Creek get relieved by the levee protecting the Bel Marin Keys V property and overtop, causing the water to pond in the flood plain. I-2.6

CHRISTINE JACKSON, continued

Finally, during the very high tides and wind action we observed in the El Nino of 1997, the seawall along San Pablo Bay was overtopped and damaged by waves, followed by flooding into the flood plain. While it took property owners less than two days to repair the worst damage, the acreage of ponding available in the flood plain was effective in storing the excess floodwaters. I-2.6 Con't.

The 300-acre flood plain is the key to maintaining public safety from flooding in Bel Marin Keys. We will not accept any degradation of this protection of public safety. How do these proposed alternatives address these requirements to protect our property rights?

I-2 Kristine Jackson

I-2.1

See Master Response 3 regarding flood zoning and MCFCWCD easements. Flood zoning and easement requirements are summarized in the *Surface-Water Hydrology and Tidal Hydraulics* section and appendix F.

I-2.2

See Master Response 5 regarding flood insurance.

I-2.3

See Master Response 4 regarding the BMK south lagoon overflow and the BMK CSD overflow easement. Also see Master Response 2 regarding flooding.

I-2.4

See Master Response 3 regarding flood zoning and MCFCWCD easements. Flood zoning and easement requirements are summarized in the *Surface-Water Hydrology and Tidal Hydraulics* section and appendix F.

I-2.5

See Master Response 5 regarding flood insurance.

I-2.6

See Master Response 4 regarding the BMK south lagoon overflow and the BMK CSD overflow easement. Also see Master Response 2 regarding flooding.

Comment Letter I-3

Lisa and Tom Mowbray
176 Montego Key
Ignacio, CA 94949

August 21, 2002

RE: PROPOSED PLANS FOR WETLANDS AROUND BEL MARIN KEYS

To whom it may concern:

We regret not being able to attend today's meeting due to prior medical appointments, but hope to be able to make our voices heard by writing this letter, so you may include it in the hearing at tonight's meeting at the Humane Society.

We purchased our house on the lagoon side of Montego Key in Bel Marin Keys in 1997. At the time of purchase we were advised that we were not required to purchase any flood insurance as the property and entire surrounding area was zoned F2. Nevertheless, in the spring of 1998 high tide and rainfall caused the waters in the creek and the lagoons to rise significantly, flooding our garden almost all the way to the house. We spent many hours watching the water gush from the Novato creek over the lock gates into the lagoon. This we were told by members of the community had never happened since the development was first built in the sixties. It became clear however, that there was potential for flooding of the development, if the existing flood control system was improperly maintained, new burdens laid upon it our changes imposed that were insufficiently studied.

Over the past years Novato creek has further silted up and flow out to San Pablo Bay is slower than ever. This does not only affect our access to and from the Bel Marin Keys via the waterways, but also poses a very realistic danger of flooding to the properties in the case of a similar tide/wind/rainfall situation. The fact that major flooding has not happened so far merely means that the existing dikes at the end of the present bay have been working and the waterways previously were able to discharge or pond the water that otherwise would flood the development. Notwithstanding this, we may be subject to a much more severe flood, a 50 or 100 year flood, as scientists are telling us the next El Niño is approaching. The changes proposed in the zoning do not address this possibility sufficiently and breaching the existing dike will increase the danger of flooding to Bel Marin Keys properties even more. I-3.1

Just as a visual reminder we are attaching photos taken from the internet this morning, showing the flooding presently affecting Europe and the devastation that is happening there. We are very concerned with the safety of our properties and the welfare of the citizens in Bel Marin Keys and would like to encourage you to address these issues fully I-3.2

prior to entertaining any changes to the present conditions as they seem to have kept the area relative protected over the past decades. I-3.2 Con't.

We would also like to bring to your attention that the neighborhood would be severely affected by a parking lot and visitor center right at the mouth of our development. Our only access to Bel Marin Keys is via a two lane from HWY 1. This road cannot accept a lot more traffic. Traffic to and from Bel Marin Keys would be further slowed down if a visitor center was to be built here. Our traffic over the past 3 years has already been very affected since the construction of the new interchange, which accommodates the traffic from the new housing development at the former Hamilton Military Base. There is even more traffic on the horizon for our single access point to HWY 101 when the major housing development in Ignacio presently under construction is completed. I-3.3

In addition, properties located adjacent to what is suggested as a possible location for the visitor center would loose much of their privacy and value, would the plans for the center be realized in this location.

Bel Marin Keys is home to many rare animals and birds. Herons, egrets, owls, and many others nest in the trees in the spot presently considered for the parking lot and visitor center. We regular see owls and even eagles in our trees. Bats and barn owls live in the old barns in the unit 5 area. Pacheco Pond has become home to these birds as well as migrating water fowl, including white Pelicans. We are very concerned that these species will be displaced in an effort to create a habitat for others and hope this will be considered properly. I-3.4

The extent of construction anticipated for the project is of big concern, as it will affect our lifestyle, health and property values over a very long period of time. It is important that a more specific description and outline of the planned work and schedule is provided to the community. I-3.5

Although we recognize the value of creating wildlife habitats, we are deeply concerned about the far reaching and irreversible affects the creation of the planned environment will have on our quality of life, our properties and investment therein, and last not but least the impact on our health, safety and security. We therefore kindly request that we receive written response to all of the concerns raised in our letter and by our community, so we can be assured that all efforts are made and necessary guarantees are given to us, clearly demonstrating that the planned changes will indeed provide a valuable enhancement of the environment for all, and not create a hazard for its neighbors, i.e. the Bel Marin Keys community and its wildlife already in place. I-3.6

We look forward to hearing from you.

Sincerely,

Lisa + Tom Mowbray

I-3 Lisa and Tom Mowbray

I-3.1

See Master Response 2 regarding flooding related to Novato Creek, Master Response 3 regarding flood zoning and MCFCWCD easements, Master Response 4 regarding BMK South Lagoon overflow and BMK CSD overflow agreement), and Master Response 8 regarding navigation.

I-3.2

Comment noted. See prior response regarding flooding.

I-3.3

As noted in Master Response 1 and 14, the lead agencies have identified Alternative 2 (as revised) as their preferred alternative, which would place the interpretive center at the City of Novato property near Hamilton, which would result in less traffic on Bel Marin Keys Boulevard, compared to an interpretive center on the northwest side Bel Marin Keys Unit V.

I-3.4

See Master Response 12 regarding habitat design and Master Response 13 regarding existing wildlife habitat.

I-3.5

The construction activities and timeframe are identified in chapter 3. The most intensive activities are in Phase 1, Site Preparation, which is expected to take about 2 years. Phase 2, Dredged Material Placement, is expected to take about 10 years, but activity would be limited most of the time to the specific area of dredged material placement and pumping. Phase 3, Earthworks and Tidal connection, is expected to take about 1 year. Project design measures (such as location of the staging area at distance from residential areas and designation of access from Hamilton as the primary access route) have been incorporated to reduce disruption due to construction. Mitigation measures for noise and air quality are identified in the document.

I-3.6

Responses to specific comments are provided above. The Final SEIR/EIS is being provided to all agencies and individuals that provided comments on the Draft SEIR/EIS and is available in local libraries for public review and comment during a 30-day period.

Comment Letter I-4

Duane C. Collins
124 Bahama Reef
Bel Marin Keys, CA 94949

August 21, 2002

California Coastal Conservancy
U.S. Army Corps of Engineers

Re: Bel Marin Keys Wetlands Restoration Project

Dear Sir:

My wife and I purchased our home in Bel Marin Keys in 1997. We looked at many properties in Bel Marin Keys and finally decided on 124 Bahama Reef. The major and foremost deciding factor was the views of Mt. Diablo to the east and Mt. Tamalpais to the south. We have full sun during the day and we are sheltered from the prevailing northwesterly afternoon winds. We paid a premium for the property, about 30-40% above market for a house of comparable size in another location, because of the views and the waterfront.

We understood when house shopping that there was the possibility of development across the channel from us (Unit V). Before buying we went to the county planning department and found that Unit V, even if it was built, would enlarge the lagoon behind our home and the nearest house would be several hundred yards away. The only loss would be some light pollution from the new homes across the larger lagoon and the effect on our spectacular views would be negligible, although we preferred the open space. My wife and I could live with either the development or the open space. I-4.1

No one in this community was happier than we were when we found out that Unit V was now owned by the Coastal Conservancy. I wrote numerous checks to the Coastal Conservancy and the Audubon Society to help secure title to Unit V. We have been in your corner from the get-go and we still are.

Now we read the three proposed wetland restoration proposals and none of the three proposals take into consideration the view we have had and enjoyed for the past five years. People remark how open our view is. I have even gone so far as to sue my new next-door neighbor when he tried to erect a structure that blocked our view of Mt. Tamalpais. My wife and I frequently have dinner parties on the full moon so we can witness the "Silver Bridge" across our lagoon as the full moon rises. Our friends spend the night so they can see the spectacular sunrises from our rear deck. We don't want to loose these views or our life style. I-4.2

Your restoration plans call for a new levee to be constructed near our south lagoon levee. This new levee would serve as a buffer from the bay tides and allow for a catch basin for flooding and storm overflow. This new levee will be up to thirteen feet tall. If it is constructed too close to our homes it will impair our views dramatically. I-4.2 Con't.

We understood that when Unit IV was built there were 300 acres set aside for flood control for the south lagoons. We feel this set aside should be between our existing south lagoon levee out into the open space. This would give us the 300 acres we need to handle our storm and flood overflow. Also it would give migratory birds a seasonal wetland habitat. It would accomplish flood control without the need of mechanical pumping devices and our overflow pipes are already in place. The levee should be placed far enough from our existing levee as not to obstruct views (2,000 yards away). I-4.3

Bel Marin Keys has several hundred thousand yards of dredge material that is available to construct the new levee. We understand the dredge spoils have passed all the necessary environmental tests for you to accept the material. Build the levee but build it far enough away as not to obstruct views, and provide for adequate and inexpensive flood control and seasonal habitat. I-4.4

Not only birds and wildlife live out here in the open space. People, three thousand of us, also live here and we want to co-exist with the wetlands and its inhabitants. Never the less, we have as much right to enjoy the marsh as any of the other creatures. Do what's right. Keep the new levee far enough away as to have no impact on south lagoon residents. If you don't, who is going to pay for our loss of property value, our loss of views and our loss of life style? I-4.5

Sincerely,

Duane Celton

Attachment I-4



Current View

Attachment I-4



VIEW WITH 10 FOOT LEVEE

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: Duane Collins

Address: 124 Bahama Reef

Phone Number: 883-7106

Email: COLLINSTAX@Compuserve.Com

COMMENT: How are you going to preserve my view? I-4.6
Who is going to pay for my loss of Property Value?

Why are you raising the south Lagoon levee to 12' when there is no tidal action and there has been little settling in the past 25 yrs? I-4.7

Why is the new Buffer levee only 1000' feet from our levee not 2000 feet or more? To protect views + Values. I-4.8

Please feel free to use the back of this form, if needed.

Thank you for your comments!

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

DUANE COLLINS

Hi, Duane Collins, 124 Bahama Reef.

I live in that little hook that sticks out right directly across from the wetlands restoration project. And my wife and I purchased our home in Bel Marin Keys in 1997. We looked at many properties in Bel Marin Keys and finally decided on 124 Bahama Reef. The foremost deciding factor was the view of Mt. Diablo to the east and Mt. Tamalpais to the south. We had full sun during the day and were sheltered from the northwesterly winds. We paid a premium for the property, probably 30 to 40 percent above the market compared to the same size in another location. Because of the views, we were willing to pay this premium.

We understood when we were house-shopping, there was a possibility of a development across the channel -- Unit V. Before buying we went to the County Planning Department and found that Unit V, even if it was built, would enlarge the lagoon behind our home, and the nearest house would still be several hundred yards away. And the only loss we would have would probably be some light as pollution from their homes. The effect on our view would be almost negligible. I-4.9

No one in this community was happier than we were when we found out that Unit V was now owned by the Coastal Conservancy. My wife and I wrote numerous checks to the campaign for Coastal Conservancy, the Audubon Society, and everything else to help secure this. We've been in your corner from the get-go, and we're still there.

Now if I could I have a couple of comments. There's another two pages, but I don't have time.

I looked at this graph over here, and the first thing I noticed is they've got two-story houses. Does anybody have anything on their second story besides bedrooms? We all live on our first floor. We're all in one-story houses. These two-story graphs are worthless to us, unless you like lying in bed looking at your view. I-4.10

DUANE COLLINS, continued

On the back of my letter I have a photograph that my wife took of the sun rising in our backyard. You can see Mt. Diablo. You can see the East Bay hills at night. You see the lights. You can see the Carquinez Bridge. It's a spectacular view. You see the dark line in front here [indicating]. That's the existing levee.

This is what I would see if they put a 12-foot levee up -- nothing. My questions are, what are you going to do to preserve my views? Who's going to pay for my loss of property value? Why are you putting a 12-foot levee where there's no tidal action against it and the existing levee, which is 25 years old, has only settled a foot or two, when you tell me that this thing is going to be down in a few years? I-4.11

And the buffer levee -- the second levee -- you're talking about putting up, why is it only 1000 feet from the existing levee, when it would usually be 2000 or more feet out and have less impact on our views? I-4.12

Thank you.

I-4 Duane C. Collins

I-4.1

See Master Response 9 regarding aesthetics, which includes discussion of the conclusions of the prior EIR/EIS concerning visual resources. As explained in the Master Response, the prior EIR/EIS identified significant unavoidable impacts on BMK residential views due to complete obstruction of some existing views and would have had far more severe aesthetic impacts than the proposed project.

I-4.2

See Master Response 8 regarding levee heights and locations and Master Response 9 regarding visual resources.

The commenter raises a concern about long-range views of the East Bay Hills and Mt. Diablo. As explained in the master responses, due to the elevation of these features well above the horizon and the location of the proposed levee features below the horizon, no obstruction of views of these features is expected.

I-4.3

See Master Response 3 regarding the 300-acre MCFCWCD easement, Master Response 4 regarding BMK overflow, and Master Response 8 regarding levee location and height.

I-4.4

See Master Response 10 regarding dredged material. See Master Response 8 regarding levee location and height.

I-4.5

Comment noted. See Master Response 8 regarding levee location and height.

I-4.6

See Master Response 8 regarding levee location and height and Master Response 9 regarding visual resources.

I-4.7

See Master Response 8 regarding levee heights and location. In the preferred alternative, the south lagoon levee would be constructed to an initial elevation of 6 feet NGVD with settlement to 5 feet NGVD, which is the height of most of this levee at present.

I-4.8

In the preferred alternative, the new outboard levee would be constructed to an initial elevation of 10 feet NGVD at a location approximately 1,500 feet south and east of the lagoon. The Final SEIR/EIS concludes that this levee height and location would have a less-than-significant effect on visual resources. Also see Master Response 8.

I-4.9

See response to I-4.2.

I-4.10

The visual analysis in the Draft SEIR/EIS includes analysis of effects on first-floor and second-floor views so as not to ignore views that residences may have from second-story views, even if they are from upstairs bedrooms. The analysis does not discount the value of views from first-floors.

I-4.11

The provided photograph shows East Bay hills, Mt. Diablo (the portion above the first range of hills), and the Carquinez Straight bridge. All of these features are located above the horizon, e.g. above a level line of sight from the viewer. As shown in the analysis of Alternative 2 (as revised), first-floor views from viewpoints 2 and 3 (the most effected viewpoints) of San Pablo Bay would not be affected. The East Bay features cited as of concern by the commenter are located at higher elevations than San Pablo Bay and thus would be apparent in views after construction of the levee. Also see Master Response 8.

I-4.12

In the preferred alternative, the new outboard levee would be constructed to an initial elevation of 10 feet NGVD at a location approximately 1,500 feet south and east of the lagoon. The analysis of this levee indicates that it would have a less-than-significant impact on visual resources.

Comment Letter I-5

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: N.C. Nicholas

Address: 916 Bel Marin Keys

Phone Number: unlisted

Email: none

COMMENT:

Three types of H2O are to be considered as well as and including their ecology. Years ago this was NOT considered in the management of land and water up at Bahia. This areas has not yet recovered thirty years later. Will this can be repeated in Bel Marin Keys?

I-5.1

Please feel free to use the back of this form, if needed.

Thank you for your comments!

I-5 N.C. Nicholas

I-5.1

The comment is not specific as to what environmental effect the commenter is intending to address. The commenter could be talking about the ecological resources associated with the 3 different sources of water - Pacheco Pond, Novato Creek, and San Pablo Bay relative to the project. In that case, the response is that the project analyzes in detail the effects of connecting the project to all 3 water bodies, as well as the beneficial and adverse effects of the project on any associated ecological resources. Lacking any further specifications, no further response is required.

Comment Letter I-6

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: Howard F Hall

Address: 1156 Bel Marin Keys Blvd

Phone Number: 415 883-4257

Email: HFH1930@Yahoo.com

COMMENT: Firmly believe the interpretive center should be located at "reservor hill". I am opposed to any use of pumping stations, rather than creating some 300 acres of flood plain. I-6.1

Please feel free to use the back of this form, if needed.

Thank you for your comments!

I-6 Howard F. Hall

I-6.1

See Master Response 1 regarding the preferred alternative and Master Response 14 regarding the interpretive center. The preferred alternative includes an approximately 387- acre swale and does not currently include the use of mechanical pumping to drain the swale.

Comment Letter I-7

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: MARK KUBIK

Address: 192 Carle Osle Novato Ca 94949

Phone Number: 415 883 5469

Email:

COMMENT: We would like assurances and a mechanism in place for ongoing monitoring of dredge material content, timely guaranteed Public access to this data, and continued adequate funding for this monitoring. In addition we want to see an expedited legal mechanism in place to address violations of dredge content or its correct unanticipated negative effects from construction of this project on local residents, from this project in a timely manner. I-7.1

We want continues access of our leashed dogs to present levees, proposed levees trails. I-7.2

Please feel free to use the back of this form, if needed.

Thank you for your comments!

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

MARK KUBIK

Good evening. Mark Kubik, 192 Caribe Island.

We would like assurances and a mechanism in place to have ongoing monitoring of dredged material content -- timely public access to this data and continued adequate funding for this monitoring. In addition, we would want to see an expedited legal mechanism to address violations of dredging content or to correct unanticipated negative effects from construction of this project in a timely manner. I-7.3

Secondly, on a different note, many of us own dogs here. And I believe Bel Marin Keys residents have had an easement on the levee for over 20 years for recreation, including walking our dogs on the levees and on other trails. The present proposal appears to restrict or even prohibit dogwalking on all levees and trails. We would like to maintain our present privileges and not have them removed. I-7.4

Thank you.

I-7 Mark Kubik

I-7.1

See Master Response 10 regarding dredged material quality and sources.

Projects proposing to place dredged material at the HWRP and BMKV expansion sites would be required to submit analytical testing results to the DMMO for determination of suitability as wetland cover material. Dredging projects are required to obtain permits from the Corps, which issues public notices concerning proposed dredging projects which may be the source of material to be placed at HWRP/BMKV. The agencies that have permit authority over dredging and disposal all have enforcement authority to address violations of associated dredging permits.

The Corps has a monitoring component to projects it undertakes both during and after construction. Pursuant to CEQA, the Conservancy would adopt a Mitigation and Monitoring Plan (MMP) at the point of project approval that would describe how the adopted mitigation measures would be implemented and monitored.

I-7.2

The goal of the proposed project is to create wetland habitat to support threatened and endangered and other migratory and resident species. While addition of a recreation trail can be done consistent with wetland restoration, dogs can be disruptive to sensitive species that are dependent on existing habitat and that would be dependent on the restored wetland habitats. The assessment in the Draft SEIR/EIS concludes that the impacts of dog access on existing and restored habitats (and associated species) are avoidable through a prohibition of dogs on the property and all trails (see Impacts BIO-12, 35, 37, and 39). Dogs are currently prohibited at Pacheco Pond, due to concerns about adverse effects on wildlife present at and around the pond. The proposed Bay Trail in the preferred alternative provides access around the east and south side of the pond. Allowing dog access could be inconsistent with current DFG and MCFCWCD management of Pacheco Pond.

I-7.3

This comment is identical to I-7.1 and the response is provided above.

I-7.4

See the response to I-7.2 regarding the proposal to prohibit dogs on the expansion site and on any associated trails.

As to the easement for the south lagoon levee, see discussion under Master Response 13. The BMK CSD easements for the south lagoon levee are for drainage and maintenance purposes related to the levee itself, which is located on property owned by the Conservancy. Ingress and egress noted in the subject easement(s) are only for the purposes of maintenance or drainage. The easements do not provide a privilege or right for BMK community residents or any other persons to access the levee or any other location on the BMKV parcel for recreational purposes.

BY 9/3/02

Comment Letter I-8

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: RICHARD COHEN

Address: 43 CARIBE BMK

Phone Number: 883-6626

Email: CAMRCOHEN@AOL.COM

COMMENT: ~~TRAIL SHOULD BE...~~

I THINK THE ~~SE~~ SPUR TRAIL ON THE 12' LEVEE SHOULD BE ON THE SIDE TOWARD THE WETLANDS, NOT TOWARD BMK. I-8.1

THIS WOULD PROVIDE BETTER VIEWS FOR THE VISITORS. GROWTH OF RUSHES, CATTAILS, ETC. MAKES GOING OFF THE PATH VERY DIFFICULT.

Please feel free to use the back of this form, if needed.

Thank you for your comments!

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

RICHARD COHEN

I'm Richard Cohen. I live at 43 Caribe.

I want to speak to the question of flooding and the flood calculations. The EIR makes the comment that this is an extremely complex situation: What we have coming from the west are six different watersheds coming up Big Rock Ridge that sort of come together at Bel Marin Keys. Coming from the east, you have the tidal coming up Novato Creek and into San Pablo Bay.

In a bad storm day when these things meet, Bel Marin Keys is at a very, very difficult -- and has been marginally flooded in the past couple of years. The only reference in the hydrology to the calculations that were done to figure out what these changes are doing to do -- I'm going to read it right out of the report: "However, a detailed assessment of the present and future watershed conditions coincident with storm peak flow analysis and hydrologic routing characteristics that would more accurately define the expected characteristics of storm hydrographs was beyond the scope of this study." In other words, we took a guess at it, looks like it would be okay. A little further down the same page -- page 5: "Detailed and consistent surveys of the physical characteristics of Pacheco Pond and Novato Creek are necessary to identify accurate water surface elevation. These surveys were beyond the scope of this conceptual planning effort." In other words we didn't do it. I-8.2

Additionally, all of the studies are based on a so-called one-dimensional model in which Novato Creek, believe it or not, is considered to be a straight line. Like a channelized flood control. And the deviations between the one-dimensional model that Novato Creek actually is in fact most severe under heavy flooding and fast flow condition. I-8.3

So we need to get some real modeling. We have to remember that the safety of our houses and our lives are dependent on this modeling being right. And once it's done it's not going to be easy to turn back.

RICHARD COHEN, continued

We have all seen pictures in the past couple of weeks of flooding in Germany, the flooding in Austria, and flooding in Czechoslovakia. We don't want to see pictures of Bel Marin Keys as a result of poor engineering practices. The modeling -- "Well, we thought it was okay."

Thank you.

I-8 Richard Cohen

I-8.1

Comment noted. The preferred alternative does not include any spur.

In Alternatives 1 and 3, both of which contain a spur option, location of the trail on the side of the tidal wetland restoration area, while providing better views, would increase access impacts on species that colonize the restored wetlands. Since restoration is a primary goal of the project, location of the trail on the side opposite the tidal wetland restoration is on the balance, considered preferable, though it may have greater visual effects on nearby residents. However, it should be noted that neither of the alternatives containing the spur are the preferred alternative of the lead agencies.

I-8.2

See Master Response 2 regarding flooding and Master Response 6 regarding Novato Creek morphology.

The comment is incorrect in its characterization that an assessment of hydrology and hydraulics or modeling was not conducted to support the analysis in the Draft SEIR/EIS. See Master Response 2 concerning responses to comments on flooding and flooding analysis, the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 of the Draft SEIR/EIS, and the 2 technical memorandums in appendix B.

I-8.3

See Master Response 6 regarding Novato Creek morphology. Also see Master Response 2 regarding flooding. As explained in the master responses, hydrologic and hydraulic modeling were conducted to support the impact assessment and are considered adequate for evaluation of the project.

Comment Letter I-9

Mr. Tom Gandesbery
California Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2630

August 30, 2002

Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market Street, 8th Floor
San Francisco, CA 94105

Subject: **Comments on Hamilton Wetlands BMK-5 SEIR/EIS**

Dear Messrs. Gandesbery and Jolliffe:

Below are my comments on the SEIR/EIS for the Proposed Bel Marin Keys Expansion of the Hamilton Wetland Restoration Project. My concerns relate chiefly to the lack of attention in the SEIR/EIS to basic ecological parameters of the proposed Expansion. I suggest that unless these fundamental deficiencies are corrected, the document is not a proper basis for planning and execution of the Expansion. An acknowledgment of receipt of my comments would be appreciated. I-9.1

1) DIVERSITY. All three SEIR/EIS alternatives fail to provide sufficient habitat diversity and they all therefore appear to contradict the project's stated central objective of "diversity".

The minimal amount of upland and transition habitat is significantly deficient in all three alternatives when compared with the "mosaic approach" generally favored in most other major SF Bay Area estuary restoration projects and encouraged by the 1999 Baylands Ecosystem Habitat Goals Report.

It is now scientifically accepted that an unbalanced restoration of Bayside areas exclusively to "historic" habitat may actually cause a loss in numbers of birds and a decrease in diversity of bird species. This is ecologically undesirable especially in the Hamilton-BMK-5 restoration; transition and upland areas bordering the Bay have suffered as much or more from development as wetlands themselves. In BMK-5, for example, proposed elimination of barns, groves of large trees and open fields used for avian foraging will adversely impact resident and migratory raptors such as Golden Eagle, Red-tailed Hawk, Red-shouldered Hawk, White-tailed Kite, Kestrel, Great Horned Owl, Barn Owl and possibly Peregrine Falcon. Some existing groves of trees, either on BMK-5 land or nearby and subject to direct disturbance by project construction or increased human traffic, are currently used for perching by significant numbers of Great Egret, Snowy Egret, Black-crowned Night Heron, some Great Blue Heron, and Turkey Vulture, as well as for nesting by some of the above raptors and passerines such as orioles, flycatchers, swallows and warblers. I-9.2

The project's upland portions, as designed, are merely narrow strips of bare, compacted, engineered fill which are entirely inadequate in size, shape, soil composition or vegetal cover to

compensate for what is being lost or disturbed. These bare fills areas, of little wildlife benefit, will be colonized quickly by exotic, invasive alien vegetal species, which are costly to manage and remove once they gain a foothold in disturbed areas.

The SEIR's three alternatives give lip service to restored diversity but in actual fact fail to provide the workable, sustainable, balanced mosaic of tidal and upland habitats, both natural and artificial, that is needed to realize the project's stated diversity objective.

I-9.2 Con't.

This failure could be at least partially remedied by presenting a new, fourth and preferred alternative in SEIR Final Review which at least triples the size of the transition and upland zones and spells out management measures to be taken to restore, mitigate and compensate for what raptor prey base area and vegetal cover are irretrievably being lost. (Such a fourth alternative would also have the desirable bonus effect of enlarging the ponding capacity of these upland-transition strips and thereby increasing flood control benefits.)

2) LOSS OF AGRICULTURE. The loss of agricultural lands not only entail loss of the prey base of significant avian raptor species but also loss of other species such as coyote, fox, skunk as well as eliminating areas used by deer. These historically and currently farmed agricultural lands were used collaterally for many decades previously as a private hunting area, evidence of their ability to sustain significant amounts of upland mammals. Moreover, the finding by the SEIR/EIS that loss of agriculture is of "less than significant impact and no mitigation required" contradicts the finding of the previous final EIR/EIS for BMK 5 development (1992) which found that the loss of local oat hay product and conversion of potential prime agricultural land to other uses were both considered to be Class I impacts, which are unavoidable significant impacts. Conversion of prime agricultural land today is clearly of even greater relative impact than when this finding was made a decade ago owing to the pressure of development on such land throughout the County. The SEIR/EIS should be corrected to be in line with these previous findings.

I-9.3

3) NOVATO CREEK SCOURING (vz. 2.5.11). Permanent closure of the outlet of Pacheco Pond to Novato Creek would, the SEIR states, "reduce Creek scouring and increase sediment deposition and reduction in channel depth in Novato Creek downstream of the confluence channel". This is an irreversible and cumulative impact that would be inconsistent with the project's objective of ecosystem restoration. This irreversible destruction of the original natural course of tributary waters would thereby end the historic connection that enables some key wildlife to diversify and enrich Pond waters, helps make it a viable feeding ground for many species, and allow upstream movement of fish and other organisms into tributary creeks from Novato Creek. The wildlife impact would be cumulative.

I-9.4

The natural course of Pacheco Creek and Arroyo San Jose originally took their waters into confluence with Novato Creek to the north of today's Pacheco Pond. (See State Lands Commission map for 1912 and earlier records.) That historic confluence was distorted but maintained by the Pond's creation. The artificial pond was created decades ago in a not-entirely-successful attempt to mitigate the destruction of beautiful, highly productive historic natural wetlands and transition areas now filled by the asphalt and concrete of the BMK commercial district.

Closure of the Pond's connection to Novato Creek would be the final and unhappily compounded destruction of the alignment of a natural watercourse. It thereby arguably contradicts the project's overall objective of natural diversity and historic restoration.

Pacheco Pond has been officially designated a Wildlife Area by both the City Council of the City of Novato (Ordinance No. 1268, December 17, 1991) and the County of Marin (Marin County Ordinance 2197, para.. 3(G) and 3(I) and Marin County Flood Control and Water Conservation District Ordinance No. 2995, May 2, 1989). Rules and restrictions "to achieve the maximum fish and/or wildlife values" are set forth. The proposed closure is arguably inconsistent with these governing regulations and will adversely impact them.

For example, such fish species as salmon and steelhead will be blocked, irreversibly, from access to Arroyo San Jose and Pacheco Creek by destroying the remnant of their historic upstream route that remained open as long as Pacheco Pond was kept partially tidal. According to local observers, salmon were to be seen in Arroyo San Jose not too many years ago behind the Ignacio Safeway, and the only route to that spot is through Novato Creek and Pacheco Pond. The SEIR speculates without any direct evidence that these were "hatchery salmon"; even if true, the key point is that valuable, locally threatened species remain able to find their way into the creeks and follow still promising natural routes as long as engineers let them.

Worse, the SEIR fails to spell out any specific mitigation or minimization measures to counter or offset the SEIR-stated "reduction in Creek scouring and deposition of silt" in Novato Creek caused by shutting off and re-routing of the two tributaries' waters. What are these measures? How effective can they be? On what calculations are they based? Do they in fact even exist in theory let alone practice? Who will pay for them if they do exist? On whom will the cost burdens be shifted under the stated impacts if they do not exist? If they are ineffective or non-existent, what will be the quantative impact on streamside Bel Marin Keys, its property values, navigability for recreation craft, stream water organisms, cost of additional dredging, and lost prospects for such longer-term incremental restoration of the Creek as may still be feasible, for example, by returning historical tidal prism, settlement basins and increased volume? Should not these questions be answered now, in the EIR, in time to make it of any value to decision makers and citizens? I believe these questions need answers immediately, before the dirt moves. I-9.4 Con't.

Although the totality of Novato Creek's historic natural state may well be forever lost, it is highly irresponsible to foreclose such partial restoration as may be feasible by eliminating a key linkage to once-biodiverse tributaries. Residents of Marin have seen too much of such unsustainable, destructive tinkering and engineering with our wetlands and watersheds throughout Marin. The SEIR should not legitimize further irreversible degradation of potentially quite valuable habitat and natural hydrology under a slogan of "historic restoration" without a valid, honest reckoning of true costs and impacts.

4) CLIMATE CHANGE. The SEIR/EIS does not take into account anticipated impacts of projected global warming and climate change on watershed, creek and tidal hydrology. It should. It appears to be based on the assumption of a static climate and hydrology. It should not be. I-9.5

For example, the Expansion should take full account of scientifically projected climate-change impacts on the project area's anticipated flooding potential and its impact on neighboring areas. Since it currently has not done so, the SEIR/EIS should fully document the impact of this failure.

At present a scientific consensus indicates that, owing primarily to the melting of the world's glaciers, already well underway, the level of the sea will rise at least 9 to 42 centimeters in coming decades. This sea-level range is even now considered too conservative by many scientists who perceive a self-reinforcing acceleration of current global warming and sea-level rise.

Scientists also project that California's mountain snowpack will thin and recede in typical winters and a shorter but more torrential winter rainstorm period will ensue; greater rainy-season flooding plus drier and longer summers are in prospect. How do these projections square with the project's basic engineering assumptions of needed size and depth of transition and upland zones, of levees and dikes, of pumping stations, of ponding area, of quantity of dredge materials and depth of deposition?

Any serious and credible EIR must clearly include a reckoning of impacts of the Expansion's failure to be based on a reasonable projection and calculation of how climate change may affect the UNDERLYING ASSUMPTIONS OF SUSTAINABILITY of the entire wetlands restoration project. Any assumption of non-change — on which the Expansion project is evidently based — has a 100 percent certainty of being false or misleading in a world where atmospheric CO2 levels have risen from 260 ppm to more than 370 ppm, far above the historic norm, and will increase many fold higher even if human societies deal promptly and effectively with the causes of these increases now, which they currently show little propensity to do. I-9.5 Con't.

Is it possible that, given the current information available about global climate change (International Panel on Climate Change-IPCC website, current to 2002) and California climate change (UC Santa Cruz research, published 2002) -- but not considered by the Expansion or the SEIR -- key parameters of the entire project may be unworkable or impaired in just a handful of decades or, worse, even before it is completed, thereby entailing enormous monetary losses and disrepute to the project's conceptualizers, designers, funders and government investors as well as possible harm to the existing and impacted adjacent communities and businesses?

Whatever conclusions a serious assessment might draw, the extant EIR is defective in failing even to address anthropogenic climate change which, in the view of the credible majority of the world's climatologists, may now be the most serious long-term environmental threat to existing and restorable wetlands in the Bay and elsewhere around the globe. Until the EIR is amended as suggested, it is fundamentally flawed and seriously incomplete and a poor basis for proper project implementation.

5) INTERPRETATION CENTER. To minimize the impact of the center's visitors and their cars on both the wetlands to be restored and the area's established avifauna, it is suggested here that locating the center as far away as possible from sensitive wildlife locations would avoid many difficulties. I-9.6

The location proposed in several alternatives, i.e., just off BMK Blvd., is unsatisfactory, notably for the inevitable impact of noise and human numbers on a major waterbird roosting grove close by, and of traffic on BMK Blvd., already, according to official County sources, one of Marin County's busiest thoroughfares.

It is understood that, so far, the Hamilton community has not registered objection to locating the center at Hamilton, for example, at the base of Reservoir Hill. The Hill would be immediately available for visitors to climb and view a striking panorama of the refuge to supplement knowledge gained from visiting the center below. This option should be stipulated and preferred in the EIS's alternatives. I-9.6 Con't.

5) BAY TRAIL. For the sake of wildlife -- the prime consideration in a wildlife refuge -- the presumably heavily traveled Bay Trail should be routed as far away as possible from sensitive wildlife areas like BMK's heron-egret roosts and the Wildlife Area Pacheco Pond which has harbored such wary species as White Pelican and various ducks and waterbirds. This may mean that the Trail will have to link up with the existing northward trail along the old rail line paralleling 101 by some routing WEST of Pacheco Pond. This option should be stipulated and preferred in EIS alternatives. I-9.7

6) MOSQUITO CONTROL. As the West Nile Virus migrates west and the occurrence of encephalitis becomes more frequent — particularly in the context of global heating and the movement of tropical disease vectors northward into formerly temperate climates — an accurate assessment of potential mosquito breeding in the Expansion and a specific projection of the necessary means of mosquito control are essential for the health and safety of people living and working nearby. The SEIR/EIS lacks any such a thorough assessment/projection. This is not a trivial concern: Reliance on pesticide spraying could seriously impact human populations here, notably children and the elderly, arguably making it a life-or-death issue for some. I-9.8

7) LIABILITY. The SEIR/EIS fails to make clear how funds will be secured to guarantee the State's or the owner's ability to pay for damages and negative impacts caused by this project. This basic omission in the SEIR/EIR should be corrected before final review. I-9.9

8) SCOPING. Because scoping of the SEIR/EIS, as outlined in Chapter 6-2, does not adequately reflect the span of concern by residents and other citizens, it is recommended that the following specifics be added: "Impacts on property values, scenic views, public health, navigability, traffic and other quality of life issues specified by the Bel Marin Keys community". I-9.10

Sincerely,

Edward A. Mainland
1017 Bel Marin Keys Blvd.
Novato, CA 94949
phone 415-883-5948

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

EDWARD MAINLAND

I'm Edward Mainland. I live at 1017 Bel Marin Keys Boulevard. I am a senior conservation fellow at the Sierra Club in San Francisco, although my remarks tonight are as a private citizen of Bel Marin Keys.

The first question is whether all three SEIR alternatives fail to provide sufficient habitat diversity inconsistent with the objective of the project, which is to increase and preserve biodiversity. As we know, restoring San Francisco Bay areas exclusively to the historic habitat may actually cause a loss in the number of birds and other species and a decrease in the diversity of bird species. I-9.11

The three alternatives of SEIR appear to be deficient in the amount of planned upland transition habitat. By contrast, we see in the South Bay restoration projects and major ones using a mosaic approach and estuary restoration projects are normally in conformance with the 1990 Bay line ecosystem habitat [inaudible], which this report does not appear to be. In Bel Marin Keys V, for example, elimination of barns, groves, large trees, and fields used for foraging by various species will adversely impact resident migratory raptors such as golden eagles, red-tailed hawks, red-shouldered hawks, white-tailed kites, kestrels, and possibly peregrine falcons, great horned owls, and barn owls. I-9.12

The SEIR sidesteps the need to restore and manage a mosaic of tidal habitats, natural and artificial. And engineered soils in the upland portion of the project are merely narrow strips of engineered materials that are not adequate in size or shape to fulfill the mosaic function that the expansion of the upland area might correct. I-9.13

Secondly, I'd like to ask a question about creek scouring. Closure of the outlet of Pacheco Pond to Novato Creek would, the SEIR states, reduce creek scouring and increase sediment deposition and reduction in channel depth in the Novato Creek downstream of the confluence of the channel. And this is an irreversible, significant effect that is inconsistent with the objective of ecosystem restoration. I-9.14

EDWARD MAINLAND, continued

I might add that fish species such as coho salmon would be blocked irreversibly from access to San Pablo Bay and Pacheco Creek by destroying a remnant of the historic upstream routes. So the increase in creek scouring, deposition of silt and mud in the creek is nowhere in the SEIR specifically addressed by specific mitigation or minimization measures. And we'd like to know what are these measures going to be, how effective can they be? If ineffective, what will be the impact on a [inaudible] that keeps property values at the cost of additional dredging of the creek and failure of creek restoration steps. I-9.15

Finally, just a word about climate change. Nowhere in the EIR/EIS are the anticipated impacts of global warming and climate change addressed. These will be considerable on the watershed and on the creek and tidal hydrology. We might note in the EIS how will they affect the sustainability, repeat, sustainability of the entire project. The SEIR does not address climate change, which many people think may be the most serious environmental challenge to the Bay tidal habitat and natural-based system restoration. I-9.16

Thank you.

I-9 Edward A. Mainland

I-9.1

Responses to substantive comments are noted below.

I-9.2

See Master Response 11 regarding habitat design and Master Response 12 regarding existing wildlife habitat.

The commenter asserts that the upland portions are merely "narrow strips of bare compacted engineered fill" and appears to assert that the upland areas should not be filled at all. However, because of the subsided nature of entire site, if the proposed upland areas are not filled, none of the uplands would drain without the use of mechanical pumping. One of the project objectives is to design a "project that stresses simplicity and has little need for active management." Mechanical pumping obviously represents active management, and the project sponsors would like to avoid pumping if feasible. The areas proposed for uplands are presently subsided to an average elevation of –4 feet NGVD. Since the swale area is being designed to drain via gravity to Novato Creek, the area must be filled in order to promote drainage without pumping. It is not proposed to compact or engineer the fill in the upland areas. Engineered fill would be used for construction of levees. The upland areas are expected to be colonized by ruderal species similar to that present in the existing non-cultivated areas on and adjacent to the expansion site.

As noted in the monitoring and adaptive management plan (MAMP) in Appendix K of the Final SEIR/EIS, a plan for controlling noxious plant species and non-native predators will developed in coordination with California Department of Fish and Game and U. S. Fish and Wildlife Service.

I-9.3

See Master Response 17 regarding agriculture.

I-9.4

See Master Response 7 regarding the diversion of Pacheco Pond outflow and the effect on Novato Creek morphology.

The cited reference from Section 2.5.11 of the GRR states that the rerouting of flows from Pacheco Pond *may* reduce scour and increase sedimentation. The purpose of this section of the GRR is to identify the potential planning constraints that were considered in the development of the plan and alternatives, not to provide an analysis nor conclusions about the significance of project effects. The SEIR/EIS assesses the potential for reduction in scour or increased sedimentation and concludes that diversion of Pacheco Pond outflows would have less-than-significant effects on lower Novato Creek morphology.

In the SEIR/EIS itself, impact TH-3 assesses the potential morphological changes that may occur with diversion of pond outflows and concludes that the outflow from Pacheco Pond is not a controlling determinant on the morphology of lower Novato Creek, which is dominated by tidal forces and episodic high flow events in the main stem of Novato Creek. Thus the potential diversion of some or all of the

outflow from Pacheco Pond is estimated to have a negligible effect on channel width and depth. With no discernable change in creek morphology, no significant effects on existing habitat within the creek or on navigation is expected.

Regarding the habitats present in Pacheco Pond at present, the project is not expected to significantly affect these habitats. As noted in Section 3 of the draft SEIR/EIS, the outlet from Pacheco Pond to the BMKV site would be designed so as to further the existing water management of the pond for wildlife and flooding purposes. Averting changes in water levels would avoid habitat-related changes that might otherwise occur if water levels were substantially higher or lower than at present. Discussion in the Biological Resources section of the Final SEIR/EIS has been updated to clarify this impact.

Regarding analysis of the effects of the project on wildlife in Pacheco Pond, the comment asserts that the project will result in a loss of pond wildlife diversity due to restriction of fish access. However, the comment seems to assert that the pond is easily accessible by fish at present, which is inaccurate. The baseline for impact assessment is that the pond is not tidal and is not easily accessible to fish from Novato Creek due to the MCFCWCD tide gates. It is not reasonably foreseeable that MCFCWCD will allow the pond to be tidal by removing the tide gates, because this would eliminate a large portion of the flood control function of the existing pond. As a result, the reasonably foreseeable future is that flapgates will continue to be operated as at present, which will continue to hinder anadromous fish access to the pond and to Arroyo San Jose and Pacheco Creek. As discussed in the draft SEIR/EIS, with this baseline, and the probable non-listed and non-self-sustaining nature of salmonids who accesssed the pond and its tributaries recently, the potential effect of the proposed project on fish access is considered a less-than-significant effect.

The preferred alternative does not envision permanent closure of the tidal flapgates, utilizes the existing outlet for dry season outflow, and leaves open the possibility of continued operation of the existing outlet in the wet season. The project includes development of a new water management plan for Pacheco Pond by the MCFCWCD, the DFG, and the project sponsors and it is probable that the plan would ultimately call for dual use of the existing outlet to Novato Creek and the new outlet to BMKV in the wet season. If the existing outlet to Novato Creek is operated in the wet season, it would be possible to retain the hindered access at present, at least at those times of operation identified in the new water management plan.

I-9.5

See Master Response 18 regarding climate change and the discussion of climate change under Master Response 2.

I-9.6

Refer to Master Response 14. The preferred alternative, Alternative 2 (as revised) places the spur trail on City of Novato property west of the HWRP seasonal wetland in area separated from Pacheco Pond and from the restoration area.

I-9.7

Proposed routing of the Bay Trail along the railway near Nave Boulevard or along Nave Boulevard itself were both studied by the City of Novato in the Hamilton Public Access Bay Trail Plan (City of Novato,

2001). In the study, the railroad right of way was found to be "insufficient to allow pedestrian or bicycle access" and to conflict with use as a transit corridor. Further, the railroad right-of-way owner, the Golden Gate Bridge, Highway and Transportation District is reported in the City study to have indicated that there are safety concerns with allowing pedestrian access in proximity to an active railline. These constraints, in addition to the need for additional land to reach the railroad right-of-way, were sufficient in the study to preclude routing the Bay Trail along the railroad.

Regarding, Nave Drive and Bel Marin Keys Boulevard, the City study identified that the City supports trail placement that avoids designating trails on city streets and also noted traffic conflicts and potential right of way needs along these streets.

For these reasons, in addition to the fact that such routings are located on land not owned by the federal government or the Conservancy, a potential alternative further west of Pacheco Pond was not considered in the SEIR/EIS as part of the BMKV expansion of HWRP. The preferred alternative routes the Bay Trail along the east side of an expanded Pacheco Pond, which is the preferred alignment of the City of Novato, and would avoid the direct disruption of Pacheco Pond wildlife associated with routing of the trail around the west side of Pacheco Pond. The specific design and management of the trail would incorporate specific measures to reduce impact on adjacent wildlife in coordination with BCDC, DFG, USFWS, the City of Novato, the County, Association of Bay Area Governments (ABAG) Bay Trail Project, and other interested parties as noted in mitigation measures BIO-11 and BIO-17.

I-9.8

See Master Response 15 regarding mosquito breeding habitat and Comment L-6 from the Marin-Sonoma Mosquito and Vector Control District.

I-9.9

NEPA and CEQA require the assessment of environmental effects of proposed projects, the identification of the significance of these effects, evaluation of potential mitigation measures and alternatives for significant measures. CEQA requires the state lead agency to adopt an MMP at the time of project approval that identifies the adopted mitigation measures, the responsible parties for implementation, and the monitoring activities necessary to ensure mitigation implementation. Neither NEPA nor CEQA require securing of funds or guarantees for unspecified damages or negative impacts. Mitigation is proposed in the SEIR/EIS where significant impacts have been identified as required by NEPA and CEQA.

I-9.10

Scoping refers only to that period wherein the SEIR/EIS was scoped to determine the subjects of concern for analysis. Scoping included the workshops in the fall of 2001, the scoping hearing in December, 2002, and the written comments on the NOI/NOP. Chapter 6 is only a brief summary of the scoping report, which is included in appendix G of the Draft SEIR/EIS. Navigation is specifically mentioned in chapter 6 and the scoping report also notes that mosquitoes (public health) were raised as a concern. However, during the scoping meeting and in the letters received on the NOI/NOP, concerns about scenic views, traffic, or property values were not expressed. Aesthetics and traffic were addressed in the Draft SEIR/EIS. Economic or social effects, such as property values, of a project are not considered significant

effects under CEQA (CEQA Guidelines 15131 (a)), and thus are at the discretion of a lead agency whether or not to address in a CEQA document.

Comments raised on the Draft SEIR/EIS are responded to in this document. Issues raised during the public comment period have been summarized in a new section of chapter 6 of the Final EIS/EIR

I-9.11

See above response to Comment I-9.2.

I-9.12

See above response to Comment I-9.2.

I-9.13

See above response to Comment I-9.2.

I-9.14

See above response to Comment I-9.5.

I-9.15

See above response to Comment I-9.5.

I-9.16

See Master Response 18 regarding climate change.

RECEIVED
Comment Letter I-10
COASTAL CONSERVANCY
OAKLAND, CALIF.

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August 30, 2002

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Subject: Finalized Comments

Gentlemen:

Thank you for the opportunity to respond to the DRAFT SUPPLEMENTAL EIR/EIS for the Bel Marin Keys Unit V (BMKV) Restoration Project (DEIR/S).

My comments on the DEIR/S Executive Summary are: 1. Explain why there are 2 different Executive Summaries. 2. On Table ES-2, (mislabled ES-1 on pages 2 thru 15) HYD-5 is only beneficial if adequate ponding is available, which is still unresolved, please so indicate. Also please add that as a result of the Pacheco Pond alteration, the water level in Novato Creek will be lowered by only 0.1 foot. 3. Why is HYD-8 (flood control) listed as "Less than Signifigant" when the text states the issue is not resolved? Please correct. 4. Mitigation Measure (MM) BIO-2 saves the mice but does nothing to restore mouse refuge area. Please address loss of habitat. 5. MM BIO-5 same comment, address loss of habitat. 6. LU-4 Easement- Conflicts Impacts depend on the F-2 Zoning Regulations which are unresolved. Please so state. 7. The Signifigant Impacts on Views could be at least partially mitigated by moving the levee further out. Please so indicate. I-10.1

Additional comments are in five sections, I. Habitat Issues, II. Flood Control Regulations and Project Design, III. Rejected Alternatives, Alternative 5, IV. Agriculture Policies, and V. Visual Impact Policies.

I. Habitat Issues.

Table 3-2 shows a postrestoration habitat of 849 acres of "tidal marsh". Explain how allocating such a large portion of the site for marsh habitat is consistent with the stated Project Goal: "to create a diverse array of wetland and wildlife habitats at the __ sites that benefit endangered species as well as other migratory and resident species." (underline added) How was the allocation of the various habitat areas determined? Which wetland habitat will "sustain ___ in particular Bay Area special status species" as required by the Project Objectives? Which species? How will the habitats be maintained as required by the Project Objectives? I-10.2

TIDAL SALT MARSH (TSM) ELEVATIONS
(From Figure 4-8, pg4-67+, and Table 4-2, pg4-18.)

Marsh Type	(Vegetation-Habitat)	Elevation Range, NVGD29
Middle TSM	(Pickelweed-Harvest Mouse)	MHW, 2.68'- MHHW, 3.43'
Low TSM	(Cordgrass-Clapper Rail)	MSL, 0' - MHW, 2.68'

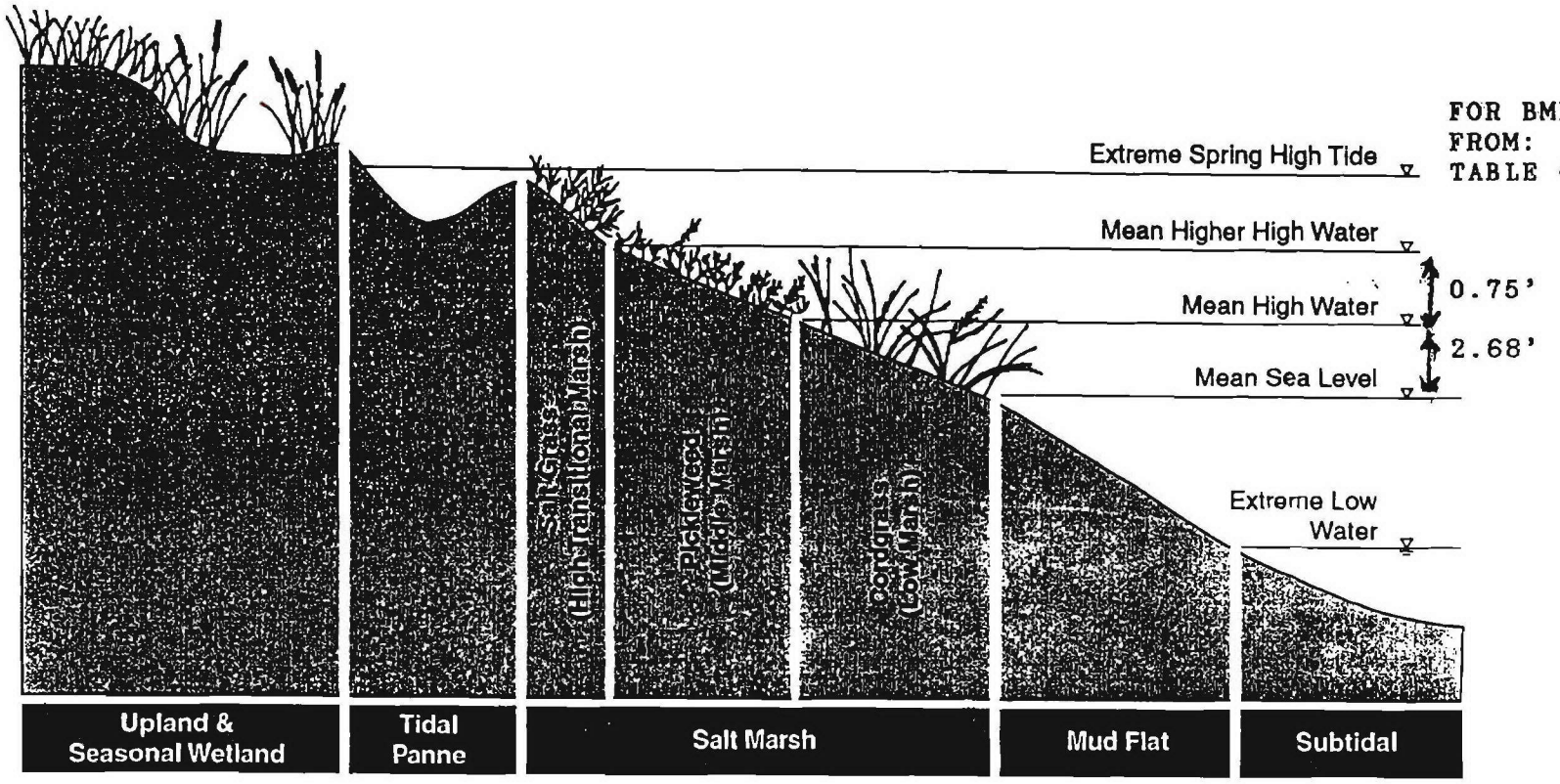
Note: MHHW - Mean Higher High Water, MHW - Mean High Water (MHW)
MSL - Mean Sea Level

To establish TSM on the whole 849 acres would require the entire area to reach equilibrium, with tidal action and after settling, as tilted planes at the right elevation and each plane with no more than 3.43' change in elevation to include both Low and Middle TSM. (See above Table and Figure 4-8, included on next page, pg 3.) Large depressions must also be absent because ponded salt water will not yield the desired habitat. In the FEIR please explain how all 849 acres could be expected to form "tidal marsh" with the above constraints.

Please provide details for establishing Middle TSM (Pickle Weed - Harvest Mouse Habitat) within the elevation range shown on the above Table. How will the exact elevation and elevation change of less than 1 foot be maintained over the area proposed given tidal and wind action? How will the exact amount of settling be determined and accounted for? What will or can be done if the calculated elevations and/or amount of settling need ajustment after the area is flooded? Please quantify the Middle TSM area and the Low TSM area that will be established at project maturity. Will the area of newly created assessable Harvest Mouse Habitat exceed the area lost during the proposed restoration? Please specify habitat areas before and after restoration. Will new habitat meet the 3 for 1 requirement? Please provide documented evidence to show the proposed Tidal Wetland Design method described on pg 3-19 will actually yield 100% of the desired tidal marsh areas after settling. If not 100%, what percentage can be expected with certainty, based on past restoration? I-10.2 Con't.

If documented evidence does not support the project restoration scenario, then I propose that a more likely scenario: tidal erosion and silt deposition will establish an "equilibrium length" (EL) of TSM perpendicular to any existing or new levee. (See Figure 4-8, next page, pg 3.) EL can be determined if it is not known or published. Any tidal area beyond the EL limit will not be TSM habitat, it will be mud-flats.

If the above more likely TSM scenario is correct, decreasing the amount of tidal area will not necessarily decrease the area of TSM because it is more dependent on levee length than tidal area. Please take this into account when evaluating the merits of the alternatives and the "Mid-1800's shoreline" Alternative in the FEIR/S, see Section III.



Source: Woodward-Clyde 1998.

02002.02.002

Jones & Stokes

nhc northwest hydraulic consultants

Figure 4-8
Schematic of Habitats by Tide Levels

Attachment I-10

Please evaluate the area of TSM habitat in each alternative in the FEIR/S using this more reasonable scenario if documented restoration projects do not support the project scenario. I-10.2

Loss of Habitat.

There is no mention of the loss of Salt Marsh Harvest Mouse refuge area and mouse mortality due to flooding during high water after the Novato Creek levee and the bay levee are lowered. In the FEIR/S please quantify the extent and effects of this refuge loss and determine if the flood control benefits on the creek warrant the loss. This loss must be evaluated separately since lowering the levee does not produce additional habitat elsewhere. Will restored habitat meet the 3 for 1 criteria? How will the lowered levee be maintained so it does not erode away further with time. I-10.3

Alternative 2 - Seasonal Wetlands

Under Alternative 2 all the water from San Jose Creek and Pacheco Creek passes through Pacheco Pond to the bay through the new ponding area. The proposed Pacheco Pond ponding area is listed as 210 acres of seasonal wetlands. This would imply that all of the area will become dry in the summer. This can only occur if San Jose and Pacheco Creeks dry up and the water left in the new pond all evaporates before the fall rains.

The water in the new pond can only flow to the bay when it is higher than the tide level. Therefore, the depth of water left in the pond after the creeks dry up will depend on the elevation of the bottom of the ponding area relative to the tide as well as the flap gate elevation. Flapgate maintenance (silt deposition) must be considered when selecting its elevation. I-10.4

The flow analysis of Pacheco Pond in Appendix B does not address the proper flow scenario. It analyzes only peak storm flow and neglects the continuous winter rain flow which also must flow through the pond to the bay. For the FEIR/S please perform a proper analysis of the pond system including all the variables discussed above. Also revise the pond area size if necessary to handle the increased flow.

II. Flood Control Regulations and Project Design.

F-2 Zoning.

The stated purpose of the county F-2 zoning regulation "is to insure that life and property will be protected within the designated zone". BMK Unit 4 (BMK4) was built on a "specified encroachment area" (100 acres for BMK4) in a "designated F-2 zone" as per the regulation. The regulation further states "(1) That the remaining area or percentage of the parcel (300 acres for BMK4) shall be subject to ponding and overflow". It is therefore very clear that the 300 acre ponding easement is for the protection of BMK4 and that "No ___ activity which would I-10.5

reduce the ponding area or capacity" of that remaining area shall be permitted. The 300 acre dedication to BMK4 is therefore independant of the future resolution of any F-2 zone requirements for the remainder of the property.

Please note per the regulation that the ponding "capacity" as well as the area must be preserved for the sole use of BMK4. It certainly appears that none of the alternatives, except the "no build" alternative meets the requirement of the regulation since there is no ultimate channel or equivalent proposed. Please explain in the FEIR/S how each alternative will satisfy the county flood control regulations regarding the BMK4 300 acre ponding requirement for area and capacity.

The regulation also provides "(3) Drainage improvements (to enable the ponding to be used shall be constructed by the land owner." In this case the developer of BMK4. The county waived this requirement for BMK4 because it was obvious that flood water overflowing the levee would have no difficulty finding the 300 acres. However that waiver had no affect on BMK4's use of the 300 acres. (Private conversation with John Wooley, MC Public works, prior to easement date in 1997.) It is unknown why the easement contains wording pertaining to 3 acres rather than 300. It makes no sense to provide for removal of the easement if the levee heights are increased since the purpose is to provide for water release not water retention. Regardless of the easement language, the 300 acre ponding area is still granted to BMK4. Please address this inconsistency in the FEIR/S. I-10.5 Con't.

The DEIR/S does not specify the elevations of the seasonal wetlands. The schematic drawings indicate that the ground elevations are essentially at the same level as the BMK lagoons and consequently will have essentially no ponding capacity for BMK4. Please provide the necessary information in the FEIR/S to show that the seasonal wetlands have the area and capacity to satisfy the F-2 zoning requirments for BMK4.

Levee "Improvements".

It is not clear why the existing South Lagoon levee is being raised to provide 6 feet NGDV after settling. The most effective flood control device for BMK4 (and the South lagoon) is a spillway which requires no manual operation and will not plug up or malfunction. Raising the levees around the spillway makes no sense.

The sections of the levee that are at 5 feet are adequate to keep the water in. Raising the levee could be potentially detremental because it could raise the water level and cause unnecessary flooding if the water overflow system, other than a spillway, malfunctioned for some reason during winter storms. The sections of the levee that are less than 5 feet should be raised, but only to 5 feet initially to avoid unecessarily impacting views. Any settlement can be corrected when and if necessary. Please explain in the FEIR/S the rational for the proposed design. I-10.6

Even if a 6 foot levee were deemed necessary for some unexplained reason, it is not clear why it is proposed to add 5 feet to the existing 5 foot high areas to provide only the 1 foot required after settling. Please explain in the FEIR/S. I-10.6 Con't.
Pacheco Pond Overfow Ponding, Alternative 2.

To route San Jose Creek water to the bay through the proposed overflow pond, the pond water level must be high enough to discharge the full Creek-flow to the bay during winter storm conditions with a high tide of 7' NGVD. A portion of the storm water could be stored until the bay level subsides. The Pacheco Pond water level must be higher than the overflow pond level but low enough to prevent flooding in the Industrial Park or elsewhere. In the FEIR, please show how the ponding system would operate with the current design. If more ponding were required than in the current design, there would be further incentive to accept Alternate 5. See Section III. (Also see Section I, Alternative 2 - Seasonal Wetlands) I-10.7

For Impact HDY-5 please indicate in the FEIR/S that the change in the water level in Novato Creek will only be 0.1 foot as a result of the Pacheco Pond alteration. I-10.8

III. Rejected Alternatives, Alternative 5

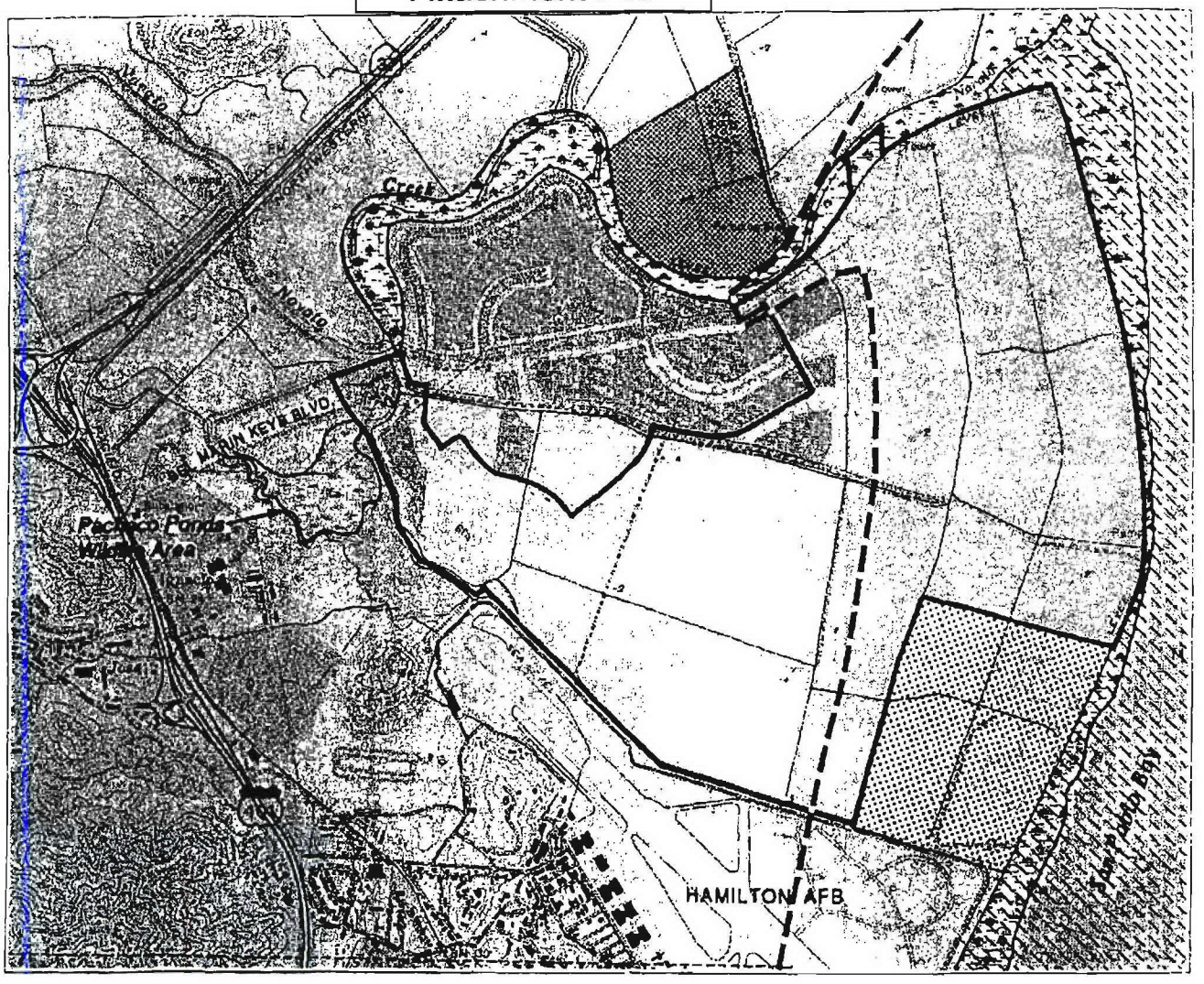
Alternative 5 - Historic Bay/Wetland Restoration (Mid-1800's shore-line) is not described in detail. I assume it is the alternative I suggested in my response to the NOI/NOP dated December 12, 2001. (See Appendix G, Letter 3. Please note that the approximate shoreline shown on Figure 1 was incorrectly labled. It should read Mid-1800's, not Mid-1880's.) A copy of the source document, Figure 5.B-1, FEIR/S, BMK5, is presented on the next page, pg 7. The new levee would be placed at the Mid-1800's "shoreline" for this alternative.

The Alternative was rejected because it "would not meet the HWRP objectives as well__". However, the HWRP objectives have no provision for maximizing" any particular habitat. Please explain why the HWRP objectives are not met as well if the restored tidal area ended at the Mid-1800's shoreline shown on Figure 5.B-1. Also, why was this alternative left out of the Executive Summary List, pg 3-10? I-10.9

In the FEIR/S please reevaluate the mid-1800's shoreline alternative described above using the information developed from Section I. Please also discuss the following advantages of placing the new outboard levee at the mid-1800's shoreline location:

1. May provide esentially the same tidal salt marsh area as Alternatives 1&2. See Section I.
2. Provide the BMK4 300-acres F-2 ponding requirement.
3. Provide additional area to expand ponding for the Pacheco Pond overflow to provide additional flood control for the City of Novato if necessary.

Attachment I-10



Salt Marsh Harvest Mouse and California Clapper Rail Essential Habitat

Federally-Owned Diked Lands (under FWS jurisdiction

State-Owned Diked Lands (use not yet determined)

San Pablo Bay Wildlife Management Area (State of California)

Shoreline in Mid-1800's

Project Boundary

0 3000 not correct scale

Feet

SOURCE: Environmental Science Associates, Inc.

Bel Marin Keys / 91-187 ■

Figure 5.B-1
Wildlife Preserves and Other Sensitive Areas Surrounding the Project Site

4. Allow economic agriculture in the summer (see Policy A-6, Consistency Analysis, pg 4.16 of FEIR/EIS.) to satisfy the CWP. (A-1.6 & EQ-2.58)
5. Provide expanded area for diversity of habitat (CWP EQ-2.58)
6. Provide agriculture to meet BCDC Policy 1, pg 6 and Policy 2, pg 4 of BCDC Diked Historic Baylands of S.F. Bay.
7. Provide wetlands area equivalent to the mid-1800's.
8. Preserve the 151 acres agricultural wetlands with "no-net loss" of wetlands. (See pg 3-13, Exec. Sum.)
10. Preserve the 114 acres seasonal wetlands in the borrow pit area.
11. Reduce the visual impact of the outboard levee on BMK residents.
12. Reduced noise level in BMK during construction.
13. Mitigate Signifigant Impacts BIO-6, BIO-7, BIO -20.

I-10.9 Con't.

IV. Agricutural Policies.

The DEIR/S does not adequately address the Marin Countywide Plan (CWP) Policies and the Final BMK UNIT 5 EIR/EIS (BMK5 FEIR/S) findings referred to in my response to the NOI/NOP dated December 12, 2001. (See Appendix G, Letter 3.)

In the Final EIR/EIS (FEIR/S) for the Restoration Project please determine the impact of the project on the following CWP Policies:

FIRST, UNDER "LAND USE IN THE BAY FRONT CONSEVATION ZONE".

POLICY EQ-2.45 GRANTS AGRICULTURE USE AND FLOOD BASIN (USE) EQUAL STATUS WITH RESTORATION TO TIDAL STATUS.

POLICY EQ-2.49, MANDATES PREPARATION OF AN ENVIRONMENTAL ASSESSMENT (EA) PRIOR TO DEVELOPMENT. THE EA BECOMES PART OF THE EIR.

SECOND, UNDER "AGRICULTURAL LANDS IN THE BAYFRONT CONSERVATION ZONE" (BFC).

I-10.10

POLICY A-1.6, STATES, "RECOGNIZING THAT AGRICULTURE LAND IS A NON-RENEWABLE RESOURCE, THE COUNTY WILL, TO THE EXTENT FEASIBLE AND LEGAL, PRESERVE PRODUCTIVE AGRICULTURE LAND IN THE BFC IN THE CITY-CENTERED CORRIDOR.

POLICY EQ-2.58 STATES, "THE COUNTY SHALL PROTECT EXISTING AGRICULTURE LANDS IN THE BFC", AND LISTS REASONS FOR THEIR IMPORTANCE.

The DEIR/S impact analysis LU-1, Pg 4-120, does not fully analyze EQ-2.45. It omits the directive that "agricultural use" and "flood basin" have equal status with restoration and are uses which "provide or protect wetland or wildlife habitat" and "shall be encouraged". Please include in the FEIR/S an impact analysis of the project which recognizes these uses

Policy EQ-2.49 is not addressed or mentioned in the DEIR/S. The Policy states, "The County shall review all proposed development ___ to ensure maximum possible habitat retoration and protection."

This Policy recognizes that there should be a proper balance between upland and tidal habitat. In addition to the above CWP the stated HWRP Goal "is to create a diverse array of wetland and wildlife habitats at the __sites that benefit endangered species as well as other migratory and resident species". Table 4-3 of the Executive Summary shows a "Moderate loss" for "Upland habitat Value" and "Large positive effect" for Alt. 1 & 2. No analysis is presented to show how much of the site should be restored to tidal wetlands and how much should be upland habitat (agriculture) to satisfy the CWP and the stated HWRP goal.

In the FEIR/S, please address Policy EQ-2.49. In view of Policy EQ-2.49 and the results of the Alternative 5 reevaluation in III above, show justification for tidal restoration in excess of the shoreline boundary in the mid-1800's, as shown on Fig. 5,B-1 of the BMK5.

Explain why an Environmental Assesment was not prepared as required by EQ-2.49a?

The analysis of the project impact on agriculture is a generalization which does not adequately address all policies and facts. The negative impact on Policy EQ-2.58 is dismissed because although "The site currently supports farmland of local importance", 1241 acres is small compared to the total land in ag use in Marin County. (Impact LU-5) This reasoning is the equivalent of "One cigarete at a time". The analysis completely disregards the intent of the policy, and the intent of Policy A-1.6 which is not addressed or mentioned in the DEIR/S. It also disregards the potential agricultural value of the site that is documented on Pg. 4-171 of the DEIR/EIS: "Over the next 30 years (from 1916 to 1946) Calpak used the property to grow sugar beets, peas and other crops___". I-10.10 Con't.

The analysis also states "the restoration__is expected to maintain or improve on the visual aesthetics of the BMKV site itself. However, Executive Summary Table 4-3 lists under Visual resources: "Minor temporary impacts; long-term change in views from BMK Community". I find this inconsistent. Please explain the conclusion, "maintain or improve on the visual aesthetics".

The BMK Unit 5 (BMK5) Final EIR/EIS listed analyses of impacts of that development on Table 3.D-1. The analysis found:
1. Loss of regional oat hay production and, 2. Loss of local oat hay production, were both Class I impacts. ie Unavoidable Signifigant Impact(s) or Potentially Unavoidable Signifigant Impact(s) after implementaion of mitigation measures.

Please reevaluate the impact of the project on agriculture taking into account the above comments, including CWP Policy A-1.6 and the findings in the BMK5 FEIR/EIS.

II. Visual Impact Policies

The discussion on page 4-179 of views from Viewpoints 1 through 4 I-10.11

is misleading. It states that the views in each case are "partially obstructed by the outboard levee" but from Viewpoint 5 it is unobstructed. In the FEIR/S please explain why the views are considered "partially obstructed" in 1-4 and what the difference is between Views 5 and 1-4. I personally have difficultly even seeing the height of the levee in Views 1-4. I-10.11 Con't.

In the FEIR/s please recognize that the impact on views could be minimized by, 1. not increasing the height of the existing level above 5' NGDV (see Levee Improvements under Section II.), and 2. moving the new levee further away so there is less impact similar to Viewpoint 5 (see Section III.)

I look forward to your response in the FEIR/S to my concerns.

Sincerely yours,

R A Farnham

Robert A. Farnham

cc: Steve Goldbeck, BCDC
Marin County Board of Supervisors
Marin County Public Works Department
Marin County Planning Department
BMK CSD/Planning Advisory Board
City of Novato Public Works

I-10 Robert A. Farnham

I-10.1

Responses are provided below for each numbered item within the comment.

1) The combined volume I contains 2 documents: the Draft GRR and the Draft SEIR/EIS. Each of these documents has an executive summary. The GRR is not part of the SEIR/EIS; it is a Corps planning document.

2) Typo corrected in Final SEIR/EIS.

As described in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 and as shown in figures 4-5 and 4-6, the proposed project is expected to lower off-peak flood stage in Novato Creek. This would enhance the ability to drain the BMK lagoons, which is considered beneficial. Regarding ponding capacity see Master Response 2. The hydrologic and hydraulic studies took into account the ability of BMKV to receive overflow from Novato Creek and have concluded that the proposed project would not increase flood stage. Therefore, there is no effective loss of flood control function on the BMKVexpansion site including ponding capacity. The study results are note designed to precisely predict the amount of change in Novato Creek stage, only to determine whether or not the change would be positive or negative; regardless, the study results show a far greater decrease in off-peak stage (up to several feet). It is at off-peak stage when the BMK lagoons can drain - thus as noted above this is identified as a benefit regardless of the actual amount of reduction in stage that might result from the project.

3) As described in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 of the Draft SEIR/EIS, the analysis of significance presumes potential inconsistency with the drainage easements (because consistency has not yet been determined by MCFCWCD). However, the potential inconsistency with the drainage easements is related to the language in the easements themselves and is not related to a physical adverse effect of the project on flooding. Not all potential impacts are considered significant effects on the environment, particularly when they are not related to a negative physical effect. Since the focus of NEPA and CEQA is on the physical adverse effects on the environment, the potential inconsistency with the easements, though unresolved, it not considered a significant effect on the environment in absence of an identified negative effect on flooding.

4) The proposed project would create approximately 1,000 acres of tidal marsh habitat overall, which would be a substantial benefit to salt marsh harvest mouse, including high transitional marsh habitat which can serve as refuge. Temporary disturbance and loss of tidal marsh during levee lowering and breaching would be mitigated by creation of substantially larger overall habitat areas for the salt marsh harvest mouse which is a major goal of the project. See Impact BIO-14.

5) Loss of grassland habitat that may support burrowing owls is discussed in Impact BIO-18 in the draft SEIR/EIS. Due to the restoration of an equal or larger amount of grassland than at present, this impact is considered less-than-significant.

6) The discussion in Impact LU-4 regarding the MCFCWCD drainage easements is a cross-reference to the discussion under Impact HYD-8. See response to 3) above regarding NEPA, CEQA and determination of significant effects on the environment.

7) In the preferred alternative, the new outboard levee has been move to a location approximately 1,500 feet from the south lagoon in part to lessen the visual effect on residential views. This in addition to the lowering of initial construction height by 2 feet is now determined to mitigate this impact to a less-than-significant level.

I-10.2

See Master Response 11 regarding habitat mixes. As noted in the Master Response, there is a clear emphasis on creating habitat for threatened and endangered species. In addition, the scientific consensus represented in the San Francisco Bay Ecosystem Goals Report supports the creation of a wide tidal plain on the BMKV and Hamilton sites, which supports a habitat plan that is dominated by the creation of coastal salt marsh, though not to the exclusion of other habitats such as seasonal wetland or upland that are included in the preferred alternative

As described in chapter 3 of the SEIR/EIS, site preparation and placement of dredged material is designed to create surface elevations ranging from approximately 2 feet NGVD to 0 feet NGVD prior to levee breaching. Material placement amounts and elevations have taken into account expected settling. These amounts and elevations would be confirmed during the detailed design phase. Final marsh elevations would be established by natural deposition of fine-grained sediments from San Pablo Bay and Novato Creek. While settling would occur, establishment and maintenance of marsh elevations occurs over time through the deposition of sediments throughout the tidal range. The conceptual design retains the portion of the outboard levees below MHHW and includes internal peninsulas, both of which serve to make the site into a "sediment trap" that favors deposition of fine-grained material. This conceptual approach has been used previously at the other restoration projects in Corte Madera and other parts of San Francisco Bay.

As part of post-construction monitoring, the Corps and Conservancy (or their successors) will monitor marsh formation to evaluate whether elevation and vegetation establishment is occurring in accordance with design (See Mitigation Measure BIO-8); if not remedial actions would be considered and proposed at that time.

The amounts of low, middle, and high marsh are listed in table 3-2. As identified in Impact BIO-14 in the Final SEIR/EIS, construction is expected to result in loss of 1 to 3 acres per breach and 2 to 5 acres of tidal marsh due to morphological changes resulting from increase in tidal prism. The 21 acres of non-tidal coastal salt marsh within the levees is separate from the tidal marsh outside the levees; as a conservative assumption it is presumed potential habitat. Presuming that all of this is salt marsh harvest mouse habitat, the preferred alternative would create an estimated 792 acres of middle salt marsh, a ratio of at least 18:1. Since this is a large ratio, even if 100%of the estimated habitat does not ultimately result, it is reasonable to expect that the project would result in a substantial increase of habitat to offset any losses of existing habitat.

The commenter asserts that it is more likely that tidal salt marsh would form perpendicular to existing or new levees out to a certain "equilibrium level" and presumably asserts that this would not occur in the same areas as the proposed design. If the project included removing all of the outboard levees (e.g.

including that below MHW), included no internal peninsulas, and included no use of dredged material, then the commenter's scenario is conceptually possible.

Because the project design is based on local environmental conditions, prior restoration experience, and hydrologic and hydraulic studies, the assertion by the commenter that the project design is not substantiated is unfounded. The design includes features specifically selected to trap sediment and promote marsh elevations formation across the entire area designated for coastal salt marsh. The commenter's alternative marsh scenario does not include any features to favor development of marsh across the available site area, and thus would be expected to form far less tidal salt marsh, which would not meet the project goal and objectives as robustly as the preferred alternative or the other alternatives analyzed in the SEIR/EIS.

I-10.3

Loss of Habitat is evaluated in Impact BIO-14.

As noted above, the overall project would substantially increase the amount of salt marsh harvest mouse habitat, including high transitional marsh and adjacent upland areas that would function as refugia. The project design in the preferred alternative is to create 79 acres of high transitional marsh on BMKV, in addition to about 90 acres on the SLC site. In addition periodic areas of remnant outboard levee would be left as refugia, and upland adjacent to the new outboard levee would also provide refugia. These provisions are expected to more than offset available refugia for salt marsh harvest mouse that would hopefully colonize the expansion site.

I-10.4

As noted on chapter 3 of the Final SEIR/EIS, the overflow structurefor the seasonal wetland in Revised Alternative 2 would facilitate overflow when water surface elevations exceed 1.5 feet NGVD, which would allow surface elevations to be maintained at the same elevations at present. Also, the preferred alternative envisions the potential use of the existing outlet in combination with the new outlet to the seasonal wetlands. The hydrologic and hydraulic analysis in appendix B is designed only to identify potential flooding impacts or benefits for the proposed alternatives. Conceptual design of the inverts of the new outlet to BMKV is identified in the document. Specific water management prescriptions and engineering design of new water management structures would be conducted during the detailed design phase; however the study conducted is adequate to identify the potential for significant impacts in the SEIR/EIS.

I-10.5

See Master Response 3 regarding MCFCWCD drainage easements and Master Response 4 regarding BMK CSD drainage agreement for BMK south lagoon overflow. As noted in the master responses, the 300-acre easement is held by the MCFCWCD, not the BMK CSD, and thus determination of its amendment is the responsibility of Marin County. Nothing in the easement states anything about it being for the "sole" use of BMK4.

The commenter confuses the BMK CSD easement for the overflow structure which specifically references a 3.034-acre portion of parcel 157-172-07 as the recipient parcel on BMKV for overflow water and makes no mention of the 300-acre area, parcel, or easement.

As disclosed in the Draft SEIR/EIS, for the purposes of impact assessment, it was presumed that the project may be inconsistent with the language of the MCFCWCD easements or the F-2 zoning; however that conclusion does not mean that flooding would increase in Novato Creek, Pacheco Pond, or the BMK south lagoon. The Draft SEIR/EIS presents the results of a hydrologic and hydraulic study that concludes that the project would not have adverse effects on flooding and would result in some benefits by reducing peak flood stage in Pacheco Pond and by reducing off-peak stage in Novato Creek, which would assist BMK CSD in draining the lagoons.

The bottom of the seasonal wetland area would be at approximately –1.5 feet NGVD and the ponding capacity of the seasonal wetland (below 1.5 feet NGVD) has been estimated at about 400 AF; the ponding capacity will be greater than this amount, depending on the final design of the overflow structure. The swale bottom would be at approximately –1.5 feet NGVD and the ponding capacity of the swale area (below 1.5 feet NGVD) has been estimated at about 450 AF; the actual ponding capacity is likely to be greater than this, depending on the final design of the overflow structure (s). These details have been added to the project description.

I-10.6

The preferred alternative includes improvement of the south lagoon levee to a 6 feet NGVD initial construction elevation to settle to a 5 feet NGVD elevation. The levee presently includes several low spots near 2 feet NGVD elevation. The 5 feet NGVD design, as the commenter notes, has been considered adequate by the BMK CSD for lagoon control. The preferred alternative includes new flow structures to allow high-water flow to the new swale on BMKV to facilitate compliance with the existing overflow easement. In addition, improvements to the levees adjacent to the south lagoon lock have been added to the preferred alternative to reduce the likelihood of Novato Creek bypass flow entering the south lagoon and raising high-water levels.

I-10.7

As described in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 of the Draft SEIR/EIS, the addition of the seasonal wetland area would lower peak stage in Pacheco Pond compared to the present condition. Since the project is not a flood control project, the seasonal wetland condition is not being designed to provide a specific control on peak stage; however the additional storage would reduce the potential peak stage, regardless of actual stage level. As noted in the chapter 3, the Corps and Conservancy would participate in the development of a new management plan for Pacheco Pond during the detailed design phase of the project that would establish design details for the new outlet and use parameters for both the new and existing outlet. Development of this plan in conjunction with the detailed design would optimize the operation of Pacheco Pond for both flood control and wildlife conservation. Finally, since the purpose of the project is not flood control, and the SEIR/EIS does not identify an adverse effect of the project on Pacheco Pond, the seasonal wetland (or expanded pond area) does not need to be expanded as suggested by the commenter.

I-10.8

Impact HYD-5 has been revised to include the results of the modeling for both peak and sub-peak stage levels. However, as noted in Master Response 2, the studies conducted were not developed to predict the actual stage level, only to identify whether or not stage levels would be raised or lowered or unchanged

by the proposed project; thus the actual stage decrease (peak or sub-peak) may be different than that shown in the model. Also, the model is based on conservative assumptions. Regardless, the expected effect of the proposed project is to provide no change or a minimal decrease in peak stage and a larger change in sub-peak stage, which should improve the ability to drain the BMK lagoons during storm events.

I-10.9

Chapter 3 correctly identifies the reference as being to mid-1800s.

Alternative 5 as described in the Draft SEIR/EIS has been updated to note that the outboard levee would be at an elevation between MHW and MHHW and would have to be breached to allow tidal flow into the tidal marsh area on the western part of BMKV. The intent of Alternative 5 is to mimic conditions when the Bay margin was much further west than at present (e.g. prior to the massive deposition of hydraulic mining sediment in San Pablo Bay in the second half of the 1800s). As noted in the Draft SEIR/EIS, the western half of BMKV would be designed to support tidal marsh and receive diverted flow from Arroyo San Jose and Pacheco Pond (presumably through a new outlet on the east side of Pacheco Pond). This alternative is substantially different than that proposed by the author in this comment and in the prior comment on the NOP.

The author's suggested alternative was not considered in the SEIR/EIS because it would: a) provide for far less overall habitat values due to retention of agriculture on the entire non-tidal area; b) require continued pumping in order to provide for drainage; and c) not substantially expand the range of alternatives considered.

In chapter 3, other alternatives or alternative features considered but dismissed from further analysis include the features suggested by the author including: a) mid-1800s shoreline (Alternative 5); b) a smaller restoration area (Alternative 7) to maintain existing drainage easements and 75% of the site F-2 nominal ponding capacity, regardless of actual impacts on flooding; c) retention or replacement of agricultural ponding areas (Alternative 10); and d) and varying habitat mixes (Alternative 4). While the alternatives considered may not capture every nuance of the author's alternative, the alternatives considered present a reasonable range of alternatives to meet the project's goals and objectives.

As noted in Master Response 11 concerning habitat design, the project has a clear emphasis on coastal salt marsh because it provides habitat for threatened and endangered and other special status species, and because of the historic 80 to 90% loss of this habitat in San Francisco Bay, and because of the recommendations represented in the Bayland Ecosystems Habitat Goals Report for a wide tidal marsh plain on the HAAF, SLC and BMKV sites.

As noted in the response to Comment I-10.2, the alternative marsh formation scenario is not likely to result in the same amount of tidal marsh on the site, and thus would not meet the project's goal and objectives.

Though this was not an intended design rationale, the location of the preferred alternative new levee is now fairly close to the mid-1800s shoreline identified by the commenter.

Responses to specific numbered items in this comment are noted below:

1) As noted in response to Comment I-10.2, the commenter's suggested alternative marsh formation scenario makes no provision for conditions favorable to natural sedimentation to achieve marsh elevations. The alternative mentions no specifics regarding lowering of outboard levees, internal peninsulas, breaches, or other details. Thus, it is speculative to assert that it would result in the same tidal salt marsh as Alternatives 1 and 2 or not.

2) This alternative would result in tidal inundation of the 300-acre MCFCWCD easement area similar to the preferred alternative. Presumably the commenter believes that the area behind the new outboard levee would be sufficiently large to offset the 300-acre area. This is likely to be true, however, as noted in the *Surface-Water Hydrology and Tidal Hydraulic* section, the determination of compliance or amendment with the MCFCWCD easements has not been done by the MCFCWCD at this time and a conclusion about compliance cannot be made. The swale area in alternative 2 is 387 acres. It may also provide sufficient area that MCFCWCD may deem it a replacement for the existing 300-acre easement.

3) The commenter's alternative would not necessarily provide any more space for Pacheco Pond overflow than Alternative 1 or the preferred alternative. If, as the commenter asserts, this alternative would provide the same amount of tidal habitat as Alternative 1 or 2, then it can only be concluded that the remaining area for ponding for either BMK lagoon or Pacheco Pond is the same as, not more than, Alternative 1 or 2.

4) See Master Response 17 regarding agriculture. Retaining a small portion of the site in agriculture is not considered economically sustainable. The Conservancy studied agriculture on the entire site and found that it was not economically sustainable, and thus maintaining agriculture on a portion of site would be even more questionable. Retaining agriculture on the non-tidal portion would provide less non-tidal habitat value than the preferred alternative.

5) As noted above, this alternative does not include a greater amount of area for "diversity" of habitat than Alternative 1 or 2, if it includes an equivalent portion of the site for tidal salt marsh.

6) Also see Master Response 17 regarding agriculture. The comment cites a 1982 BCDC study of diked historic baylands in San Francisco Bay and policies which wer never formally adopted into the Bay Plan. The current San Francisco Bay Plan, which is administered by BCDC, calls for projects like the BMKV expansion explicitly under the Tidal Marshes and Tidal Flats Findings and Policies Concerning Tidal Marshes and Tidal Flats Around the Bay section of the Bay Plan. Finding (f) states: "Diked agricultural baylands, salt ponds and managed wetlands also offer the greatest opportunity to restore large parts of the Bay to tidal action". Policy (4) states: "Where and whenever possible, former tidal marshes and tidal flats that have been diked from the Bay should be restored to tidal action in order to replace lost historic wetlands or should be managed to provide important Bay habitat functions, such as resting, foraging and breeding habitat for fish, other aquatic organisms and wildlife."

7) Neither this suggested alternative nor any of the alternatives analyzed in the SEIR/EIS would provide wetlands that are equivalent to that present in the mid-1800s. Prior to 1850, the entire low-lying area west of the Bay margin was entirely tidal salt marsh and salt pond, including the western two-thirds of the expansion site, the entire Bel Marin Keys community and lagoons (all of which are built on diked bayland), Hamilton airfield, Pacheco Pond and the Ignacio Business Park. Except at Hamilton Airfield, it is not considered feasible to convert any of the other areas of tidal marsh from their present development.

8) Impact BIO-17 in the Draft SEIR/EIS analyzed the loss of the agricultural ponding areas and concluded the impact was less than significant. These areas are not natural wetland areas, provide lower quality habitat than the seasonal wetland included in the preferred alternative, and if retained would result in lower overall habitat value for the restoration as a whole. Also, the possibility of retaining or replacing the agricultural ponding areas was evaluated as a potential alternative (Alternative Feature 10) and rejected from further consideration for similar reasons.

10) All of the 114 acres of the seasonal wetland are not in the borrow pit area; in fact the borrow pit area contains only about 25 acres of the existing seasonal wetlands, though it does contain 15 acres of non-tidal salt marsh and 15 acres of brackish open water.

The sponsors are trying to avoid the use of pumping for drainage to meet the project objective of a design that has little need of active management. While the existing borrow pit area would be within the swale in the preferred alternative, maintenance of the existing habitat at its existing subsided elevation would make it impossible to drain this area without pumping.

11) In the preferred alternative, the outboard levee has been move to a point 1,500 feet from the south lagoon, which is considered adequate to reduce the visual impact to less than significant.

12) Noise impacts are discussed in the *Noise* section in chapter 4 of the Draft SEIR/EIS, and mitigation measures are presented in that section that would reduce the impact to less than significant. Construction noise would still be audible for some of the BMK residents when grading and improvements are done on the south lagoon levee and other parts of the expansion site near residential areas, but should be relatively temporary in duration.

13) Mitigation measures are provided to reduce impacts BIO-6, BIO-7, and BIO-20 to a less-than significant level.

I-10.10

See Master Response 17 regarding agriculture. Also see Marin County Community Development agency Comment Letter (L-9), in which the CDA staff state that the CWP agricultural policies do not apply to the proposed project as it is not deemed "development". Regardless, the remainder of this response discusses the CWP policies on agriculture in relation to the proposed project for the benefit of the reader.

The comment refers to a number of topics under letter item "IV. Agriculture Policies" that are both directly and indirectly related to agriculture policies found in the Marin Countywide Plan. The following response addresses all these topics individually.

CWP Policy EQ-2.45 - As described in the CWP, the purpose of policy EQ-2.45 is for the County to "foster the enhancement of the wildlife and aquatic habitat value of the diked historic marshlands subzone." Additionally, the policy encourages land uses that include "restoration to tidal status, restoration to seasonal wetlands, agriculture use…" and also states that when development is proposed that "priority should be given to water oriented uses such as public access and low intensity passive recreational and educational opportunities." Although the policy does state that any of the mentioned land uses are allowable, it does not state whether one type of use has greater weight than another, or rate the weight of the uses in any way. As such, the purpose of the proposed action to "create a diverse array of *wetland and wildlife habitat* at the BMKV and HAAF sites that benefit endangered species as well as

other...species." is actually consistent with Policy EQ-2.45. A clarification has been made to the analysis under LU-1 in the Final SEIR/EIS. Furthermore, table 3-2 describes the total post restoration acreages that are expected under each alternative, which shows the different habitat mixes including the amount of upland, tidal salt marsh, seasonal wetland habitat that would be present on the expansion site. The discussion provided on pages ES-10 through ES-13 provides an evaluation of how the proposed action meets the goal and objectives of the HWRP.

CWP Policy EQ-2.49 – Policy EQ-2.49 is described as part of the regulatory setting section on page 4-109 of the Draft SEIR/EIS. As described in the CWP, the purpose of policy EQ-2.49 is to ensure that any development that is proposed to occur within the Bayfront Conservation Zone is properly evaluated for the potential impacts the development may pose on habitats in this zone, and to ensure maximum possible habitat restoration and protection. The project meets this CWP goal. The Draft SEIR/EIS evaluates all the potential biologic, geologic, hazard, aesthetic, and many other environmental impacts that could occur as a result of the project. Thus the requirement to prepare an "environmental assessment" in the context of the policy is fulfilled with the Draft SEIR/EIS. Comments related to Alternative 5 (in relation to EQ-2.49) are addressed in the response to comment I-10.10.

CWP Policies A-1.6 and EQ-2.58 - As described in the CWP, the purpose of policy A-1.6 is to minimize impacts to agricultural lands by preventing or mitigating for the loss of productive agricultural land within the Bayfront Conservation Zone. The proposed action would result in the loss of current agricultural lands on the expansion site. However, the conversion of the BMKV expansion site from agricultural production to a restored wetland habitat is not considered a significant impact because the site is not prime, unique farmland or farmland of state importance, agricultural is not considered economically sustainable on the BMKV expansion site, and production on the site constitutes a very limited role in the county and regional agricultural economy. Agricultural production on the site results in less than 1% of the total Marin County production of oat and hay (SFIA 2002). Furthermore, the value of the agricultural land has been documented as being poor in quality for farming due to a number of factors including: poor soil quality, poor drainage, and a lack of water supply (Gustasson pers. comm.). The site is recorded as being farmland of local importance, however, in accordance with CEQA Guidelines and professional practice, the SEIR/EIS significance threshold does not consider loss of locally important farmland as significant impact. Regarding the prior EIR/EIS analysis of agriculture see discussion in Master Response 17.

Visual Resources/Aesthetics Impact Conclusion Clarification – The comment identifies a section in the GRR, not the Draft SEIR/EIS. The Draft SEIR/EIS, in accordance with CEQA Guidelines, analyzes the impacts on visual resources or aesthetics in relation to the proposed action in 2 ways: 1) by analyzing the physical changes to the aesthetics on the BMKV expansion site itself (Impact AE-1), and 2) by the changes in the views of the site from adjacent land uses (Impacts AE-2 and AE-3). Regarding the site aesthetics itself, the Draft SEIR/EIS concluded that although the project would change site aesthetic character (from agriculture to tidal wetland, seasonal wetland, and upland), this impact is determined to be less than significant, and for some viewers would be perceived as attractive and positive (thus supporting the cited statement on page 4-122 of "maintaining or improving on the visual resources of the expansion site itself"). The Draft SEIR/EIS also evaluated potential obstruction of views of the site resulting from the construction of improved and new levees near the BMK residential development. Impacts related to obstruction of views were found to be significant in the Draft SEIR/EIS. With the changes in the preferred alternative (reduction in new and improved levee heights and movement of the outboard levee further from residential development), the Final EIS/EIS analysis concludes that the preferred alternative would have a less-than-significant impact related to obstruction of views.

I-10.11

See Master Response 9 regarding visual resources.

The *Aesthetics* section in chapter 4 of the Draft SEIR/EIS identifies that views of San Pablo Bay are partially obstructed by the existing outboard levee, which ranges in height between 6 feet and 8 feet NGVD. Discussion of Viewpoint 5 does not include an apparent view of San Pablo Bay from street level; the views noted of lagoon, farmland, hills, and utility structures, which are unobstructed.

The outboard levee is difficult to see in the field and difficult to see in the photos in the *Aesthetics* section because the vegetation on the outboard levee is the same color as the vegetation in the adjacent farmland and fallow land and because it is between 5000 and 8000 feet from the viewer.

The partial obstruction of San Pablo Bay from first floor views was identified by visual observation in the field that the area of San Pablo Bay immediately east of the outboard levee is not apparent from the viewpoints and from the line-of-sight analysis in appendix F, which identifies that the outboard levee obscures views of the first several thousand feet of San Pablo Bay from Bel Marin Keys.

The preferred alternative would raise the south lagoon levee initially by only 1 foot in most locations, with settlement to 5 feet NGVD, and this should have minimal to no affect on middle-range views of the BMKV expansion site and no effect on long-range views. The new outboard levee has been moved to 1,500 feet south and east of the lagoon and the initial construction height lowered by 2 feet to 10 feet NGVD. These changes would reduce this impact to a less-than-significant level.

Comment Letter I-11

From: "Jolliffe, Eric F SPN" <Eric.F.Jolliffe@spd02.usace.army.mil>
To: "'rwalter@jsanet.com'" <rwalter@jsanet.com>
Date: 9/3/02 4:03PM
Subject: FW: dredgings

-----Original Message-----
From: gkrone2@juno.com [mailto:gkrone2@juno.com]
Sent: Friday, August 23, 2002 6:52 PM
To: ejolliffe@spd.usace.army.mil
Cc: gkrone2@juno.com
Subject: dredgings

We were told by some environmental? person that the dredgings from Novato creek (which is fed by natural watersheds with no industrial or commercial discharges) were probably too contaminated to be placed on land (while they have in the past with no dire consequences.

But in any case tell my why dredgings from Oakland and Alameda and other such heavy industrial and commercial areas would be so much cleaner and desirable. I-11.1

Also, in any case, please advise as to your environmental and quality control contacts that evaluate the suitability of such dredgings.

I am not against land filling dredgings (if that is an option so much better than dumping them off the continental shelf). To put it quite bluntly, having been an active sailer, I have always considered the procedure of dumping the dredgings back into the bay as beyond: "stupid make-work ". I know the story about the out going tides flushing them all away - some does and much does not - maybe some of those even flushed up here to contaminate our silt. Not all of our water comes from Sacramento, as we both know that the bay water is salty beyond Benicia.

I also believe that a major needed housing project was stalled for many years, and then finally killed - in most part due to the desire of some to have swamps and marshes instead. Based on recent information it seems that some of that was a cover for the background desire to dump dredgings on land - possibly to circumvent another flag waving crowds mission to prevent encroachment on the bay. I-11.2

With all of the land available It seems this all could have been done with something for everyone - instead of this much to much one-sided steam roller that seems to be in motion.

Would appreciate any of your answers and comments

GFK

Tom Gandesbery tgandesbery@SCC.CA.gov
Calif. Sate Coastal Conservancy 510 286 7028
1330 Broadway 11th flr
Oakland, CA 94612-2530

Cathy Osugi fax 503 231 5187
USF&WS (NWRS/RPL)
911 NE 11th Ave. P " " 2096
Portland, OR 97232-4181

Eric Jolliffe ejolliffe@spd.usace.army.mil
USA CofE SF Dist. 415 977 8543
333 Market St 7th flr
San Francisco, CA 94105

Subject: BMK Unit V Exp
Ref: Report of July 2002

7/27/02

To Whom it may concern:

I had an opportunity to leaf briefly through your rather comprehensive report, and need the following clarifications and verifications.

1. In the past I had registered my claim to parcel 157-171-07, both in writing and over the phone. From the scale of the maps presented and the indiscernible border lines, I can not be sure as to whether that claim on the 7.93 acre parcel is being respected. This in an outgrowth of conversations and offers made to the previous owners before, during and after the court settlement between CQ and the Conservancy.

I-11.3

2. That parcel has fallen into disrepair and vandalism during the interim. The use I intend would correct that condition and also complies with the communities request for a proper buffer zone, with attentive care, between it and your operations.

3. So my question at this time is whether that claim is being respected and/or should I file an official lien.

4. What other office(s) should be contacted in this respect

G F Kroneberger
Box 5067
Novato, CA 94948

G F Kroneberger

Gkrone2@juno.com 415 883 6813

PS On several occasions I have requested to be included on your distributions - this has not taken place.

Please excuse the compactness of this correspondence as I wanted to keep it down to one page.

RECEIVED
JUL 29 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

I-11 G. F. Kroneberger

I-11.1

See Master Response 10 regarding dredged material quality and sources. All material proposed for use at BMKV must be determined suitable for wetland cover material by the DMMO, which is hosted by the Army Corps of Engineers, 333 Market St., 8th Floor, San Francisco, CA 94105 (Contact David Dwinell (415) 977-8741),

I-11.2

One of the project objectives is to beneficially reuse dredged material, if feasible. The HWRP and BMKV expansion sites are both heavily subsided. Use of dredged material is proposed both to accelerate the timeframe necessary for establishment of elevations favorable for the formation of tidal marsh and to provide an opportunity for beneficial reuse (thus avoiding in-Bay or in-Ocean disposal). . The intended use of dredged material has been considered and disclosed for a long time—in early planning for the LTMS, in the EIR/EIS for the HWRP in 1998, and in project planning for the BMKV expansion.

I-11.3

The Conservancy holds title to the subject property and is not aware of any claim. Also note that the property is not currently within the boundaries of the restoration project described in the Draft SEIR/EIS. The Conservancy would take steps to prevent vandalism and illegal dumping on the property. The website, mailing address and phone number for the California State Coastal Conservancy office: 1330 Broadway, Suite 1100, Oakland, CA 94612, (510) 286-1015.

Comment Letter I-12

JEFFORY MORSHEAD
5 Bon Air Rd., Suite 108
Larkspur, CA 94939

July 25, 2002

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA
94612-2530

Re: Bel Marin Keys Unit V Expansion
Hamilton Army Airfield Wetland
Restoration Project

The EIR should include a statement such as:

1. *In the likely event that federal funding is delayed or withdrawn and or the runway is requisitioned for Homeland Security, there should be a provision to delay The Unit V Expansion (and for fininding an alternate place for Dredged Material Placemen).* I-12.1

2. *Only clean non-toxic materials should be permitted.* I-12.2

Please acknowledge receipt of these suggestions.

J. Morshead

Jeffory Morshead, Retired

C: Hamilton Reuse Committee Private 401 C-3

RECEIVED
JUL 26 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

I-12 Jeffory Morshead

I-12.1

Comment noted. At the present, the project is being considered for Congressional authorization as part of the Water Resources Development Act of 2002. If authorized, the project would be funded by subsequent Congressional appropriation acts. At the present, no such request for use of the Hamilton Airfield for homeland security or any non-wetland use exists.

I-12.2

See Master Response 10 regarding dredged material quality and sources. Chapter 3 of the Draft SEIR/EIS specifies that the project would only accept material determined to be suitable for wetland cover material by the DMMO.

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WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

Comment Letter I-13

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: GUENTHER & HRSEL BRAUN
Address: 116 BAHAMA REEF, BEL MARIN KEYS
Phone Number: 415-883-8388
Email: GUENTHERBRAUN@MSN.COM

Comments: Change your tidal and wetland habitats objective and include PRESERVATION OF EXISTING WILD LIFE HABITATS, IT IS A MUST AND NOT AN OPTION.

Center your construction close to the bay shoreline and not close to Bel Marin Keys.

Explanation:

The Bel Marin Community has consionsly preserved its environment and its friendly outlook on wildlife. Our yards and streets are kept clean, water quality is excellent, we recycle our trash and maintain many public parks at our expense.

Wildlife is coming to our community in ever increasing numbers. Deer, foxes, wild geese and white pelicans to name a few.

Around 1982 wild geese were seasonal. I single young goose joint up with a domestic one (white) and decided to stay year round. Over the years the flock grew and we now have hundreds of wild geese year round. There where no white pelicans in the past. Our friendly neighborhood played a great role in this wildlife development. I-13.1

Your current plans will disturb wildlife habitats.

Trucks, noise, construction and landfill will destroy existing habitats and a growing wildlife population.

You can not dump 4' – 12' of dirt on top of existing habitats and disrupt nesting areas and the white pelicans at the Pond and in waters immediately south of the south lagoon levee.

Would you allow private industry to disrupt existing wildlife?

Therefore, minimize disrupting what is there; strive for a well-balanced dry and wetland environment.

Modify your plans **and move any construction activities close to San Pablo Bay. Create a small wetland habitat to be shared with preserved dry land habitats. Wetland at the expense of dry land is not a choice. All species combined , including the human race, will live in harmony if you make it happen.**

Replace alternative 1,2 and 3 and let your mind and outlook grow beyond preserving endangered species.

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

GUENTHER BRAUN

I live at 116 Alhambra Reef.

I'd like for you to give consideration to the potential diminishing property values at Bel Marin Keys. I think you can clearly understand that insurance is one variable. Traffic towards Bel Marin Keys is another variable. We don't know whether these features will be maintained. Safeguarding our properties is another variable. Novato Creek is another one, so I don't think it is clearly understood the potential many risks we have to our properties and to our living standard, as we know it today. I-13.2

Certainly, I pointed out earlier levees with trails, levees at a four-foot level, trails on top of it. Infringing on the current privacy of home owners is another risk. I-13.3

To that end, I'd like for you to very seriously consider putting sufficient funds into escrow or setting up bonds which can be used to reimburse Bel Marin Keys citizens should your work have an adverse effect on the living standard and property values. I think you need to have some sort of assurance that have the recourse and have a way to diminish our risk. I-13.4

Thank you.

I-13 Guenther and Ursel Braun

I-13.1

The Draft SEIR/EIS discussed the effects of the proposed project on existing wildlife habitats and identifies mitigation to reduce the effects during construction. See the Master Response 11 regarding habitat design and Master Response 12 regarding existing wildlife habitats. The project goals and objectives are those previously identified for the Hamilton Wetland Restoration Project. As this is an expansion of the authorized HWRP, the goals and objectives for the BMKV expansion must be the same as the existing project.

I-13.2

See Master Response 5 regarding potential project effects on flood insurance, Master Response 16 regarding potential project effects related to construction, Master Response 6 regarding potential project effects on Novato Creek morphology, and Master Response 2 regarding potential project effects on flooding.

I-13.3

Presumably the comment concerns potential spur trails to the south of the BMK south lagoon. In the preferred alternative, the spur has been deleted.

I-13.4

Comment noted.

August 27, 2002

Comment Letter I-14

Nancy Kubik
192 Caribe Isle
Novato, CA 94949

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway 11th Floor
Oakland, CA 94612-2530

Eric Jolliffe
U. S. Army Corps of Engineers
San Francisco District
333 Market Street 7th Floor
San Francisco, CA 94105

Dear Sirs:

As an 11 year resident of Bel Marin Keyes, I am happy to share local knowledge to facilitate the Bel Marin Keyes Unit V expansion of the Hamilton Wetlands project. I would like to mention a few things that EIR-EIS authors Jones and Stokes may not have fully understood as they did not have the benefit of seeing the ecosystem over the years.

1) Placement of the Bay Trail and Nature Center.
My understanding is that there is to ultimately be a connecting trail which will encircle the Bay. In Novato, the connecting point to the north of BMK Blvd.is at Hamilton Drive. See Map. If the Bay Trail to the south of BMK Blvd. (Bel Marin Keyes Blvd) is to the west of Pacheco Pond the 2 areas will be about 1/4 miles apart. The 2 ends will almost be visible to each other. Signs will be clear. People will not be walking along the section of BMK Blvd which is narrow and has no sidewalks. This road is dangerous. I-14.1
We had a fatality along this section several years ago. The road narrows even further as it curves up over a little hill. Visibility is very poor along the curves. We have drivers lose control in this area several times a year. I do not feel it is a suitable area to increase the foot traffic as would happen if the trail were to go along the east of Pacheco Pond. I know the increased traffic into the neighborhood along this section of road would be a burden to the BMK community as well. BMK Blvd. is the third most traveled road in

Marin County. It has only one access and egress point. The only mitigation would be to widen the road and install a berm and sidewalks on the other side of berm to protect the walkers and install gates to protect the community from increased traffic.
This, however, would not protect the bird community. We have huge eucalyptus trees – I know, they are not indigenous but the birds don't seem to mind- that harbor Egrets and Herons. The site rivals Audubon Canyon Ranch. Fortunately the trees are on private property and there is no plan to cut them down. These trees abut the parking lot in which Plan 2 and 3 place the nature center. The birds come from miles around to sleep in the trees and to nest. I feel the birds would be disturbed by construction and by increased traffic in the area. Their mitigation is to place the nature center at Hamilton on the City of Novato property.

Another plus for putting the trail along the west side of Pacheco Pond is that the workers in the Industrial Park would have access to a lovely and safe trail nearby and the birds are already used to humans in that area. I-14.1 Con't.

The portion of the Bay Trail north of BMK Blvd. goes to a road just under highway 37 and can very easily be extended to Vintage Oaks Shopping Center and even beyond that with a spur trail along the north side of Novato Creek up near the Novato Hospital. I have walked there easily. People along that trail have dogs with them. People in Hamilton have dogs also. I object to your plan to exclude dogs from the section of the Bay Trail through BMKV. What are we to do with the dog if we are walking from Hamilton to Vintage Oaks? The Las Gallinas Sewer District off Smith Ranch Road has an area of habitat for wildlife. Dogs are permitted in this area on leash. I suggest you study this area for a reference. I have marked it on the map.

2) As a long time resident and walker and nature observer I am aware of the indigenous wildlife in our area. I did not see many of the species mentioned in the EIR-EIS so naturally there was no mention of mitigation for them. We have 3 deer families. I do not know their range. I do know they have fawns each year so there is clearly enough habitat for them to breed. I do not know if they are isolated or can access the deer on the west side of the freeway through wildlife corridors. I have seen a 2 point buck who I saw as a fawn and yearling as well. There are rabbits, skunks, raccoons, possums, snakes including rattlesnakes, ground squirrels, vole, mice, rats, gophers and moles. There is a complex web of life which involves the I-14.2

oat gleanings and the water in Pacheco Pond. We have, in the trees and structures, Golden Eagles, Barn Owls, Screech Owls, and bats (important for mosquito control) . Various other birds nest and feed within the protection of the blackberry bushes. Mammals also use them for protection and food. Every year in August and lasting usually until mid September the wild Canadian geese come in by the thousands. They feed in the oat fields. They fly directly over our houses about 9:30 – 10 am and back again in the evening around dusk. Each day the groups grow larger until suddenly – they have flown south.

I would like to see a plan to protect these animals and birds which already exist and which form a diverse web of life in BMKV. Right now I only see a plan to eliminate their habitat by removing most of the upland grasses, cutting the trees, and removing the buildings and the blackberry bushes which harbor them. This is contrary to the mission statement for the Coastal Conservancy. I feel we can add wetland habitat AND protect many of our existing species AND use up more dredge spoils (hopefully those from BMK in this sensitive area so as to maintain the same seeds etc.) by the following plan: I-14.2 Con't.

Move the new levee to at least 2000 feet or more to the south and west of the existing south levee in BMK. This could increase upland habitat – hopefully enough to sustain breeding populations - as much of the area between Pacheco Pond and the BMK south levee would be a swale with seasonal wetlands and overflow capacity from Pacheco Pond or the South Lagoon, and upland grass including oats, berry bushes – much as it is now. More fill might be needed for this. The existing ecosystem could be retained. Keep existing trees and barns and build and plant new diverse habitats and nest sites for the larger birds. This reduces the amount of wetland, but wetland alone will not provide the necessary diversity. Where will the Golden Eagle nest? The Egret? These are integral to a wetland habitat. If sufficient habitat is left as it now is, the addition of wetland can be seen as a plus and a more intact ecosystem retained.

I would expect there to be a wildlife corridor, both in the completed plan and at all times during construction which provides access to other similar habitat as well as fresh water. I feel this will also reduce the amount of animals fleeing construction only to enter the habitat of the Homo Sapiens and associated felines and canines. I-14.3

For the above reasons I like Plan 2 with the following changes:

1) Bay Tail West of Pacheco Pond to connect with the northern portion of the Bay Trail and avoid exposing walkers to narrow and dangerous portion of BMK Blvd.
2) Nature Center at Hamilton on the City of Novato property to protect nesting egret trees at BMK housing entrance and avoid congesting BMK Blvd and negatively impacting Homo Sapiens habitat.
3) New levee 2000 feet or more south and west of existing BMK South Lagoon levee (this also mitigates the loss of the view from the South Lagoon homes and meets the flood control needs) to provide habitat for existing species and provide more diverse ecosystem.
4) Leaving existing trees and barns for existing nests and bat habitat
5) Permit dogs on leashes

I-14.4

By attending to these issues and improving on these ideas, you will have created a wonderful new combination of improvements for all species concerned. I look forward to seeing these points addressed in the final EIR-EIS.

Sincerely,

Nancy Kubik

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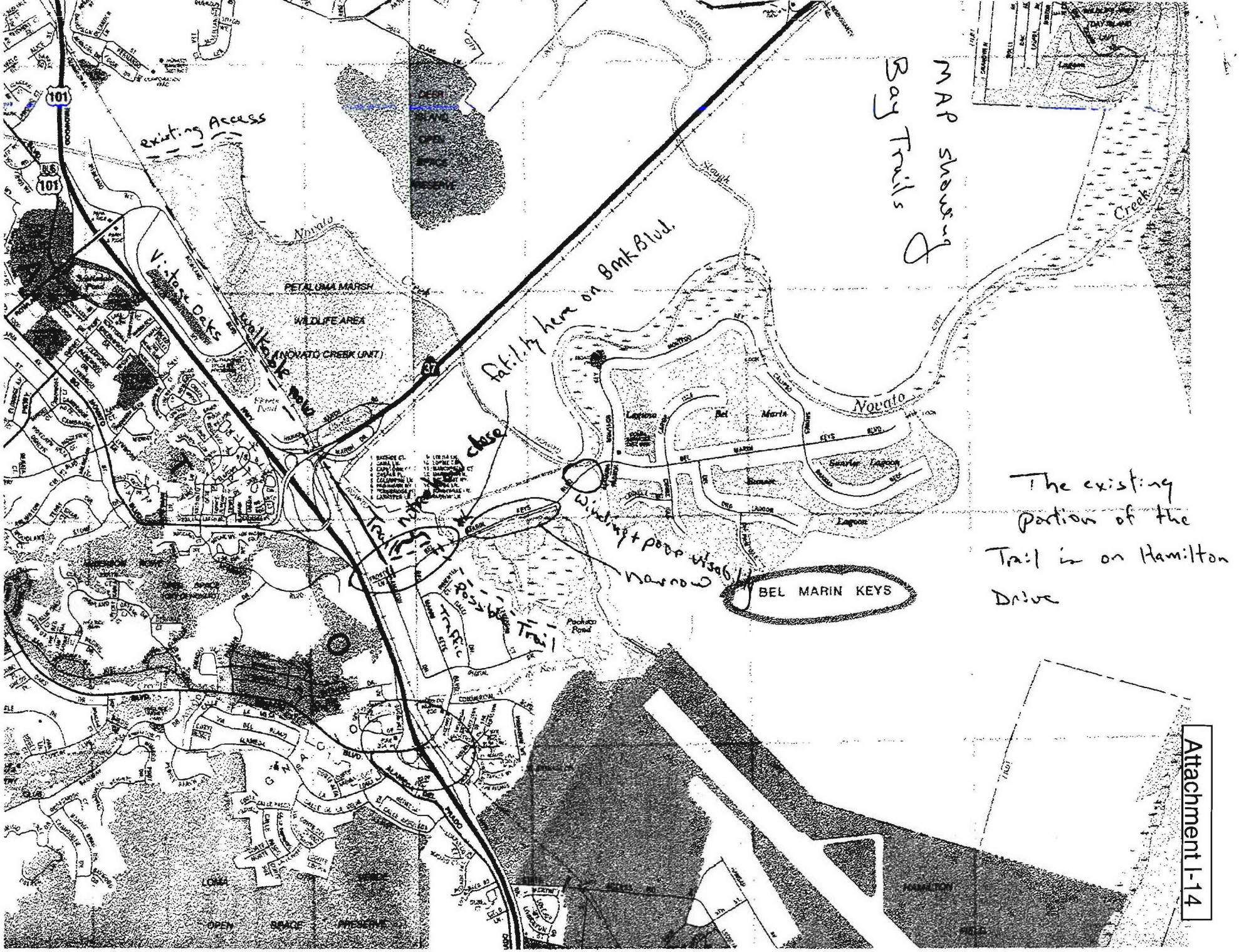
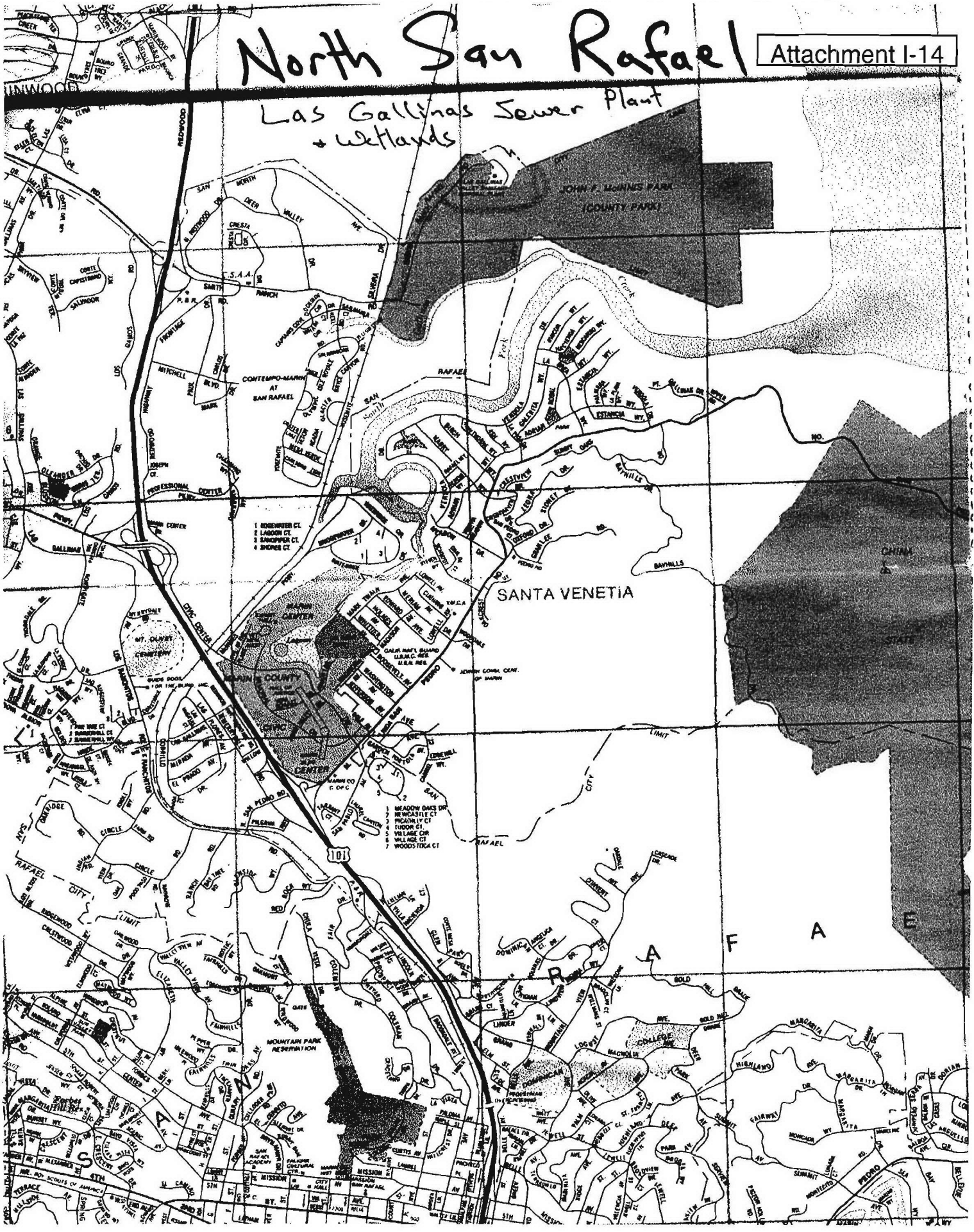

MAP showing Bay Trails
existing Access
Vintage Oaks
Redwood Blvd
PETALUMA MARSH
WILDLIFE AREA
(NOVATO CREEK UNIT)
Novato
Creek
Bel Marin
Lagoon
Lagoon
Lagoon
Lagoon
BEL MARIN KEYS
Hamilton
Hamilton
Hamilton

North San Rafael

Attachment I-14

Las Gallinas Sewer Plant
+ Wetlands



BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

NANCY KUBIK

Hi, I'm Nancy Kubik. I live at 192 Caribe Isle.

And I too am concerned about the resident species -- not just ourselves but the ones that live on the land. We have three deer families on our land out there. And we have rabbits, opossums, raccoons, ground squirrels. I would like to know how these species are going to be protected and what's going to happen to their current habitat -- it's obviously doing to be reduced -- but how far is it going to be? Will it be too low for breeding populations? That's not mentioned and I'd like to know that.

I'd also like to know what the plan is for their protection during construction, which I imagine would include a consistent wildlife corridor and access to fresh water so they stay in their habitat and not our habitat.

I-14.5

And each fall we get two to three thousand Canadian geese flying in and out of the oat fields over our houses. I don't see that mentioned at all in the report. And I don't see any mitigation for that.

We have the golden eagles being mentioned and we have the egrets nesting. I want to know what the interpretive center trailhead auto and foot traffic alternatives 2 and 3 will do to these egrets who are right on the edge overhanging the parking lot right along the Audubon Center, but I don't want to tell too many people that. I'm very concerned that the development will adversely affect these resident populations. And in the final EIR/EIS, I would like to see attention paid to mitigate this.

I would like to see trees left. I'd like to see structures left.

I'd like to keep the interpretive center at Hamilton and move the levee at least 1000 feet further southwest, which I think would provide room to put in even more dredged soils and protect the deer families by giving them more habitat.

I-14.6

NANCY KUBIK, continued

Thank you very much. Oh, I want to mention, too, that if you go to the sewer pond off Smith Ranch Road, you'll see dogs on leash walked with abundant wildlife, and they don't seem to be a problem. And I'm wondering about the legality of restricting dogs on the Bay Trail, which, as I understand it, really encompass the entire Bay region -- if that would be of the use of a trailhead. Would that be considered all right in other areas and suddenly not in ours, if that would be wrong? I-14.7

Thank you.

I-14 Nancy Kubik

I-14.1

In the preferred alternative, the interpretive center would be located on City of Novato land west of the Hamilton seasonal wetland restoration area and not on BMKV, meaning that traffic to the interpretive center would not effect Bel Marin Keys Boulevard.

The impacts of putting the Bay Trail on either the west or east side of Pacheco Pond on existing wildlife are discussed in the *Biological Resources* section of chapter 4. As noted in the Draft SEIR/EIS there are potential significant biological effects of routing the trail on either side of the pond and mitigation is proposed to reduce those effects to a less-than-significant level. It should be noted that a trail on the west side of the pond would have to cut directly through a willow riparian habitat at the confluence of Arroyo San Jose and Pacheco Creeks and would have to be directly adjacent to the edge of Pacheco Pond whereas a trail on the east side can be separated from the pond in areas by location on the slope of the levee. In addition, the City of Novato and the County of Marin have both endorsed a trail on the east side of Pacheco Pond in the land use plans, as noted in the Draft SEIR/EIS.

The design of the trail from Bel Marin Keys Boulevard to Hamilton Drive is not within the scope of this project. Safety concerns regarding this or any other segment of Bay trail would be a subject for the agency that proposes to extend the Bay Trail. Trail routing has been moved to the west side of Headquarters Hill to avoid a future Bay Trail having to be routed along the curved segment of Bel Marin Keys Boulevard near the entrance to the Bel Marin Keys residential area.

The discussion in chapter 4 has been expanded to clearly elucidate the effects related to removal of eucalyptus trees on the east of Pacheco Pond. The eucalyptus trees on Headquarters Hill (the grove near Bel Marin Keys Boulevard) are on private land and are not part of the restoration project. Direct disruption of nesting would be avoided; however, the groves near the barn and south of the barn would need to be removed outside the breeding season to facilitate the levee improvements and the site preparation and dredged material placement for the preferred alternative seasonal wetlands. With the mitigation proposed in the document, the impact on nesting by species that presently utilize these trees would be less than significant.

The BMKV expansion is a wetland restoration project with a priority on creating wetland habitat for threatened and endangered and other migratory and resident species. With this priority in mind, as discussed in the *Biological Resources* section in chapter 4, the potential negative effects of dog access on the species expected to utilize the restored wetland areas and on the existing wildlife of Pacheco Pond can be avoided by prohibiting dog use on the site. Dog use is currently forbidden at Pacheco Pond at present for the same reason; to allow dogs on the BMKV expansion site would be incompatible with the project goals and the existing management of Pacheco Pond for wildlife.

I-14.2

See Master Response 11 regarding habitat design and Master Response 12 regarding existing habitat. As noted in Master Response 1, the preferred alternative, Alternative 2, has been changed to move the new outboard levee 1500 feet from the south lagoon to enlarge the swale to increase the available upland

habitat, enlarge the available overflow volume, and reduce the aesthetic impacts of the new levee. The impact of the project on existing wildlife relative to structure and tree removal has been elaborated in the Final SEIR/EIS; however given the avoidance of direct disruption to nesting and the common nature of the affected species, this impact is considered less than significant.

I-14.3

Site preparation and placement of dredged material would take place over a 13-year construction period. Over time, as existing habitats are converted, the existing wildlife would migrate to other portions of the site and ultimately to adjacent areas. Egress from the site would not be blocked, and it is expected that common wildlife species that currently utilize the site would gradually be displaced to adjacent areas such as Pacheco Pond, the agricultural fields north of Bel Marin Keys Boulevard, and areas beyond. There is no specific wildlife corridor currently planned for the site. It should also be noted that, over time, the site would provide a diverse array of upland, open water, seasonal wetland, emergent marsh, and tidal marsh that can be utilized by many of the same species that use the existing site. Overall, as concluded in the Draft SEIR/EIS, the effect of common wildlife species and their habitats is expected to be less than significant.

I-14.4

1) See response to I-14.1 concerning Bay Trail routing.
2) This has been incorporated into the preferred alternative.
3) See response above concerning levee location.
4) See response above concerning existing wildlife.
5) See response above concerning dog use and impacts.

I-14.5

See response above concerning existing habitat.

I-14.6

See response above concerning levee location.

I-14.7

The designation of a trail as part of the Bay Trail does not establish any requirements to permit or prohibit dog use. Since construction and management of the Bay Trail is implemented by local agencies and agencies whose land the trail crosses, the decision about dog use is on a case-by-case basis depending on the overall management parameters for the land crossed. In some areas, dog use is allowed. In others, dog use is prohibited particularly where the trail crosses through sensitive wildlife areas. The lead agencies believe that Pacheco Pond is a sensitive wildlife area and the BMKV expansion site, over time, would become a sensitive wildlife area and that dog use is incompatible with the project goals and objectives because of the potential disruption of existing and future sensitive species.

Comment Letter I-15

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

JOHN BOSCACCI

My name is John Boscacci. And I live in Bel Marin Keys, 48 Caribe Isle.

My comment really is just that all the projects nowadays have mission statements. I would like you to amend the existing mission statement to include the concerns of the residents of Bel Marin Keys having to do with the waterway insurance and anything that might negatively affect the lifestyles of the residents of Bel Marin Keys. I would like that included in the mission statement as a show of good faith for our working with you as a community. I-15.1

Thank you.

I-15 John Boscacci

I-15.1

The project goals and objectives for the BMKV expansion are those previously established for the HWRP. These are in effect, the "mission statement" for this project, which is an expansion of the authorized HWRP. Since this is not a new project, the goals and objectives remain those for the original project. It should be noted that several of the objectives (see page ES-3 of the Draft SEIR/EIS) include consideration of adjacent areas such as "include buffer areas along the upland perimeter of the project area, especially adjacent to residential area" and "to be compatible with adjacent land uses and wildlife habitats. The comment about "waterway insurance" is unclear; if this comment is concerning flood insurance, please see Master Response 5.

Comment Letter I-16

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

HUGH SMITH

My name is Hugh Smith. I'm president of the homeowners' association of the Gardens. It's a 30-unit townhouse development about a pitching wedge away from where the interpretive center will be, as shown in Alternatives 2 and 3.

I am a big fish in a little pond obviously. However, I've had personal experience with inviting the public to our community, in that once a year we invite the public to come to a garage sale. In two separate incidents I've had tools stolen on those days. And I've talked to many other residents who have had things stolen as a result of inviting people to our community. It's partly because we are not equipped with the types of gates and fences and security to handle an influx of the public, so it doesn't work out too good, even though people get to sell their kayaks and stuff.

I would just ask that if this be a success, i.e., the interpretive center as planned, where it's at Bel Marin Keys that you consider it a success and you only have ten parking spaces. Then the cul-de-sac where I live will get the overflow. That's just the most obvious concern that needs to be addressed, never mind inviting the public to an area that is having difficulty handling it just one day a year. I-16.1

Thank you.

I-16 Hugh Smith

I-16.1

Refer to Master Response 14. In the preferred alternative, the interpretive center would be located on City of Novato property near Hamilton.

Comment Letter I-17

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

EVELYN BECKER

I request that the Bel Marin Keys dredged soils materials be listed in the EIS/EIR as preferred sources of materials, given the Regional Board's criteria for wetlands restoration. It is a local geological content and native seed content which is critical to the success of local restoration projects. Also, we'd like to have something in writing from you, a memorandum which would assure us that our dredged soils are preferred. And here again is a report of that. I-17.1

I-17 Evelyn Becker

I-17.1

See Master Response 10 regarding dredged material quality and sources. As noted in the master response, the project sponsors are willing to accept BMK CSD dredged material during the dredged material placement phase, provided that the material is determined to be suitable cover material for use in the wetland project by the DMMO, its reuse is cost effective to the project, and the timing and other parameters of the material's availability are consistent with the project implementation process.

Comment Letter I-18

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

TOM HARRISON

I'm Tom Harrison. I'm the district commander of the United States Sail and Power Squadrons, an international boating organization. We have helped in the finding of toxic dumps at Hamilton. We deal in recreational boating. And we plan to help in your project.

Now, my concern is, number one, that my wife and I found the benchmarks to locate the toxic dumps at Hamilton landfills 26 and 28. We worked with the Corps of Engineers. I have in my hands a report that I passed on to the Corps about a low-level radiological waste disposal that has been lost, but it is believed to be located near a creek tributary to the Bay. And this was an engineers study by Woodward-Clyde Consultants written in 1987. Now, I don't know whether you have that information or not. I-18.1

However, there's also another thing about the east levee. And it says that these areas -- let me read - It is not known to what extent contamination these or other chemicals is more widespread than the [inaudible] Bay sediments in the aquatic life or to what extent high accumulation of pollutants in the food chain threatens aquatic life, waterfowl, or public health. I-18.2

Now, this was written in 1987. They haven't located the source of that low-level toxic dump. They looked for it, but they did not find it. I-18.1

But the concern is that we in Bel Marin Keys have had has been trying to get Novato Creek dredged. And it seems that the problem is that we can't get rid of the dredged soils. Now, it is my feeling that should this project go, we should be assured of getting -- being able to dredge Novato creek so we can get our boats out and use them. Now, there's nothing in your proposal about what we're going to do or what you're going to do to assure that we do that. Now, I would suggest that you incorporate into your game plan that we in Bel Marin Keys will be assured of being able to navigate Novato Creek. I-18.3

Thank you for your time.

I-18 Tom Harrison

I-18.1

The comment concern a former radiological disposal area, identified in the Confirmation Study for Hazardous Waste, Hamilton Air force, Novato, California, Final Report, January 14,1987. This site was located on the HAAF parcel, just south of Pacheco Pond on the HAAF parcel. Two corrugated-metal cylinders containing low-level radiological waste were recovered and removed on September 14, 1988. Independent confirmation of the removal action was confirmed in records of the USAF Radioisotope Committee and the material and associated waste generated by the removal action were containerized and shipped to a waste disposal facility in South Carolina. The Community Environmental Response Facilitation Act Report (April 1994) recommended no further investigation for the former radiological disposal site.

As this site is on the HAAF parcel, has been remediated, and would not be affected by the actions included in the BMKV expansion, this information is not necessary to the impact analysis.

I-18.2

The east levee landfill is located outside the east levee in the eastern area of the Hamilton Army Airfield parcel. As previously stated, the BRAC process is separate from the BMKV expansion; the environmental impact of the currently authorized HWRP was examined in the prior EIR/S.

I-18.3

See Master Response 6 regarding Novato Creek Morphology and Navigation. The Draft SEIR/EIS concludes that the project would not have an adverse effect on navigation in relation to channel depth or width of Novato Creek. The purpose of this project is not navigation and no mitigation is necessary because no significant adverse effect on navigation is expected due to the proposed project.

Regarding BMK CSD dredged sediments, the project sponsors are willing to accept BMK CSD dredged material during the dredged material placement phase, provided that the material is determined to be suitable cover material for use in the wetland project by the DMMO, its reuse is cost effective to the project, and the timing and other parameters of the material's availability are consistent with the project implementation process. If the material is determined suitable, it may assist the BMK CSD in disposing of the dredged material, which would facilitate the BMK dredging project and therefore alleviate some of the existing navigation problems..

Comment Letter I-19

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

MADELINE THOMAS

My name is Madeline Thomas. I live at 136 Montego Key.

I have a question regarding Novato Creek. In the original channel that we had before Charlie Hoover and Jack West in 1966 got together and decided -- without telling anyone or getting a permit from the Corps -- to change the course of the river. They blocked the San Pablo Bay at the mouth of the creek and forced the creek to make a left turn, which is now Marker 25. Instead of the river flowing in its natural course down to San Pablo Bay, which was the southeasterly direction, we do not go to the south anymore, i.e. the outer reach. We did not have problems with siltation in the creek until that change was made.

We feel you should study this problem and consider correcting it, block the outer reach, open up the natural channel going down the Bay to the markers. We have spent thousands of dollars-- tax dollars -- dredging our area. And we are now preparing to dredge it again. Please consider this matter in your report. I-19.1

Thank you.

I-19 Madeline Thomas

I-19.1

See Master Response 6 regarding Novato Creek Morphology and Navigation. The Draft SEIR/EIS concludes that the project would not have an adverse effect on navigation in relation to channel depth or width of Novato Creek or the outer channel to the Petaluma River. The purpose of this project is not navigation and no mitigation is necessary because no significant adverse effect on navigation is expected due to the proposed project. The potential creation or recreation of an alternative channel is outside the scope and authority of the proposed project and is unrelated to any effect of the proposed project.

Comment Letter I-20

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)

JEAN DUCOMMON

I live at 276 Montego Key.

I want to ask this group to look at old charts, because as Madeleine has correctly pointed out there was a much closer break in the levees in the early days. And unfortunately I found that water out there was pretty shallow -- that [inaudible] famous channel did not exist on charts that I gave -- the one chart that I had. But right now using the existing route out of our community by boat, we had deep water basically all the way out to the railroad bridge just south of Highway 37. I-20.1

I-20 Jean Ducommon

I-20.1

Comment noted. Comment is a statement about the Novato Creek channel and makes no comment about the Draft SEIR/EIS, so no response is provided.

Comment Letter I-21

BEL MARIN KEYS UNIT V EXPANSION OF THE
HAMILTON WETLAND RESTORATION PROJECT
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TOM JACKSON

Good evening.

I would like to talk a little about Alternative 3. In Alternative 3, there is no backup levee system, so for that to work from Bel Marin Keys' point of view, you're going to have to build a pump station to combat floodwaters. And this goes back to the F-2 zoning. If you're going to relieve the F-2 zoning -- and we have to pay a million dollars a year and you have to pay million dollars a year of O&M costs just to Bel Marin Keys for insurance, there's also the additional cost of O&M that you're going to have to pay for the pump station, because you're going to need this pretty large facility with a gasoline or diesel engine to power the pumps because you can't rely on electrical power.

You're going to need a road along that levee just -- not just a walking path but a paved road open seven days a week to access that pump station. You're also going to need auxiliary power to the pump station for cleanup and water for cleanup. I-21.1

I build these things all over the world by the way. That's how I am pretty familiar with the facilities. You're also going to need to have to be able to transfer fuel to the motors, to the engineers, so it gets stored for a couple months. It gets old. You'll have to replace, so you'll have to have fuel transfer. That means you have to a plan in place for spills. If you run engines up and then you've got pollution and noise that's going to be added to scare the birds away.

All these things should be addressed in the report. And that's not there yet. By the way, I really hope you get this through, because we're looking forward to it.

I-21 Tom Jackson

I-21.1

See Master Response 3 regarding flood zoning and Master Response 5 regarding flood insurance.

The document has been revised to include access, fueling and electrical power in the alternative description and discuss the noise, air quality, and hazardous materials (spills) effects of a potential pump station in Alternative 3. Given the location near the south lagoon lock, periodic access would be via the temporary bridge over the south lagoon lock, not via the south lagoon levee. Regardless, the document notes that the use of a pump station does not meet the project objectives for a project with little active management (executive summary, page ES-11). It should be noted that Alternative 2 is the selected preferred alternative and the conceptual design for Alternative 2 does not include such a pumping station.

Comment Letter I-22

BEL MARIN KEYS UNIT V EXPANSION OF THE
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MADELINE SWARTZ

My name is Madeline Swartz. I live at 36 Montego Key.

And it's my understanding that both the City and the County are requiring that you meet ultimate flood control or flood channel equivalents in your present design and that none of your current alternatives meet this. This could be accomplished by dredging and thereby improving the flow capacity in Novato Creek, which is listed by the EPA as threatened due to sedimentation, and by using that mud to increase the ponding area in your project habitat, which would provide more upland and transition habitat, which is lacking in your alternative and would lessen the impact of the levee heights by moving them further away from the homes. I-22.1

Now that the mercury content of the sediment in Novato Creek has once again tested within your criteria, will this alternative be examined?

I-22 Madeline Swartz

I-22.1

See Master Responses 2 and 3 regarding flooding, flood zoning and MCFCWCD drainage easements. As noted in the master responses, the lead agencies do not believe that the potential inconsistency with F2 zoning or with the drainage agreements constitutes a significant physical effect on the environment because the project hydrology and hydraulic studies do not identify an adverse effect on flooding. As such no mitigation for flooding, such as an ultimate flood channel or equivalent are included in the document. As such, dredging of Novato Creek is not required as mitigation for flooding.

Regarding the state listing of Novato Creek under Section 303(d) of the Clean Water Act, the current listing is for diazinon, not sedimentation. In 2002, the state proposed to put Novato Creek on a "watch list" for sedimentation/siltation, but this is not formal listing. Listing for sedimentation/siltation under Section 303(d), if it occurs, would be related to water quality, not channel capacity. Also see response to Comment L-1.21.

Regarding BMK CSD dredged sediments, the project sponsors are willing to accept BMK CSD dredged material during the dredged material placement phase, provided that the material is determined to be suitable cover material for use in the wetland project by the DMMO, its reuse is cost effective to the project, and the timing and other parameters of the material's availability are consistent with the project implementation process. If the project is implemented and the material is determined to be suitable, this may assist the BMK CSD in disposing of the dredged material.

In the preferred alternative, the new outboard levee has been moved to a location 1,500 feet from the south lagoon, which would increase the capacity of the swale, increase the amount of upland habitat, and decrease the visual effects on views from the BMK residential area.

Comment Letter I-23

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ROBERT FORSYTHE

I'm Bob Forsythe. I live in Bel Marin Keys. I've owned a home there for 16 years. And I am a long-term member of the planning advisory board there.

First of all, I'd like to say I like the project. And I hope we can work things out. I just want to make sure that it will do more good than harm for us.

I am concerned that the project may not provide adequate floodwater ponding capacity. This has already been addressed by someone a few minutes ago. There's now a 300-acre flood ponding easement in effect to accommodate the overflow of water from the south lagoons. This easement was mandated by the county when Unit IV was built and was based on a provision of three acres of ponding area for each acre of developed upland area. That was a total of 100 acres. We don't actually know if 300 acres is adequate or not. All we know is that we have not been flooded from the south lagoon since Unit IV was completed. I-23.1

Alternatives 1 and 2 provide seasonal wetlands and transitional uplands which could function as ponding basins. Where the useable area is not specified either in acreage or in -- I say "useable area," but there's other areas involved with that. It does appear to be less than 300 acres, however. And that farthest volume is what is available now. I-23.2

Alternative 3 appears to have no ponding capacity whatever. I-23.3

Your stated preliminary conclusion is that the project as proposed will not have an adverse effect on flooding in the local area and so will not require mitigation to that end. We are not satisfied that this conclusion is valid. It must be demonstrated convincingly before we can endorse the project. But even if it were true, you would still be required to either maintain a functional 300-acre ponding or an alternative arrangement that would satisfy our proven ponding requirement in a worst-case scenario. This situation has not been addressed in the draft EIS/EIR. I-23.4

BOB FORSYTHE, continued

400 families and the 84 homes on the south lagoon are at risk here. The project must identify and provide flood ponding capacity that is proven adequate or fully comparable to what in place here and now. I-23.4 Con't.

Thank you.

I-23 Robert Forsythe

I-23.1

See Master Response 3 regarding MCFCWCD drainage easements.

I-23.2

See Master Response 3 regarding MCFCWCD drainage easements, which includes identification of the potential ponding capacity in the preferred alternative.

I-23.3

Alternative 3, would provide 40 acres to be added to Pacheco Pond and 10 acres of emergent marsh around the edge of the expanded pond. The swale area south of the BMK south lagoon would contain about 45 acres of upland and 10 acres of seasonal wetland. These areas would provide ponding capacity onsite, but far less than Alternative 1 or the preferred alternative, Alternative 2 (as revised).

I-23.4

The Draft SEIR/EIS presents the results of the hydrologic and hydraulic studies conducted to date and the conclusion based on those results that the proposed project would not result in an increase in flooding compared to the existing setting. Functionally, this means that the proposed project would not result in higher flood levels in Pacheco Pond or Novato Creek than those that would be present if the project is not built.

Regarding the 300-acre easement, see Master Response 3.

Comment Letter I-24

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SUSANNE GARBER

Susanne Garber, 214 Montego Key.

I'd just like to know how you're assessing the sedimentation efficient northwest of the breach in the levee that you're planning, because it will change as a result of the breach in levee. In other words, behind the houses down that way [indicating]. I-24.1

I-24 Susanne Garber

I-24.1

See Master Response 6 regarding Novato Creek morphology, which discusses the potential effects of the project on the channel width and depth due to changes in tidal prism and opening up a breach to allow tidal flow.

Comment Letter I-25

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DON SWARTZ

Hi, I'm Don Swartz. I live at 36 Montego. I'm also president of the Homeowners Association of Bel Marin Keys.

Two of your three proposals involve breaching the levee on Novato Creek in the vicinity of the mouth. How will you monitor both sedimentation and shoaling as a result of this breach? Additionally, how do you mitigate negative impacts such as flooding and/or decreased navigability as a result of shoaling, increased sedimentation, or movement of the navigation channel due to widening as a result of the breach? Will you provide dredging -- including permits, site, and equipment -- as a part of your mitigation? I-25.1

Thank you.

I-25 Don Swartz

I-25.1

See Master Response 6 regarding Novato Creek morphology and navigation and Master Response 2 regarding flooding. As noted in the master responses, the studies to date have not identified a significant adverse effect on flooding, creek morphology, or navigation and thus mitigation for these effects is not proposed. As discussed in Master Response 6, themonitoring and adaptive management plan for the HWRP has been updated to include the BMKV expansion and includes monitoring of the Novato Creek channel upstream and downstream of the levee breach. This updated plan is included as an appendix to the Final SEIR/EIS.

Comment Letter I-26

BEL MARIN KEYS UNIT V EXPANSION OF THE
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VINCE LATTANZIO

Vince Lattanzio, 1092 Bel Marin Keys Boulevard.

I'm really proud of this community and all the people who came tonight and asked very important questions and have important comments that I'm sure will be addressed about this project. Many of the concerns that we have we share.

You've heard the flood protection concerns and the 300-acre flood ponding area. We'd like to start to translate those concerns into action and plan changes. So we're looking for 2000 feet distance between the south levee and your proposed levee. This will do many things: It will help mitigate the view impact; it will help to create more upland habitat, which is in far more shortage in the Bay Area than even tidal marsh plans, according to restoration scientists. This is an important aspect also to provide some separation between our community and any plan of any sort at all. I-26.1

We do not support a spur into Bel Marin Keys. We think it is not only a privacy issue and a security issue to our community, but we think that the same issue applies to the habitat areas that you are trying to work on. The harvest marsh mouse does not do better with people coming into its habitat; nor is the clapper rail benefited by people traipsing through its habitat areas and observing it. Why, they may not even breed if they're watched. I-26.2

The F-2 zoning area would force residents to purchase flood insurance. If the flood and hydrological reports that you plan on doing in the next phase show that, that might not be necessary. And FEMA agrees that that might not be necessary. And the County agrees that's a mitigation that is viable. I-26.3

VINCE LATTANZIO, continued

The impacts on Novato Creek, including increased sedimentation and reduced flows, is a concern we have. And we are concerned because what we have found in tracking other projects of a similar nature is that, although in the long term there seem to be some of these impacts, you state in the EIR in the short, immediate term there are dire impacts of increased sedimentation and decreased flows. And those need to be mitigated as part of the initial impacts of the project, not as a reaction to oh-we-were-wrong-let's-try-to-fix it-now. We really want that to be studied. I-26.4

And the modeling that someone just mentioned needs to take into account all the actual formation and currents and curves of the creek. I-26.5

The public safety hazards resulting from toxic dust, runoff, and air pollution are a concern that can be dealt with, but it is a concern that is not adequately addressed at this point in the EIR/ EIS. I-26.6

We'd like to see plans of operation where the construction roads and access will be maintained and allowed to happen. We want the deterioration of Bel Marin Keys not to be encouraged through this construction process. It is the third busiest road in Marin County and therefore cannot stand any more traffic. And it's an issue of access. I-26.7

And any promotion of an interpretive center on Bel Marin Keys Boulevard and parking is not acceptable to this community. We prefer the location to be at Hamilton. I-26.8

And we prefer no spur of the Bay Trail into the property. We feel that is an adequate and responsible action on your part. And we understand that if any improvements are necessary at the Bel Marin Keys area that we would be able to have that mitigated through a gated community that you would provide for us. I-26.9

The traffic congestion is a major issue. And noise and dust and how that impacts our living style and our daily lives can be addressed more clearly in the EIR by limiting both access and times of operation. I-26.10

VINCE LATTANZIO, continued

The pest control, mosquito control, and rodent and predator displacement is an important aspect that is not adequately addressed. It can be better addressed in the final EIR/EIS, particularly the fact that when you start disturbing them a lot of the rodents come out of that area and seek shelter. And we're the neighborhood that winds up with the pests. I know this personally, as many of us do, but anytime our neighbor has done any construction we wind up with an infestation of mice. I'm sure the harvest marsh mouse doesn't care as long as he can get there to come into our house and eat what it can, because it's been disturbed -- you're actually disturbing habitat. It's the same thing. How do you mitigate and account for that as well as the predators that will seek shelter nearby, which is opposite Hamilton? I-26.11

The water pollution -- monitoring toxics entering the Bay and the creek from nutrient runoff -- is something that is not adequately addressed at this time. I'm sure you can do a better job in the final EIR. I-26.12

And the viewshed loss is a really key issue. I recommend that in the final EIR that you provide a photo system of views. You already have views taken from our community, but you need to do it from the yards of our homes, which we will give access to, and public areas that are along those view sheds that you do have access to and take a picture with a photo adjustment showing exactly where the levee will be in each of these alternatives, because I think you'll find that the wall you create in each scenario will be unacceptable from the view shed standpoint until you start to reach out and get more space and distance away from the community. I-26.13

Security concerns as a result of the Bay Trail and the interpretive center have been addressed. We just want to see that addressed more clearly in the final EIR. I-26.14

That's it. Thank you. And we look forward to the project going forward as a good project that is a good neighbor. Thanks.

I-26 Vince Lattanzio

I-26.1

In the preferred alternative, the levee has been moved to a location 1500 feet south of the south lagoon levee. This would increase upland habitat, swale capacity, and reduce visual effects. The commenter did not provide evidence for the assertion that upland habitat is in "far more shortage" than tidal marsh. Relevant to the site, the San Francisco Bay Ecosystem Goals Report recommends that the most appropriate use of the BMKV expansion site, from an ecosystem point of view, is to create a wide plain of tidal marsh, something the project is designed to accomplish.

I-26.2

The preferred alternative does not include a spur. The swale area is designed to be a buffer between the tidal marshand the BMK lagoon. Tidal marsh areas, which would be expected to support salt marsh harvest mouse and California clapper rail, would be located to the east of the swale and east of the outboard levee, in the tidal marsh and sloughs.

I-26.3

See Master Response 5 regarding flood insurance.

I-26.4

See Master Response 6 regarding Novato Creek morphology, which includes discussion of sedimentation, and Master Response 7 regarding Pacheco Pond.

I-26.5

See Master Response 2 regarding flooding and Master Response 6 regarding Novato Creek morphology, both of which discussion model assumptions and adequacy.

I-26.6

The Draft SEIR/EIS adequately discussed the air quality and water quality effects of construction. The comment provides no details concerning the alleged inadequacy of the analysis.

I-26.7

In the preferred alternative, the primary construction access route would be via Hamilton. Bel Marin Keys would be the secondary construction access route. Creation of a gated community is not a necessary mitigation measure for any identified significant environmental impact of the proposed project. Construction plans would be developed after the detailed design phase.

I-26.8

Refer to Master Response 14. In the preferred alternative, the interpretive center is on City of Novato property at Hamilton.

I-26.9

As noted above, the preferred alternative does not include a spur. The Bay Trail would be located on BMKV along the eastern edge of Pacheco Pond.

I-26.10

As noted above, the primary construction access route has been moved to the HAAF site, which would reduce construction traffic impacts on Bel Marin Keys Boulevard. Noise and dust are discussed in chapter 4. Mitigation Measures A-1 is included to reduce dust, and Mitigation Measure N-1 is included to reduce noise, including restriction of hours of operation.

I-26.11

See Master Response 15 regarding mosquito breeding habitat and pest/predator displacement. Any displacement of salt marsh harvest mice, if actually present in the disturbed areas, would be to adjacent marsh habitat, not to residential areas.

I-26.12

Impact WQ-9 discussed the potential for degradation in water quality due to runoff from the site into the Bay or Novato Creek. Mitigation Measure WQ-4 includes a water quality monitoring program, which includes assessment of nutrients such as nitrates and phosphorus.

I-26.13

See Master Response 9 regarding visual resources.

I-26.14

Refer to Master Response 14. In the preferred alternative, the interpretive center is located on City of Novato property and there is no spur along or adjacent to the south lagoon. This should address the security concerns mentioned in the comment.

Comment Letter I-27

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KARLA JACOBS

Hello. I am Karla Jacobs.

I live on the creek on [inaudible] shores across from the --

Two things: the flooding that was mentioned from the south lagoon -- the 400 families on the south lagoon. That does not just affect the 400 families and [inaudible] on the other side of the street through our garages and into our homes that way. We had flooding during El Nino right up to my patio within this high [indicating] of my doorstep, so it's a real threat.

Global warming is causing oceans to rise. I don't know if your calculations have taken that into consideration. The water levels are rising everywhere. And nature just does its own thing. I don't know how your report, as we see it right now, can predict the flow of the river. I-27.1

Breaching the mouth of the river is bound to cause siltation. After you finish dredging it, you've breached the river. Where are we then? We want something in your plan to monitor it -- monitor all the breaches immediately and find out what their immediate impact is. We want funds to undo the damage, put it back where it was, and try something else perhaps. But we want to know that mistakes are not going to impact us and our property values. I-27.2

And the other thing that I see from the backyard of my Hughes (house?) is red-tailed hawks, tons of egrets, nighthawks, blue herons. We see mice. There is an eagle's nest. There's a family of barn owls. I understand that the barns are coming down. The towers that the eagles perch on and the red-tailed hawks are perching on are going to be down. I want to make sure that those species are protected as well as humans in Bel Marin Keys. I-27.3

I-27 Karla Jacobs

I-27.1

See Master Response 18 regarding climate change.

I-27.2

See Master Response 6 regarding Novato Creek morphology and navigation.

I-27.3

See Master Response 12 regarding existing wildlife habitat. The PG&E power towers would not be removed.

Comment Letter I-28

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ANNA LANG

My name is Anna Lang. I live in inaudible].

My question is: Much of the south lagoon is subject to an easement [inaudible]? I would like to know if the legal rights justify your use of the easement to provide public access. I-28.1

Thank you.

I-28 Anna Lang

I-28.1

See Master Response 13, which includes discussion of trail routing and the existing BMK CSD easements for the south lagoon levee which are for maintenance and drainage purposes. The levee is located on land owned by the state and the easements do not provide a right of private recreational access.

The preferred alternative does not include a designated spur trail along the new levee or along the south lagoon levee. These areas would not be designated for public access. BMK residents, like other members of the public, would be able to use the Bay Trail for recreation.

Comment Letter I-29

BEL MARIN KEYS UNIT V EXPANSION OF THE
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MARY SERPA

[Inaudible.]

I'm sort of reiterating some of the things that have already been spoken about. When I heard about these plans and that they're going to last for years, the actual construction is going to go on for years. And I see a great disruption in our lives for those years with the traffic with dump trucks and all the other things that are going to be involved and a lot of noise and a lot of dust. I-29.1

As was mentioned before, a lot of inundation by the little critters that are fleeing this disruption. I have already dealt with one of my dogs being bitten by a rabid skunk who happened to cross my backyard. So this is a very real concern to me. I have mice already and bats in the belfry. I-29.2

And so these are things I see as being real disruptions in our lives. And so I'd like to know what's going to be done to minimize those disruptions or ameliorate the problems that might be created by all of this construction. Also, to reiterate, the eucalyptus trees that are at the beginning of our levee -- or in that area -- are a roosting area for lots and lots of egrets -- the most incredible thing you've ever seen. And I don't want that to go away. It's beautiful; it's wonderful. And so I do want you to consider, although you're bringing in species that have been taken away from the area what's going to happen to the species that now live there, for which this area has become a home and who have adapted to this area? Are we going to wipe them out? I-29.3 I-29.4

That's all. Thank you.

I-29 Mary Serpa

I-29.1

Construction impacts of the project concerning traffic, noise, and dust are discussed in chapter 4 of the document and mitigation measures are proposed where significant impacts are identified. The preferred alternative includes a primary construction access route from Hamilton and secondary access from Bel Marin Keys Boulevard, which would reduce traffic and associated impacts associated with construction access.

I-29.2

See Master Response 15 regarding pest/predator displacement.

I-29.3

See Master Response 15 regarding pest/predator displacement and Master Response 16 concerning construction disruption.

I-29.4

See Master Response 12 regarding existing wildlife habitat. The eucalyptus grove on Headquarters Hill near Bel Marin Keys Boulevard is on private property and is not part of the restoration project.

Comment Letter I-30

BEL MARIN KEYS UNIT V EXPANSION OF THE
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DIANNE KLING

Hi, my name is Dianne Kling. I'm the secretary of the homeowners' association -- the Bermuda Harbor Homeowners Association. We are immediately next to or within a small amount of water to where the locks are for south lagoon right by Bel Marin Keys. If you know where that is, we are 12 units.

We see a lot of traffic -- trucks that make a long diversion that are headed to Hamilton. And I'm constantly redirecting people now. I don't need to be more of a traffic director than I am now. So I guess what I'm speaking of is the Bay Trail interpretive center in Alternative 2 and I believe 3 as well. You have the interpretive center at the entrance immediately to Bel Marin Keys.

Since it is, as I think someone else mentioned, we are the third most heavily traveled road in Marin County and the only access for 740 homes. We've got to think in terms of emergency vehicles being able to pass. Will there be so many cars parked on sides of the road and people walking -- "Gee, I never saw this neighborhood before. Let's check it out. Let's drive around." They are going to end up at dead-end streets at every one of those lagoons. They're going to be coming back through again. That's what so many semi trucks do now. We certainly don't need any more. I-30.1

Also, we've spoken already about safety concerns and security. We surely would be concerned about that. So we would like to highly recommend that the site at Hamilton, which is City of Novato property -- and it offers views to people of the complete restoration project. It just seems like it would make a lot more sense to have it there at the base of Reservoir Hill, where there would be less human and animal intrusion and disturbance of the wildlife corridor. And that should be the preferred site.

Thank you.

I-30 Dianne Kling

I-30.1

In the preferred alternative the interpretive center is located on the City of Novato property at Hamilton.

Comment Letter I-31

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612

August 29, 2002

Dear Mr. Gandesbery,

As residents of this Bel Marin Keys community, we would like to make clear that we are not against the Wetlands Restoration project.

However, this project as presently planned, will have a significant impact on this community in more ways than one, and revision of the present alternatives should be seriously considered to prevent alteration of our life style, privacy, and public safety. I-31.1

We hereby state our opposition to the following alternatives as presently planned by the California State Coastal Conservancy:

1. New Levee.

The new 12 feet high levee proposal along the South Lagoon, is totally unacceptable, not only for us, but for approximately 400 other homes whose views of the San Pablo Bay will be obstructed. This high levee construction which would be the equivalent to a "Berlin Wall" in front of our backyards, will not only block our views but it will create an eyesore in this part of the community and would definitely be the cause for property devaluation. We don't want our views blocked, and we would like to preserve our property values. I-31.2
SUGGESTION: Move this levee at least 3,000 feet away from its present location toward the San Pablo Bay. This would definitely prevent the blocking of our panoramic views, and it would blend more aesthetically with the surrounding area. This should be the proper solution for this problem which we as tax payers are facing.
What mitigation will be considered for our property devaluation, if the present planners ignore the concerns of the 400 homeowners affected??

2. Bay Trail Interpretive Center.

Presently, there is a proposed Bay Trail Interpretive Center and access to the Bay Trail to be erected near the entrance to Bel Marin Keys residential area. Again, we are against this proposal for the following reasons:
a. Bel Marin Keys Boulevard is a heavily traveled road, and the only access road for 703 homes. The location of this center at the proposed site, would definitely create traffic safety concerns, because of the increased traffic and automobile parking lot near this narrow road. Not to mention the increased activity by the touring buses industry bringing sightseers to this area. I-31.3
Since this is the only accessible road to Bel Marin Keys residents, in case of an emergency, we would be faced with chaotic results in terms of evacuation.

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b. The establishing of this center in this particular area, would create a very serious security problem for the Bel Marin Keys community, since it would allow a high number of people to wander on the Bay Trail spurs which are planned along the South Lagoon levee. Presently, this is a " Neighborhood Crime Watch "community where we can easily detect any suspicious activities in the neighborhoods. With the present proposal, it would be practically impossible to monitor any suspicious activities, since there would be an enormous number of people wandering not only around the trails, but individuals driven by curiosity will venture into our residential streets by walking or driving. I-31.3 Con't.

c. With the present proposal site, our privacy as residents would be practically eliminated, since hundreds of people would be invading the trails which are few feet away from our own backyards. Most of them will be curiously involved in watching our home activities as they pass by. Therefore, we will be deprived of our own privacy, and this is totally unfair to us. SUGGESTION: Why not utilize the site at Hamilton which is actual property of the city of Novato? This site would offer a hilly area with trails that could provide better downward views of the complete Wetlands Restoration accomplishment, with less human/animal intrusion and less disturbance to this community.

3. Flooding.

At present, there is a provision of 300 acres Ponding required by the Marin County Flood Control. Under the proposed alternatives, there is no such provision being considered. And it appears that mechanical pumps are intended to be used in the proposal.

a. Who is going to operate these pumps? Bel Marin Keys community is not willing to undertake the responsibility of operating these pumps.

b. Pumping water out of the lagoons is not an acceptable practice for flood protection in the Bel Marin Keys community. I-31.4

c. If the present provision of 300 acres Ponding is removed, this would constitute the removal of F2 Zoning, which would affect us by flooding problems.

e. By the removal of F2 Zoning, this community would be considered to be in a possible flooding area, and each homeowner would be forced to pay the high cost of flood protection insurance, which at present is not needed. This would be totally unfair to our property rights, and therefore, we strongly suggest that the provision of 300 acres Ponding required by Marin County Flood Control be incorporated in any proposed alternative in order to preserve the F2 Zoning.

We sincerely appreciate your attention and consideration to these comments and questions which we have presented to you, and would sincerely appreciate your response.

Sincerely,

Rudolph D. Sheldon Elisabeth Sheldon

Rudolph D. Sheldon Elisabeth Sheldon
160 Bahama Reef, Novato, CA 94949

Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612

August 29, 2002

Dear Mr. Gandesbery,

Regarding the Wetlands Restoration Project in the vicinity of the Bel Marin Keys community, we would like to present some comments and questions pertaining to the impact this specific project will have to the residents of this community.

1. Construction Project.

It is contemplated that it would take a period of 5-19 years to complete this Wetlands Restoration project, during which time, heavy construction equipment will be utilized to accomplish this enormous task. This continuous activity will have an impact on our daily lives, because we will be exposed to construction noise, air pollution, dust, and pest displacement which will be increasingly disruptive and disadvantageous to us residents. As we understand, the construction traffic would start near the entrance to the Bel Marin Keys residential area and would create considerable traffic problems on this narrow road which is the only accessible road to all residents of Bel Marin Keys. I-31.5
SUGGESTION: We suggest and request that construction traffic be routed through the access road at Hamilton and not bel Marin Keys Boulevard.

How will these negative impacts be monitored and mitigated?

a. How do you intend to address the problem of rodent and predator population displacement when this construction is in progress?

b. In the case of pest displacement such as mosquitoes etc. Are you intending to increase mosquito abatement by increasing insecticide spraying? And if the insecticide spraying is actually increased, how will this action affect the health of this community if it is not properly controlled and conscientiously monitored??? Here we are talking about a high health risk issue, and all precautionary measures should be considered and studied to insure that residents of this community are not exposed to unhealthy situations. I-31.6

2. Novato Creek Navigability.

This is a waterfront community and consequently, we want to continue navigating.
What commitment have you made to study impacts to navigation on the Novato Creek?
This is very important to the Bel Marin Keys community since this creek is needed in order to navigate to the San Pablo Bay and the San Francisco Bay as well. I-31.7

RECEIVED
SEP 0 1 2002
COASTAL CONSERVANCY
OAKLAND, CALIF.

We thank you in advance for your courtesy and attention to these comments, and we would appreciate consideration be given to our suggestions and requests. We are also looking forward to your response to the many questions hereby presented.

Sincerely,

Rudolph D. Sheldon Elisabeth Sheldon

Rudolph D. Sheldon
Elisabeth Sheldon

160 Bahama Reef,
Novato, CA 94949

I-31 Rudolph & Elisabeth Sheldon

I-31.1

See Master Response 1, which identifies the changes that have been incorporated in Alternative 2, the preferred alternative, in response to comment.

I-31.2

In the preferred alternative, the new outboard levee has been moved to a location about 1,500 feet from the south lagoon levee and has been lowered by 2 feet to reduce the visual effects. The revised visual resources analysis concludes that these changes would reduce the visual impacts to a less-than-significant level.

Also see Master Response 9 regarding visual resources.

I-31.3

In the preferred alternative, the interpretive center is located on City of Novato property at Hamilton and no trail spur along or south of the BMK south lagoon is included. The Bay Trail would be located on the BMKV expansion site along the east side of Pacheco Pond and would not be directly adjacent to the BMK south lagoon.

I-31.4

Pumping for flood relief is only included in Alternative 3 and is not included in the preferred alternative. See Master Responses 2, 3, and 5 regarding flooding, flood zoning and existing drainage easements, and flood insurance, respectively.

I-31.5

In the preferred alternative, the primary construction access route is through Hamilton and Bel Marin Keys Boulevard would be used only as a secondary access route..

I-31.6

See Master Response 15 regarding mosquito breeding habitat and pest displacement. Also see Marin Sonoma Mosquito and Vector Control District comment letter (L-6).

I-31.7

See Master Response 6 regarding Novato Creek morphology and navigation.

Comment Letter I-32

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: THE INTERPRETIVE CENTER IS MISPLACED

Address:

Phone Number: A TRAIL ACCESS LOT WILL REQUIRE

Email: MANY MORE PARKING PLACES THAN

COMMENT: 10 — WHICH WOULD BE TOO MANY FOR THAT LOCATION WIT SHOULD BE IN HAMILTO

I-32.1

THERE IS AN EXISTING TRAIL THAT RESIDENTS USE TO GET TO THE BAY IT APPEARS THAT IT WILL BE INUNDATED — IT SHOULD BE MAINTAINED

I-32.2

Please feel free to use the back of this form, if needed.

Thank you for your comments!

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: _____

Address: _____

Phone Number: _____

Email: _____

COMMENT: _____

IF OUR BMK DREDGINGS ARE NOT ACCEPTABLE THEN THE DREDGINS OF OTHERS — ESPECIALLY INDUSTRY & COMMERCIAL CONTAMINATION ARE NOT ACCEPTABLE

I-32.3

Please feel free to use the back of this form, if needed.

Thank you for your comments!

WRITTEN COMMENT FORM

BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLAND RESTORATION PROJECT

PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: _____

Address: _____

Phone Number: _____

Email: _____

COMMENT:

WITH ALL OF THE ACRES
(1000 & 1000-2 & 1000-3 ALREADY
RESERVED FOR MARSH

DO WE REALLY NEED MORE
(1000-1 & 1000-4 & 1000-5 OF ACRES
MORE FOR BIRDS, FISH
& MOSQUITOES!

I-32.4

Please feel free to use the back of this form, if needed.

Thank you for your comments!

I-32 Anonymous Written Comments Submitted at Public Hearing

I-32.1

The preferred alternative places the interpretive center on City of Novato land at Hamilton, not on BMKV.

I-32.2

See Master Response 13 regarding trail routing which includes discussion of the easements for the south lagoon levee, which are for maintenance and drainage purposes. The levee is located on land owned by the state and the easements do not provide a right of private recreational access.

The preferred alternative does not include a designated spur trail along the new levee or along the south lagoon levee. These areas would not be designated for public access. BMK residents, like other members of the public, would be able to use the Bay Trail for recreation.

I-32.3

See Master Response 10 regarding dredged material quality and sources. Regarding BMK CSD dredged sediments, the project sponsors are willing to accept BMK CSD dredged material during the dredged material placement phase, provided that the material is determined to be suitable cover material for use in the wetland project by the DMMO, its reuse is cost effective to the project, and the timing and other parameters of the material's availability are consistent with the project implementation process. The DMMO suitability determination is the same test of quality that all material potentially to be used at the site must pass.

I-32.4

See Master Response 11 regarding habitat design and Master Response 15 regarding mosquito breeding habitat. As noted in the master response, the project is expected to decrease potential mosquito breeding habitat.

As to the need for habitat restoration, the San Francisco Bay has loss 80% to 90% of tidal wetlands resulting in the decline of many native mammal, birds, and fish species, some of which are now threatened and endangered. Restoration of tidal marsh and of other bay habitats is considered essential to restoring overall diversity and health of the San Francisco Bay and the Hamilton/BMKV project is a major component in long range planning for the bay. The site represents the implementation of a number of regional planning efforts that represent the general scientific consensus about priorities for restoration efforts.

Comment Letter I-33

September 3, 2002

Jones and Stokes
268 Grand Avenue
Oakland, CA 94610-4724
Attn: Rich Walter

Dear Mr. Walter:

I shall make this quick. My name is Andrea Vincent. I am a dog owner in Marin County. My brother played Little League at Hamilton AFB 30 years ago. I life guarded there 20 years ago at the Officers Club pool. Its all about family isn't it? Life. Well dogs are a big part of family now even more so these days where kind people are taking there dogs out to exercise during their hectic life to get a piece of enjoyment while feeling safe with their furry companion. I respect bird life, but land should and can be shared with birds. Cats kill birds, not dogs. Wild or not, dogs live and breathe on this planet and more land is being restricted to dogs and their human's. A creative solutions is the approach not prohibition – there are several other options. I am so angry that this continues. This moment in life, a walk with a dog, is so important to happiness and health to each individual. Less stress, less violence, happier planet – big picture. It starts small and trickles out to the rest of the community. I-33.1

Thanks for considering the dog people.

Andrea Vincent
San Geronimo, Marin County, CA USA
Astarn@ix.netcom.com
Po Box 475
Fairfax, CA 94978

PS Note the miles of bird sanctuary land that surrounds the Bay Area.

I-33 Andrea Vincent

I-33.1

Comment noted. See Master Response 13 regarding Bay trail routing, spur trails, and dogs.

Comment Letter I-34

Tom Gandesbery
California Coastal Conservancy
1330 Broadway, 11th floor
Oakland, CA 94612-2630

September 13, 2002

Eric Jolliffe
U.S. Army Corps of Engineers
San Francisco District
333 Market St., 8th floor
San Francisco, CA 94105

Dear Mr. Gandesbery and Mr. Jolliffe,

Thank you for the opportunity to comment on the GRR/SEIR/EIS dated July 2002 for the Bel Marin KeysV Expansion of the Hamilton Wetland Restoration Project. The Friends of Novato Creek (FNC) is a not-for-profit citizen based watershed advocacy group focusing on local watershed issues relating to the Novato Creek Watershed. Projects include creek, pond, and estuary health and monitoring, public awareness, and watershed education, biological monitoring, endangered species habitat protection, and assessment of watershed pollutants. FNC has the following environmental concerns and questions related to the development of the " BMKV Wetlands Restoration Project as an extension of the Hamilton Wetland Restoration Project. FNC is very concerned that the Novato Creek, its tributaries, adjacent habitats and the San Pablo Bay ecosystem will be negatively impacted by the BMK-V Restoration Project if our comments are not adequately addressed in the final EIR/EIS.

The main topics of the concerns stated in these comments on the Draft GRR/SEIR/EIS are as follows:

- **Hydrological Watershed Impacts-** The project proposes significant hydrological impacts to the Novato Creek, Pacheco Pond, the contaminated Outboard Tidal / Coastal Marsh parcel, and the Novato Creek watershed, by implementing diversions and structural modifications to current hydrology. These impacts are not adequately studied in the EIR. The Final EIR/EIS must include the Novato Creek Watershed and Pacheco Pond in the Study Area (2.2) and provide studies which accurately model current conditions, defining and mitigating negative impacts. I-34.1

- **Combination of Restoration Sites-** The separate restoration project sites which are divided by the NSD levee and pipeline should be evaluated separately, as they have significantly different land use, planning constraints, requirements and potential impacts, which should require a separate and complete environmental review processes. In attempting to combine these different restoration projects, the GRR/SEIR/EIS has neglected to provide critical technical data/ studies on significant impacts from the Hamilton site while failing to accurately identify environmental impacts from BMK V site on the wetland restoration process and goals. I-34.2

- **Toxics Contamination-** Toxics and hazardous substances identified on the Hamilton/ BMKV sites including the State Lands Commission/Antenna Field, BRAC, Outboard Coastal Marsh, and BMK V parcels are not addressed in any of the following: the GRR/EIR Executive Summary, Planning Constraints, Public Issues and Site Opportunities and Constraints. FNC has previously expressed serious concerns about toxics in responses to the Hamilton Army Airfield Wetland Restoration on the significant environmental issues of adequate toxics remediation protective of environmental restoration. The GRR/ SEIR/EIS lacks the technical data and backup reports on this issue necessary for an adequate public review. ***The EIR/EIS does not acknowledge the extent or distribution of toxics on the BMK V or current state of remediation on the BRAC, Outboard Coastal Marsh, Navy Ball field, and SLC parcels at Hamilton Field.*** I-34.3

- **Incomplete Information and Data-** Necessary data is omitted making the GRR/EIR difficult for the public to access, and review. How can the public or agencies access the environmental impacts of the project when an environmental assessment of the property has not been provided as a part of the EIR/EIS. Detailed remedial investigations for toxics on the BMK V and SLC parcels was not included as a part of these documents. Information provided in the 1998 Hamilton Wetland Restoration Plan is not provided in the GRR/SEIR to correspond with issues related to restoration objectives, development, management, and monitoring. Information on environmental effects from Volume 11 was not provided. I-34.4

- **Planning Constraints-** Re-evaluation of the impacts of co-mingling these two sites should be considered as Hamilton Army Airfield contains base wide toxics and pesticide contamination which must be remediated or immobilized prior to construction. These separate sites should not have soils or materials transported, mixed or commingled with other restoration areas as suggested in the Hamilton Wetlands Restoration Plan (i.e. use of on site borrow material) I-34.5

As a summary comment FNC believes the distribution of this document is premature due to lack of accurate/ current technical data, required studies, more realistic assessments of impacts, and clarification of property ownership and regulatory controls. I-34.6

Executive Summaries GRR/ SEIR
Project Overview
Has project feasibility been assessed based primarily on economic basis of providing a dredge disposal site for the Port of Oakland with environmental issues, impacts and success criteria being minimized? ***Please reference in the EIR.*** I-34.7

Comment:
If the Port of Oakland dredge spoil materials or other sources do not meet wetland cover criteria for Restoration, how will this impact the economic viability of the project to self fund generate revenue ? How frequently will these be tested to assure compliance? ***Please reference in the EIR.*** I-34.8

EIR/ES-3 Project Objectives

- How can this project realistically meet the contradictory Project Objectives specified as: ***"To design and engineer a restoration project that stresses simplicity and has little need for active management"*** **and** ***"To Create and maintain wetland habitats that sustain viable wildlife with emphasis on special status species"?***

Comment:

Adaptive management is an iterative approach, implying ongoing management and monitoring to evaluate progress and evaluate cause/ effect relationships. (Zedler 2001) Maintenance and monitoring (i.e. active "adaptive" management) are critical and as many experts in the field have reported " Fully functional wetlands are not easily created and even fully functional wetlands may not be self sustaining" (Zedler, Weller 1989) Given a timeline of potentially 50 years to develop, who will be responsible for maintaining, managing, and monitoring this 2,526 acre restoration site? Without a long term adaptive management plan and maintenance program this project cannot achieve a true restoration of habitats. Review of other local Restoration Projects using dredge spoils demonstrates many challenges including material consolidation, pollutant release, and dredge material stabilization. Tidal wetland restoration sites all require maintenance, continual observation and adequate budgets for short and long term actions such as irrigation, replanting, fertilizing and managing exotic species removal. An ability to respond to unexpected events such as discouraging herbivores, algae blooms, and sedimentation events is critical to the success of a restored Wetlands Project. (Zedler 2001).

Please address these issues in the final EIR.

I-34.9

ES-6 Significant Unavoidable Effects

ES-6 *"There is a potential for an increase of methyl mercury production due to the increase of tidal wetland acreage in contact with sediments containing mercury"* References from a recent paper on Mercury in Tidal Wetlands (Davis, Yee, Collins et al.) implicate tidal wetland restoration activities as possibly leading to increased concentrations of mercury in the estuarine food web and exacerbating the mercury problem. What is being done to assure that this effect is monitored and minimized? ***Please reference in the EIR.***

Comment:

Recommendations from this paper specify where dredged sediments are used that the mercury load must be analyzed routinely and channel design must be considered in relation to mercury loads. What predictive modeling of percent methyl mercury has been done on tidal circulation and residence times as mercury toxicity to clapper rail embryos is appears to be one of the primary causes of mortality in this endangered species? ***Please reference in the EIR.***

I-34.10

Comment:

The creation of tidal wetland from the flooding diked farmlands is reported to result in particularly high rates of mercury bioaccumulation. Creation of tidal wetlands through placement of dredge material is reported to result in higher methyl mercury production, unless the material is low in organic content, microbial activity, or total mercury. It is recommended that the potential for increased methyl mercury production associated with dredged material reuse is evaluated before the project is initiated. Has this been done? Numerous studies on percent methyl mercury as an indicator of rate of methyl mercury production and wetland physical characteristics are available. This information should be incorporated into the EIR, surveys on the existing mercury concentrations in the food web should be provided for the site, and long term monitoring should be conducted to confirm.

Please answer the above questions and incorporate this information into the EIR.

ES-6 Significant Unavoidable Effects- Levees- Please evaluate the option of increasing the distance to the new levee construction (2000 feet) by increasing the buffer zone as an alternative to provide a more natural and gradual wetland to upland ecotone? Please define both slope and planting specifications which are critical to maximizing habitat value and the natural transition zone functions in the EIR. I-34.11

Please include the above discussion into section Executive Summary of the EIR.

ES-3 Restoration Alternatives

Please explain the scientific basis for the restoration design criteria for Alternatives 1, 2, and 3 as the rationale for design components including hydrology, habitats, levees/ locations, Bay Trail access specified. Technical basis for Alternatives1-3. is not clear. i.e. a. Alternatives 1 and 2 do not seem significantly different. Please clarify objectives. I-34.12

Table ES-1

FNC's Preferred Restoration Alternatives which are not indicated in any of the Proposed Alternatives and are noted as follows:

Habitat- Increase habitat diversity from Alternative 1 to include more diverse ecotones, habitats and upland areas and provide scientific rationale for allocations.

Buffer Zones- Increase buffer zones to 2000 feet from harmful local residential impacts and create a longer natural gradient to the high marsh on the outboard side of the levee.

Outboard levee breaches- San Pablo Bay only -No negative impacts to the Novato Creek Watershed including increased sedimentation and decreased freshwater or tidal flows and scour are acceptable. I-34.13

Pacheco Pond- Provide a direct tidal connection to Novato Creek to allow passage of endangered and special status fish to Novato Creek Tributaries i.e. Arroyo San Jose and promote improved circulation in the Pacheco Pond re-establishing this historic connection to the Novato Creek. (1897 topographic map)

New Levees- Alternative #1 located 2000 feet from residential impacts with appropriate planting and slope

Bay Trail should be located as to have minimal impacts to the restoration project. Bay Trail access trail along the existing Pacheco Pond is NOT preferred. Interpretive Center located on City property west of HWRP where it will have minimal impacts and provide the best site overview.

ES-7 Please describe how the site will be monitored and managed during the potential 28-45 year wetland establishment process. What agency(s) will be responsible for ongoing management? How is this funded? I-34.14

Please include the above discussion into section Executive Summary of the EIR.

ES-9 While it is noted that the Conservancy does not support Alternative 3 based on the reduced use of dredge material, the EIR should also note that the Alternatives 1 and 2 offer a higher risk of methyl mercury production and subsequent accumulation in the food web. This predicted outcome does not support the project objectives of creating a productive habitat for endangered and special status species. I-34.15

Please include the above discussion into section Executive Summary of the EIR.

ES-11 Management Considerations

See ES-3 Project Objectives- ***Please include the above discussion into section Executive Summary of the EIR.*** I-34.16

ES-11- Beneficial Use of Dredge Material
Please provide sampling and data analysis which clearly demonstrates that use of dredge material from sources such as the Port of Oakland will be beneficial and will not produce any adverse impacts over use of natural sedimentation. Please provide specific data from modeling this project and related local restoration projects i.e. Muzzi Marsh, Montezuma Wetlands, Sonoma Baylands or others. ***Please include the above discussion into section Executive Summary of the EIR.*** I-34.17

ES-11 Site Opportunities and Constraints
Please discuss land use and planning constraints relative to known and yet un-remediated hazardous materials and toxic contamination on the State Lands Parcel, BRAC, Outboard Tidal Coastal Marsh, historic Navy Ball fields and BMKV properties. ***Please include the above discussion into the Executive Summary of the GRR/EIR.*** I-34.18

GRR/ Chapter 1.
Section 1.3 Planning Process- Recommendations and concerns from major BMKV stakeholders including the Bel Marin Keys Planning Advisory Board/CSD made over 2 years ago on hydrological and environmental concerns of this impacted community have not been acknowledged. Studies requested through the "Stakeholder" process on critical impacts have not been initiated or incorporated into this GRR/SEIR. ***Please note this concern in Chapter 1, Planning process and all relevant sections of the EIR.*** I-34.19

Section 1.4 Prior Studies and Reports- Mention of reports documenting toxic contamination i.e. Draft Final Record of Decision/Remedial Action Plan, Inboard Area Sites Army BRAC Property, Hamilton Army Airfield, Focused Feasibility Study on the Hamilton Wetland Restoration Project. ***Please add the above information into the final EIR/EIS.*** I-34.20

GRR/Chapter 2.0
2.2 Study Area Description- The Study Area should include Novato Creek, Pacheco Pond, contaminated Outboard Marsh parcel/ BRAC, and the Novato Creek Watershed including tributaries -Arroyo San Jose and Pacheco Creek as these areas are significantly impacted by implementing diversions and structural modifications to current hydrology. ***All potential levee breaches should be referenced with long and short term impacts being accessed in the EIR.*** I-34.21

2.3.2 Land Use- Site history should be corrected throughout all documents to reflect that this parcel prior to the mid 1800's was primarily underwater with the historic shoreline about midway (2 miles into the BMKV site) through the "BMKV" site. From 1954-84 Hydraulic mining produced sediment buildup in the Bay, resulting in accretion along the shoreline. This was diked and drained in the early 1900's. The property has been used for dry land farming continuously since the early 1900's (3.0 LSA 1996) In the 1940's freshwater wells supported the farming of tomatoes indicating a supply of fresh water was obtained from the groundwater wells. Previous Land Use does not reflect the use of the BMKV site and Pacheco Pond as a practice bombing range and fly zone for HAAF. ***Please reference this information in Chapter 2 and all relevant sections of the EIR.*** I-34.22

2.3.4 Hazardous, Toxic, and Radiological Waste
The "Results of Shallow Soil Investigations" does not include the following contaminated areas which pose hazards to environmental restoration and the goal of habitat creation for special status species. ***Please include specifics on the un-remediated toxic contamination on the State*** I-34.23

Lands Commission Parcel, Outboard Tidal Marsh/ BRAC parcel and including reported disposal sites scheduled to be investigated by the Army in this section of the EIR. I-34.23 Con't.

2.3.5 Regional Hydrology

The natural, historic confluence of the Pacheco Creek and the Arroyo San Jose Creek with Novato Creek is documented in topographic maps in 1897 and earlier. This critical link to San Pablo Bay was later disrupted and re-routed by the filling of the BMK commercial areas and the artificial creation of Pacheco Pond/ Ignacio Reservoir a "freshwater wetland" mitigation site for the BMK Industrial Park. This connection was open to San Pablo Bay as a result of broken flap gate flood control system existed until the recent replacement of tide gates in 2001, which have now blocked fish passage. This "enhanced" habitat area has not restored lost habitat but recreated an artificial freshwater habitat area. This artificial habitat is actually a brackish to salt water habitat (salinities 5-20+ppt) with many salt water/brackish plant species including Salincornia spp. abundant. The historic confluence of the Pacheco Creek and Arroyo San Jose Creek with the San Pablo Bay would be destroyed if the Proposed BMKV wetlands project is constructed as presented in these EIR/EIS Alternatives. I-34.24

Please correct and clarify the hydrological connections in this section, and include information in the EIR.

2.3.5.1 Local Hydrology

Generalized ground elevations are not accurate on portions of the BRAC parcel, i.e. Wetland/ Upland Mitigation areas are much higher. The previous failure to create seasonal wetland habitat on the NW runway (BRAC parcel) appears related to higher elevations which make this not feasible. Please clarify how this will be corrected. Has current hydrology been mapped for the combined sites and impacted water bodies? ***Please address the questions listed above in Chapter 2 and all relevant sections of the EIR.*** I-34.25

Pacheco Pond –This mitigation project from the 1970's is not a true freshwater habitat as salinities range in the 5-15ppt range and specific freshwater plant species which have been planted as a part of restoration efforts have not survived, possibly due to high salinities in sediment and water. This pond and its water levels are not managed or monitored at the desired levels. The description provided in the EIR is taken from outdated reports and should be corrected to reflect current conditions and information. ***Please revise this information in the EIR.*** I-34.26

Novato Creek- This description based on 1996 data is outdated or incorrect. Pictures provided to the Coastal Conservancy show flooding of BMK Blvd. in 1998 at BMK entrance and overtopping of BMK south lock by the Novato Creek in 1998, 2000, and 2001. ***This description provided is based on outdated reports and should be corrected to reflect current conditions and accurate bathymetry in the Final EIR.*** I-34.27

BMK Residential Development- The agreement with the former property owners of the BMK Granted the right to discharge flood water on to a **300 acre** portion of the BMK V property not a 3 acre portion as specified in the GRR. ***Please correct this information.*** I-34.28

Hamilton Army Airfield Drainage

PDD Comments on flows to SP Bay. ***Please reference flood overflows and levee blowouts from the BRAC parcel which resulting in flooding from the LF26 mitigation area onto the BMKV parcel in the EIR.*** I-34.29

2.3.6 Geotechnical Conditions

Please provide a complete geotechnical survey mapping the presence of substrate from historic creeks and sloughs throughout the BMKV and HAAF sites and model how this will affect wetland development? Data on soil salinity, compaction, texture, moisture, and organic matter content is critical to modeling. Has the soil and substrate conditions of the BMK V and BRAC parcels been mapped comprehensively? Please reference this information in the EIR? Is Bay mud be assumed to cover the entire area of the site without an actual study and what is the distribution of the stronger, less compressible soils mentioned across both sites? Please provide calculations for the depth of the Bay mud and the subsequent project development time providing a more accurate "estimate" than 10-50 years. What are the conclusions being developed based on the NHP levees sinking and tipping at a significant rate of over 1 foot per year. How will this affect the proposed levee development and berms used to protect toxics movement on the site? ***Please address the questions above in Chapter 2 and all relevant sections of the EIR.*** I-34.30

2.4.1.2 Historic Decline of Species as related to Chemical Contamination

Please discuss the historic flushing of toxic contaminants out to the Bay from over 50 years from the pumping of unmonitored toxic runoff from HAAF into PDD, directly in to San Pablo Bay. Please discuss how sediment toxicity and contaminant stressors have also impacted the populations of special status species. Overall sites in San Pablo Bay and the mouth of the Petaluma River / Novato Creek are some of the most contaminated sites in the Bay. ***Please include the above discussion into section Chapter 2 of the EIR.*** I-34.31

2.4.2.2 Increased Habitat Quality and Quantity

Removal of habitat diversity and creation of a mono landscape of primarily tidal marsh habitat theoretically to support the Clapper Rail is not compatible with project goals. The creation of a diverse array of wetland and wildlife habitats, not only for endangered species, but also for migratory and resident species is critical to the success of this project. The importance of the wetland – upland interface is referenced in the San Francisco Estuary Restoration. Project Primer. According to SFEI approximately 74% of the alluvial soil habitats adjacent to the Bay have been lost. This is also a significant problem as these support two important Bay ecotomes, moist grassland/ vernal pool habitats and riparian zones. Please describe why these valuable ecotomes are not clearly defined as lack of high ground next to marshes has contributed to the declines of species such as the back rails, clapper rails, and salt marsh harvest mice. Transitional habitats provide food chain support to upland species such as the burrowing owl and the red tail hawk, and the presence of a wide buffer may reduce upland predator foraging. Please explain why there is a minimal upland transition when over 80% of the Bay special status species depend on these ecotonal areas. (4.SFEI) Please explain how this site is contiguous as it is divided by a NSD levee?

Please reference the documented predation of the Clapper rail on the Salt marsh harvest mouse in the relevant EIR sections. I-34.32

2.4.2.3 Unit Cost Savings

The GRR description and location of levee's not needing to be constructed is unclear . What is the estimated cost saving by combining the projects? ***Please clarify which BMKV perimeter levees would not need to be constructed as levees on the BMK community side and BRAC/ Hamilton side are still required along the NSD outfall in the EIR?*** I-34.33

2.4.2.4Beneficial Use of Dredged Material

See ES-11 I-34.34

2.5/ ES-11 Planning Constraints

2.5.1 Minimization of Impacts to Existing Threatened and Endangered Species Wetlands

Low, Mid, and High marsh habitats (2.4.2.2.) will be destroyed in the construction process and existing salt marsh harvest mouse and clapper rail populations will be impacted. Please clarify how this will be minimized or avoided. In addition endangered fish species will be impacted by the destruction/ diversion of creek and tidal flows, and excess sedimentation. ***Please clearly define how this environmental damage will be minimized in the EIR. Please address the following concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.35

Historic Flooding of the Hamilton Air Force Base property and adjacent parcels. Please reference serious fate and transport issues regarding toxic contamination on HAFB and neighboring properties due to historic flooding of the properties.

Cover and fill requirements specify maintaining a 3 ft clean cover between toxics and receptors as recommended on the HAAF parcel. Please indicate where this is referenced in the EIR? I-34.36

Excavation and exposure of wetland soils and stockpiled soils can create acid sulfate soils. How will discharge of acidic material to Novato Creek and San Pablo Bay, which can harm habitat and kill fish, be prevented?

If contaminants are uncovered during restoration efforts what construction and hazardous management plan is in place to decontaminate or remove contaminated soils or substrate? Please provide a map of all known toxics contamination on both sites and status of remediation.

2.5/ ES-11 Planning Constraints

Use of inappropriately defined dredge material could promote the destruction of the endangered species the project is mandated to promote. Please indicate where actual testing data for toxics in sediment and elutriate from prospective dredge spoils and corresponding results discussion are provided in the EIR? Please define all criteria for dredge materials to be used including texture, composition, organic content etc. in the EIR ***Please address the following concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.37

HAAF Groundwater issues are still not being dealt with on a base wide level. No comprehensive monitoring program is in place, nor has a data map for all of the groundwater data gathered so far, been produced. Information presented contains contradictory statements between the ROD/RAP and the FFS regarding groundwater contamination. Please correct these discrepancies.

The HAAF storm drainage system (under the HAAF runway) is still in place, and contains significant contamination of concern. Please discuss this issue of concern in the EIR/EIS document as it directly relates to the wetlands conversion plan and final design. I-34.38

Please describe how toxics on both sites will remain immobilized and not be released to the Bay in an unpredictable environment such as an emerging wetland restoration?

Base wide DDT's ands widespread contamination of CERCLA substances has always been a critical issue, but in light of the Historic Flooding evidence which includes flooding onto the BMKV parcel, and channelization from the proposed Wetlands Project Design, it has become even more of an increased concern.

ES-12 Historic hydrological linkages of the Novato Creek to the area now occupied by the Pacheco Pond (created in 1970), Arroyo San Jose Creek and Pacheco Creek are documented in maps 1987 U.S. Coast and Geodetic Survey. This linkage indicates possible passage for special status fish species. ***Please demonstrate how this important hydrological and environmental linkage will be restored or maintained in the final Wetland Restoration Alternatives in the EIR.*** I-34.39

ES-12 Extension of the Bay Trail to the Novato Creek would produce significant negative impacts, and human intrusion detrimental to the project restoration objectives and protection of endangered species. FNC requests that this spur should not be allowed. This significant intrusion into the wildlife corridor would disturb the very endangered species the project is designed to protect. Project design should be balanced and significant buffer zones established to minimize disturbance. ***Please address this issue in the EIR.*** I-34.40

ES-13 Please explain how integration of the BMKV site with the State Lands Parcel can be considered given the need to create a deep and unpredictable tidal channel across an area that is documented to contain toxic and contaminated soils. ***Please address the hydraulic modeling and immobilization of sediment required to prevent toxic contamination from being released to the Bay in the EIR.*** I-34.41

2.5.3 NSD

Please clarify that the NSD outfall pipeline and berm effectively results in dividing the site and making the proposed expansion project not contiguous as previously referenced in the EIR. I-34.42

2.5.6 Please provide toxics testing data on the prospective sources of Dredge Material including the Ports of Oakland and Richmond and methodologies used as this data is necessary to assess the viability of the proposed project alternatives. ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.43

2.5.7 HTRW

Please define HTRW (Hazardous Toxic and Radiological Waste)in the text of the EIR. What sampling has been done on site? Please show a map of toxics on this and the BMKV site. Please discuss the results of the testing of the Spoils Site A for mercury, methyl mercury and other contaminants which may be detrimental to wetland species and result in localized mercury bioaccumulation. ***Please address these concerns in Chapter 2 and all relevant sections of the EIR.*** I-34.44

2.5.8

Please provide all data and calculations of the protection of the local community from flooding and negative impacts. ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.45

2.5.9

Why is alternative #1 being considered if it would result in a loss of wetland habitat? ***Please address this issue in Chapter 2 and all relevant sections of the EIR.*** I-34.46

2.5.10

Please describe how this project prevents negative impacts to adjacent properties and the Novato Creek in the EIR? I-34.47

2.5.11

Please describe how increased sediment deposition in the Novato Creek will be avoided or mitigated in the EIR? I-34.48

EIR-2-9

- What toxics and elutriate studies have been completed on the Port of Oakland Dredge Spoils? Will dredge spoils be used to cover toxic contamination at the HAAF site and if so what is the interaction or combined environmental effects of toxics on site with dredge spoils?
- How will the agencies guarantee that these toxics will remain immobilized in place and remain on site? I-34.49
- What ongoing monitoring will take place to assure the public that toxics are not migrating off site?
- What confirmation testing has been completed to assure that all UXO from military bombing activities has been identified and removed from the areas now identified as BMKV, Pacheco Pond, SLC and Outboard Tidal Marsh. These were reported bombing practice targets in mid 1900's . ***Please address these issues in Chapter 2 and all relevant sections of the EIR.***

SLC- All three alternative utilize the SLC (Identified as the NAF in Appendix B) as an integral part of the overarching wetland restoration design. Please refer to properties by a consistent name. Given that the SLC/NAF parcel is a known area of significant toxic contamination please explain the rationale for including this area without any information of actual feasibility of construction of channels through the site. I-34.50

- What is the timing for a remedial investigation and when will this be completed?

Please address these issues in Chapter 2 and all relevant sections of the EIR.

EIR 3-3 Please explain how Alternatives 1-3 retain a connection for fish passage from San Pablo Bay and Novato Creek to Arroyo San Jose, a listed habitat for endangered species including, Chinook, Steelhead and other native endangered and special status species. ***Please address this issue in Chapter 3 of the EIR.*** I-34.51

EIR 3-5 Please designate a possible Alternative which removes the SLC from the project as this area has been identified to contain quantities of toxic contamination which has yet to be completely identified, and remediated. ***Please address this issue in Chapter 3 of the EIR.*** I-34.52

- Who is responsible for remediation of each property?
- What is the timing for future remediation actions? Is the BMKV Project viable without the SLC parcel as this constitutes as large portion of the project?

EIR –3-12

Please clarify that soils will not be moved between project sites as referenced in the Hamilton Wetland Restoration EIR and that on site Borrow material will be limited to soils which have been recently tested and confirmed not to contain any toxic contamination meeting the criteria for clean cover material. Please address this issue in Chapter 3 of the EIR. I-34.53

- How will the developer assure that contaminated soils will not be transported or used in wetland creation? ***Please address this issue in Chapter 3 of the EIR.***

EIR 3-12

- How will the construction activities be managed to minimize the distribution of airborne contamination (i.e. air pollution) from the destruction of existing infrastructure and the movement of contaminated soils and sediments.
- How will this be actively monitored during construction?

I-34.54

Please indicate where in the EIR document the detailed plan for dust, air pollution and construction noise monitoring and mitigation is addressed over the length of Construction. These describe how these impacts will be assessed in detail and include in the EIR.

EIR 3-16

Please elaborate on how this cover material will be stabilized as many areas require 3 feet of stable clean cover to remediate buried toxics and site wide pesticides, PNA's, and heavy metal contamination. Please specify testing requirements and permit requirements before discharge into San Pablo Bay in the EIR

I-34.55

EIR 3-18 ***Please indicate an Alternative plan if the SLC/NAF parcel is determined financially unfeasible to remediate as a result of toxic contamination and discuss this possibility in EIR.***

I-34.56

EIR 3-22 Please identify where the description of internal levee and phase levees construction is located in the EIR/EIS? ***Please include answers to the following questions in Chapter 3 of the EIR.***

- How will these internal levees be stabilized? How will 2nd and 3rd degree channels be created and stabilized?
- How will heterogeneity and biodiversity be assessed and enhanced by each Alternative?
- Which Alternative will result in a wetland with the highest natural heterogeneity and corresponding biodiversity?
- What local or regional reference sites were used to develop these models?

I-34.57

EIR 3-3 ***Please provide a Summary Comparison of Associated Environmental Benefits projected from each Project Design Alternative.***

I-34.58

EIR 4-7 Please note that the NHP levees constructed along the HAAF property are reportedly sinking at a rapid rate.(>12"/year) ***Please confirm and identify this issue and settling rate in the EIR.***

I-34.59

EIR-4-2 Geology Soils and Seismicity data sources are incomplete and should be expanded to include data from the adjacent studies at HAAF/ BRAC, SLC, and Navy Ball fields.
Where are the geology studies from the adjacent properties at HAAF described in the EIR?
Please include the above discussion into Chapter 4 in the EIR.

I-34.60

EIR 4-38

- What requirements and permits must by obtained to discharge elutriate into the Novato Creek and San Pablo Bay? Please reference all State and Federal Permits required including those related to creek diversion and destruction of endangered species habitat.
- What remediation of toxic and hazardous material is mandated before a design is approved and what agency has final jurisdiction?

Please include the above discussion into Chapter 4 in the EIR.

I-34.61

EIR 4-47

Pacheco Pond/ Ignacio Reservoir – ***Serious Water Quality Concerns***- Indicators of poor water quality are documented in Pacheco Pond in 1999-2001. *Beggitoa spp.*, a filamentous sulfur oxidizing bacterium which indicates areas of abundant H2S (hydrogen sulfide) or sewage was identified in above normal levels in Pacheco Pond during and after several recent fish death (2000-2002) incidents (Rhomberg Tiburon Center, personal communication). This indicator of stagnant and poor water quality along with high *Enteromorpha spp.* cover over the pond in the winter/spring can signal a stagnant water system, which has had historically high incidents of fish death, presumably due to high temperatures and low dissolved oxygen (MCSTOPP). This habitat that could be improved by re-establishing the historic connection to the Novato Creek and San Pablo Bay improving circulation and water flow. A study is requested to examine impacts to Novato Creek resulting from loss of potential tidal prism useful in scouring the creek to maintain channel equilibrium. The EIR does not address impacts from diversion of Pacheco Pond flows on water quality, sedimentation, flow rates, depth and existing endangered species habitat as opposed to greater tidal exchange during seasons of low flood threat? ***Please include the above discussion in the relevant sections including Chapter 4, relating to Pacheco Pond and Water Quality in the EIR.***
Please address the redirection of Pacheco Pond flow during normal conditions and referenced reduction in water levels, and any other potential impacts, and include in the EIR. I-34.62

It should also be noted that the Novato Creek and Pacheco Pond are tested monthly and results regularly indicate levels significantly above recreational water quality standards for pathogens. Water quality data has been submitted to the SWRCB on the Novato Creek recommending that the Novato Creek be listed as an impaired body of water for both sediments and pathogens. Testing is ongoing to document this request.
Please note this information and include in the EIR. I-34.63

Proposed alternatives which would re-route fresh water flows from Pacheco Pond into a newly created freshwater seasonal marsh are not acceptable. Connection of the wetlands project to the Pacheco Pond / Ignacio Reservoir should be studied further as historic contamination of this site from 50 years of use in the flight path of Hamilton Army Airfield, produced toxics including pesticides, PNA's, PAH's, Metals Dioxins, etc. The Airfield and Military Base were active until 1993 and further investigations of toxics from recent reported disposal near Pacheco Pond should be assessed. Recent indicators of water quality problems in Pacheco Pond, and resulting fish and invertebrate death and human contamination have yet to be adequately investigated by sediment testing on this historic military property.
Further testing is required to ensure protection of environmental health and safety. Please provide further testing of Pacheco Pond sediments to assure that this area will not contaminate the wetland restoration project in the Final EIR/EIS. I-34.64

4-47 Correction: The county took sediment samples in storm drains in BMK Industrial Park. Minimal potential contaminants were analyzed. This was a part of the County TMDL testing requirements and was not a result of concerns relating to potential toxic runoff from HAAF/ Hamilton, or concerns about fish deaths. The Pacheco Creek was not tested. The highest values for pesticides in the storm drains was in BMK Industrial Park adjacent to a Pest Extermination Company. ***Please correct this information in the Final EIR, Chapter 4.*** I-34.65

Reported Hazardous material dumpsites near Pacheco Pond (documented in the ASR2001) have yet to be investigated or tested by the BRAC Cleanup team.
Please note this reported toxic site as unaddressed in the EIR. I-34.66

EIR 4-126 ***Please provide a chart by site of toxics identified, remediation actions and timing. Please provide a map that includes all toxics identified on both sites, concentrations , and estimated risk factors to the endangered species population.*** I-34.67

Miscellaneous General Comments;

1. The project name " Bel Marin Keys V Expansion of the Hamilton Wetland Restoration Project" is misleading as "Bel Marin Keys V" refers to a failed waterfront housing development project from 1995, which the local community of Bel Marin Keys and environmental groups, strongly opposed as being environmentally unsound. This Federal Project should replaced with a name which accurately references the historical landowners of the property. (i.e. Ignacio Pacheco Wetlands). ***Please correct the current name of this project as it misrepresents the project site as integrated with the Bel Marin Keys Community.*** I-34.68

2. The GRR/SEIR/EIS appears to feature a photo of the Novato Creek on the cover yet all reports have categorically refused to study the negative impacts to the impacted watershed from the proposed project alternatives and hydrological modifications. The impacts to the Novato Creek Watershed including the deposition of sediment from erosion upstream at a rate of .8-1vertical foot per year and decrease in total cross sectional area of 50-100 % as documented in (1.0 / PWA 1996) are not addressed. Please provide all calculations, data, and assumptions which were used to evaluate, quantify and predict sediment accretion in the Novato Creek adjacent to the breech of the Creek and include all creek modification impacting potential routes of sediment transport and decreased flows. I-34.69
Please include the above information into all relevant sections and discussions of hydrology in the GRR/EIR.

3. The proposed restoration alternatives do not provide for the required ponding area specified by Marin County Flood Control of 300 acres for flood protection. This entire project site is designated as an F1/F2 zone which is Primary or Secondary Floodway District and designated such so that no building, dredging, filling or levee or dike construction is permitted. Removal of the F2 zoning is not protective of the local community and will require local residents to purchase Flood insurance. Flooding conditions in Bel Marin Keys exists during periods of coincidental storms, high tides and wind. Diversion of flood waters to Novato Creek at those times is not feasible to mitigate flooding as waters which are typically flowing into the BMK lagoons as photos documentation provided to the developers has indicated. Storm water/ tidal overflow must be stored until the tide and creek elevations subside, which can take days to weeks depending on rainfall amounts. The Restoration Alternatives provided must provide a plan for the specified storage capacity of 300 acres and /or offer mitigation funds to reimburse all impacted local homeowners for the added economic burden of the expense of purchasing Flood insurance annually. ***Please include the above discussion into the discussion and summary of mitigation measures in the EIR.*** I-34.70

4. A current study of the surface water hydrology and tidal hydraulics for the BMKV expansion is not included in the EIR to determine that the decrease of capacity of secondary floodplains and impacts on adjacent habitats. Modeling studies provided in the EIR used old and inaccurate data and flow models. The hydrological impacts to the entire watershed require further investigation , using accurate documentation and current data. Removal or reduction of area for overflow I-34.71

ponding, or reliance on mechanical pumping would create a significant negative impact and is not an acceptable alternative.

Please provide a current study of surface water hydrology and tidal hydraulics for the Novato Creek Watershed which demonstrate that no negative short or long term impacts to creek flow rates and morphology will result from this project. This study should be modeled for the length of project/ site maturation i.e. 30-50 years depending on the Alternative considered and options presented in the EIR. I-34.71 Con't.

5. The proposed modifications to Pacheco Pond and the proposed diversion of flow away from Novato Creek considered in the design alternatives will present substantial effects. Historically this area was part of the Novato Creek watershed as documented in the (1897 Topographic map Treasury Dept. Register 2447). Documented accounts are found in the literature (1876) of 20 ton sloops transporting produce to the Novato wharves, indicating significant depth and breadth of the Novato Creek in the late 1800's and early 1900's.. I-34.72

The natural, historic confluence of the Pacheco Creek and the Arroyo San Jose Creek with Novato Creek is also documented in maps dating 1897 to 1912. ***Please include the above information into discussions of the Pacheco Pond and Novato Creek linkage in the EIR.***

6. Endangered and Threatened Species and Fish Passage- This critical environmental connection to San Pablo Bay was later disrupted and re-routed by the filling of the BMK commercial areas and the artificial creation of Pacheco Pond/ Ignacio Reservoir "freshwater wetland" as mitigation for the commercial areas is now still until the replacement of tide gates have blocked fish passage. This "enhanced" habitat area has not restored actual lost habitat but recreated a fictional freshwater habitat area. This habitat is actually a brackish to salt water habitat (salinities 5-15ppt at the bridge) with many resident salt water/brackish plant species including <u>*Salincornia spp.*</u> abundant. The historic confluence of the Pacheco Creek and Arroyo San Jose Creek with the San Pablo Bay could be destroyed if the Proposed Unit V wetlands project are constructed as presented in this EIR/EIS. The Novato Creek and its tributaries including Arroyo San Jose are documented habitat for threatened, and endangered fish species including Chinook, Steelhead, and other special status fish species(* Photos have been provided of endangered Chinook building redds in Arroyo San Jose Feb 2002.-MCSTOPP) Blockage of fish accessibility to the Novato Creek and reduced flows as a result of this restoration project should be addressed in the EIR as a take of Federally listed endangered species habitat. ***Please include the above information into the discussion and summary of the Pacheco Pond and Novato Creek existing habitats and address mitigation measures in the EIR.*** I-34.73

7. Alternatives 1 & 2 include a marsh basin connection to Novato Creek through a single levee breach of the Novato Creek levee to provide for tidal exchange into a created wetland. There is no analysis of the potential impacts of the levee breaching in the immediate vicinity of the breach and upstream in the Novato Creek. While the added tidal prism may increase the channel cross section, the condition of the channel in the vicinity of the breach and upstream could be negatively impacted. Modeling is not based on specifics relative to Novato Creek and accurate bathymetry. Data from various sloughs may not provide data consistent with erosion due to upstream and tidal effects and may not incorporate effects of bank soil composition. Documentation of the expected increase in the channel cross section is not provided. There is no analysis of impacts to normal existing tidal hydraulics. There is no study determining present creek flow. ***Provide verification of creek flow in the lower reaches of Novato Creek by installing a flow gauge or equivalent in the EIR. Resultant channel widening of between 10 and 25 feet along the channel corridor of Novato Creek may have significant negative impacts to the channel.*** I-34.74

Provide cross sectional data to show impacts on flow rate. Please identify where the corresponding "10-20 acres of eroded marsh flood plain" will occur in all relevant sections in the GRR/EIR. I-34.74 Con't.

8. The hydraulic analysis contained in the Appendix concludes that the added tidal prism should increase the channel cross-section downstream from the breach.
Please provide all calculations, exact locations and assumptions for each Alterative which defines added tidal prism creation, increased channel width, channel depth, channel erosion, and flow rates. Revise description to reference wetland cells which vary in size from approximately 400 to 600 acres as not contiguous unless the NSD outfall pipe is re-routed.. I-34.75

9. Please address the short term vs. long term impacts of sedimentation of the Novato Creek in the EIR. The SEIR/EIS assumes that sediment transport will be from San Pablo Bay to the created wetlands. It has been documented that sediment from bank erosion in the upper watershed is significant. (2. Laurel Collins 1998) . "This report states that bank full discharges appear capable of transporting and distributing the load downstream to the tidal reaches". What is the effect in both the long term, and short term impacts of sediment transport from the upper watershed as the wetland is being established. In addition the creation of internal channels in the wetland from erosion of freshly deposited dredged material could cause sediment transport into Novato Creek and the development of shoals or deltas. ***Please address these issues in all relevant sections of the EIR.***

a. What are the potential impacts to shoaling in the Novato Creek from the initial breaching of the levee prior to the equilibrium condition of the created wetland? I-34.76
b. Provide modification to sedimentation processes and morphology in Novato Creek due to relocation of Pacheco Pond outlet and breach and/or lowering of BMK/Novato Creek Levee.
c. Provide modification to sedimentation processes and morphology in Novato Creek due to breach of BMK/Novato Creek Levee and loss of potential tidal prism caused by relocation of Pacheco Pond outlet.
d. Identify the morphologic adjustments and changes within San Pablo Bay and Novato Creek that could develop over time as a result of construction of tidal outlet channels through the existing salt-marsh and mudflats. Please supply a study and/or analysis of impacts to the existing Novato Creek that include the reduction of flow and therefore scour due to relocation of Pacheco Pond outlet will not have significant negative impact, especially during low flow summer months.
Please include the above data, technical assessment, and modeling into the discussion of all sections referencing Hydrology in the EIR.

10. Elimination and removal of the large groves of Eucalyptus trees along the BMK South Lagoons and open fields used for avian foraging will adversely impact resident and migratory raptors such as the Golden Eagle, Redtail Hawk, Red Shouldered Hawk, Whitetailed Kite, Kestrel, Peregrine Falcon, Great Horned Owl, Bats, and Barn Owl. The existing groves of trees are used for roosting and nesting by significant numbers of Great Egrets, Snowy Egrets, Great Blue Herons, Turkey Vultures and raptors. The proposed site of the interpretative center is a valuable roosting and nesting habitat and human impacts near this area should be prohibited. I-34.77
Please include the above information into summary of mitigation measures and Bay Trail references in the EIR. Please consider alternatives which avoid destruction of these habitats.

11. The finding of less than significant impact and no mitigation required for loss of agriculture is not supported by the previous final EIR/EIS for BMK V development (1992). The loss of local oat hay product and conversion of potential prime agricultural land to other uses were both I-34.78

considered to be Class I impacts, which are unavoidable significant impacts. Most of this site has historically been and is currently farmed. I-34.78 Con't.
Please include the above discussion into relevant sections and Executive Summary of the EIR.

12. Approximately 135-550 acres of mosquito habitat would be created by the restoration project. Reliance on pesticide spraying could have grave environmental impacts and is not acceptable. Characterization of existing conditions described in the SEIR/EIS are misleading. Land currently used for agriculture is tallied as ponding area which is not correct. Displaced rodent and predator populations are not addressed in the SEIR/EIS. I-34.79
Please include the above discussion into section Executive Summary and mitigation measures in the GRR/EIR.

13. ***Please provide a comprehensive adaptive management and long term monitoring plan, including maintenance and annual funding allocations for contingency repairs to infrastructure including levees, excess sedimentation removal, replanting, changes to hydrological features, and flood control improvements and other unforeseen events in response to the adaptive management approach as an appendix to this EIR. Please identify:*** I-34.80

- What funds are allocated annually to guarantee the state's ability to pay provide the adaptive management necessary to assure that project goals an objective are met?
- What contingency funding will be kept in reserve for damages and negative environmental impacts resulting from this project.

Thank you for addressing these questions and concerns in the Final EIR.
Sincerely,

Sue Lattanzio
President, Friends of Novato Creek

References:

1. Channel Design Recommendations Lower Novato Creek, Phillip Williams Associates, Ltd. October 1996
2. Sediment Sources and Fluvial Geomorphic Processes of Lower Novato Creek Watershed, Laurel Collins, July 1998

cc: Cynthia Murray, Marin County Board of Supervisors
Craig Tackabery, Marin County Department of Public Works
Jennifer Barrett, City of Novato Planning Depart.
Tom Selfridge, Novato Sanitary District
Chris De Gabriele, North Marin Water District
Pat Baldarama, Marin County Flood Control District
Eric Tattersall, California Dept. of Fish & Game
Fran Pavley, State Assemblymember
Tom Keeley, State Assemblymember
Joe Nation, State Assemblymember
Mary Nichols, California Resources Agency
The Honorable Harry Reid, U.S. Senate
The Honorable John Duncan U.S. Senate
The Honorable Barbara Boxer, U.S. Senate

The Honorable Lynn Woolsey, U.S. House of Representatives
The Honorable Ellen Tauscher, U.S. House of Representatives
Lieutenant Colonel Timothy S. O'Rourke, District Engineer, U.S. Army Corps of Engineers
Lt. Gen. Robert B. Flowers, Chief of Engineers . U.S. Army Corps of Engineers

I-34 Friends of Novato Creek

General Response to Comment I-34 Regarding Remediation Issues at HAAF, Navy Ballfields, and SLC (NAF) sites (specific responses provided below):

The comment letter makes numerous references to remediation issues on the HAAF, Navy Ballfields, and SLC (also referred to as the North Antennae Field or NAF) sites. This general response discusses the relation of these issues to the activities included or not included with the BMKV expansion of HWRP, which is the subject of the SEIR/EIS.

The BMKV expansion is a proposed addition to the HWRP. The HWRP, including the HAAF, Navy Ballfields, and SLC (NAF) sites, were analyzed in the 1998 EIR/EIS and authorized in the Water Resources Development Act of 1999.

Relevant to HAAF/Navy Ballfields portions of the HWRP, as noted on pages 3-1 and 3-2 of the Draft SEIR/EIS, The suite of restoration activities in the 3 action alternatives include the following changes:

Replacement of the barrier levee between BMKV and HAAF, with an access berm for the NSD line
Extension of the Bay Trail south and north from the City of Novato levee
Potential use of diesel off-loading and booster pumps for off-loading dredged material
Potential alternative alignment of dredged-material pipeline directly from the off-loading facility to the BMKV expansion site (Alternatives 1 and 2)

None of the proposed changes included in the BMKV expansion result in any changes to the HWRP wetland design for the HAAF or Navy Ballfields parcels. The BMKV expansion makes no determinations whatsoever regarding potential remedial activities at the HAAF or Navy Ballfields The BMKV expansion proposes no hydrologic or physical connections between the HAAF or Navy Ballfield parcels. Remedial determinations for these sites are being addressed through the BRAC process. If the remedial determinations ultimately made through BRAC would require changes in the wetland designs proposed for the HAAF or Navy Ballfields portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. This has been clarified in the executive summary, chapter 2, and the *Hazardous Materials and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the BRAC process would not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with present project design.

Extensive discussion of the HAAF and Navy Ballfields remedial issues in the BMKV expansion SEIR/EIS are not necessary for an adequate analysis of the effects of the proposed BMKV expansion. The summary of hazardous materials and waste relevant to the HAAF parcel and the Navy ball fields has been expanded somewhat so as to provide the reader with a contextual understanding of the remedial process at the neighboring parcels.

The SLC parcel was included in the 1998 EIS/EIR as part of the HWRP. Remedial issues at the SLC parcel are being addressed through the FUDS process. However, the only potential changes analyzed in the BMKV expansion SEIR/EIS relevant to the SLC site are, as noted, on pages 3-1 and 3-2:

- elimination of the proposed HWRP separating levee between SLC and BMKV;
- change in location and amount of high transitional marsh;
- repositioning of the tidal breach on SLC to BMKV (in Alternative 2 and 3); and
- reduction in the amount of dredged material placement (Alternative 3 only).

A summary of remedial concerns on the SLC site is presented in the *Hazardous Substances and Waste* section in chapter 4 of the Draft SEIR/EIS. The summary of hazardous materials and waste relevant to the SLC parcel has been expanded somewhat so as to provide the reader with a better contextual understanding. However, extensive discussion of remedial concerns on the SLC parcel is not necessary to adequately assess the impacts of the BMKV expansion, because the BMKV expansion presumes that the SLC site will be appropriately remediated to a state suitable for the proposed wetland use. Further, BMKV expansion makes no determinations regarding ultimate remedial options for contaminated portions of the SLC site, which are being determined through the FUDS program. If the remedial determinations ultimately made through BRAC would require changes in the wetland designs proposed for the SLC portions of the HWRP, then at that point, the lead agencies would evaluate the potential effects of the changes and determine whether or not additional NEPA/CEQA compliance would be necessary. This has been clarified in the executive summary, chapter 2, and the *Hazardous Substances and Waste* section of chapter 4 of the SEIR/EIS. At this point, the lead agencies consider it speculative to assume that the FUDS process will not result in remedial options that leave the site suitable for the proposed wetland use generally in accordance with present project design.

I-34.1

The hydrologic and hydraulic effects of the project on San Pablo Bay, Novato Creek, and Pacheco Pond are discussed in the *Surface-Water Hydrology and Tidal Hydraulic* section in chapter 4 and in appendix B of the Draft SEIR/EIS. These are the portions of the Novato Creek watershed potentially affected by the BMKV expansion. See further discussion of hydrologic and hydraulic studies in Master Responses 2, 6, and 7 relevant to Novato Creek and Pacheco Pond.

Reference to the "Outboard Tidal/Coastal Marsh parcel" may be either to an area on the HAAF parcel, and area on the SLC parcel or both. Remedial investigations and actions are addressed through the separate BRAC and FUDS remedial processes.

I-34.2

See General Response to Comment I-34 above.

While the HAAF parcel would be separated by the access road/berm for the NSD site, with the BMKV expansion there would be no separating levee between the SLC parcel (which is part of the authorized HWRP) and the BMKV expansion site.

The HWRP goals and objectives are those used for the BMKV expansion as described in the executive summary and in chapter 1 of the Draft SEIR/EIS. The alternatives analyzed in the document were designed to meet those goals and objectives, and the project sponsors believe that the BMKV expansion furthers the HWRP goals and objectives, which is why they are proposing to add the BMKV expansion to the HWRP.

I-34.3

See General Response to Comment I-34 above regarding HAAF and SLC.

The 1998 EIS/EIS discussed wetland restoration at HAAF.

The results of Phase I Environmental Assessment (Miller Pacific 1995) and the Shallow Soil Investigation (Erler & Kalinowski 2002) for the BMKV expansion site are summarized in the *Hazardous Substances and Waste* section in chapter 4 of the Draft SEIR/EIS. The results of prior studies at the SLC site are also summarized in the same section. Source documents for preparation of the summary information are cited. CEQA Guideline 15125(a) specifies that the description of the environmental setting for a project shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives.

I-34.4

As noted in the prior response, the results of prior hazardous waste studies for the BMKV expansion site are summarized in the Draft SEIR/EIS. It is presumed that the comment reference to "environmental assessment" refers to hazardous materials investigations, and these are summarized in the document for the BMKV and SLC sites. The actual studies are not included in the Draft SEIR/EIS, but the summaries of results are sufficient to characterize potential impacts for the reader of the document. These studies are included in the technical appendices to the GRR; however both NEPA and CEQA allow the incorporation of information from supporting technical studies by reference.

As noted in the prior response, this document is a supplemental EIR/EIS to the 1998 HWRP EIS/EIR and is limited to analyzing the new actions or changes actions relative to the BMKV expansion and does not reanalyze environmental effects of the HWRP where they are not changed by the proposed expansion.

The reference to Volume 11 is unclear. If this is a reference to Volume II of the GRR – this is an appendix to the GRR, not to the SEIR/EIS. Nevertheless, the information in the technical appendices was utilized and is referenced and summarized in the SEIR/EIS where relevant to the analysis of environmental effects.

I-34.5

On a physical level, the HAAF site and the BMKV expansion site would not be "co-mingled" as they would be separated by the NSD access road/berm, which would be a barrier to surface hydrological connection. Resolution of remedial issues at the HAAF site ispart of the BRAC process. Handling of potentially contaminated soils, including any potential use of borrow material at the HAAF site, the SLC site, or the BMKV expansion site must comply with state and federal laws and regulations. There is no plan to move soil from HAAF or SLC to BMKV.

I-34.6

Comment noted. The lead agencies believe that the SEIR/EIS is supported by sufficient and adequate technical studies, presents a realistic assessment of project effects and discusses relevant regulatory requirements. Property ownership is identified in both the GRR and the SEIR/EIS.

I-34.7

The Hamilton/BMKV project is designed to restore a diverse array of wetland habitat, using dredged material as a resource, where feasible. The environmental goals drive the project design and feasibility analysis, not dredged material disposal. The Port of Oakland is only proposed to provide a portion of the material to establish the restoration template. Material from the Port or any other source will be used only if it is determined to be suitable by the DMMO.

As noted on page 6-13 of the GRR, the Oakland Deepening Project Cooperation Agreement (PCA) assigned funding responsibility relevant to beneficial reuse of Port dredged material at the HWRP to the Deepening Project. Also as noted on page 6-13 because the Port's obligation is defined as a fraction of the total costs of the applicable components of the HWRP implementation costs, the adjusted HWRP implementation costs are expected to increase the funding contributions from the Deepening Project. Use of appropriate material and funding contributions from the Oakland Deepening Project are part of the assessment of feasibility. However, as noted in the GRR, the majority of project costs are to be funded by the HWRP and other navigation projects using the site. As noted in the GRR, the project is considered economically feasible

Environmental effects are discussed in the SEIR/EIS and where significant effects are identified, mitigation measures are proposed. It is the lead agencies determination that based on all of the information presented in the GRR and the SEIR/EIS, that the preferred alternative is feasible.

I-34.8

The HWRP/BMKV project is proposed to be funded as a federal/state project. No user fees are proposed. Therefore the economic viability of the project would not be impacted by dredged material sources that do not meet criteria for use in the project.

As noted above, the HWRP/BMKV project would only accept material determined to be suitable as wetland cover material by the DMMO. As described in the *Hazardous Substances and Waste* section in chapter 4, the DMMO, which is a consortium of regulatory agencies, evaluates dredged material and makes recommendations on its chemical suitability and biological suitability for use in wetlands and uplands based on testing that is specific to the proposed site environment, as well as on criteria and guidance from federal and state laws. Because dredged material would not be accepted from any source if it were not determined suitable for wetland cover, the project has an effective screening mechanism in place to monitor sediment quality. The DMMO will evaluate the suitability of material from dredging sources on a project-by-project basis.

Also as noted above, the project sponsors have determined that there are substantial amounts of appropriate dredged material from the Port of Oakland that can support the project in addition to substantial amounts of appropriate dredged material from other navigation projects.

I-34.9

The project sponsors do not believe that these goals are contradictory. The project design was guided towards a system that is simple and minimizes need for active management. For example, allowing natural sedimentation processes to create the final marsh plain by placing dredged material at a slightly lower elevation, rather than attempting to sculpt a final marsh plain prior to breaching. Another example

is the use of flapgates to drain nontidal areas, rather than maintaining pumps. However, the sponsors will monitor project development and use an adaptive management plan as needed.

As this is an expansion of the HWRP, the Monitoring and Adaptive Management Plan for the HWRP applies to the BMKV project. This plan has been updated to include the BMKV expansion and is included as an appendix to the Final SEIR/EIS. Responsibility for implementing the plan in the short-term will be assigned to the Conservancy and Corps. The Corps has adopted a 13-year monitoring period after completion of construction for this project. Responsibility for implementing the plan after the involvement of the Corps would be held by the Conservancy or its successor in interest.

I-34.10

Impact WQ-1 discusses the potential degradation of surface water and sediment quality due to increased methylmercury formation. As noted in the impact discussion, current research has identified that tidal wetlands and tidal wetland restoration may lead to increased concentrations of methylmercury in sediments and water; however, although models are being developed, it is not currently possible to estimate the methylmercury concentrations and bioaccumulation and biomagnification that may occur as a result of tidal wetlands restoration. The comment itself notes that the cited paper implicates tidal wetland restoration as "possibly" leading to increase concentrations of mercury, which is consistent with the description of impact in the Draft SEIR/EIS. Because mercury is a concern in San Francisco Bay, and mercury methylation in tidal wetlands is not sufficiently characterized by present science to complete a quantitative impact assessment, it was presumed that this impact is significant and unavoidable. Mitigation Measure WQ-1 is incorporated in the project to develop an adaptive management plan (including monitoring) in consultation with responsible regulatory agencies that would help guide project implementation and phasing in light of the scientific research being developed concerning mercury methylation.

Regarding dredged sediment monitoring, Impact WQ-9 discusses the potential for degradation of receiving water quality due to dredged material placement and identifies Mitigation Measure WQ-4 to develop and implement a water quality monitoring program for dredged material placement. The methylmercury adaptive management plan and the water quality monitoring program would reinforce each other in making choices about corrective actions regarding water quality, should they be determined to be necessary.

As noted in the Draft SEIR/EIS predictive modeling of methylmercury concentrations is not currently considered feasible, although models are currently in development. When appropriate models have been developed, then these models should be used as part of implementing Mitigation Measures WQ-1 . Specific mention of this has been added to the language of the mitigation measures.

I-34.11

See Master Response 1 regarding selection of the preferred alternative. The outboard levee has been moved to a location approximately 1,500 feet from the BMK south lagoon. This would increase the buffer zone as well as the upland component of the project. The preferred alternative is felt to contain an appropriate habitat design that fulfills the project's goal and objectives.

I-34.12

See Master Response 12 regarding habitat design. The project goals and objectives are the primary design criteria around which alternatives were developed and considered for analysis in the SEIR/EIS. One of the primary prior planning efforts, the Bayland Ecosystem Habitat Goals Report, was influential in establishing priorities for restoration in San Francisco Bay, and the project design was mindful of the recommendations of the Goals Report for a wide tidal marsh plain at the project area in addition to inclusion of diverse wetland and other wildlife habitat. As noted in the document, a wide range of alternatives was considered and is considered to represent a reasonable range of alternatives for consideration. These alternatives were then further evaluation for consideration of analysis in the Draft SEIR/EIS and were found to be a reasonable range for analysis. See further discussion of alternatives dismissed from further consideration in chapter 3.

As described in chapter 6, a series of technical and public workshops and meetings were conducted in the latter half of 2001 that were attended by agency representatives, consultants, interested parties, and members of the public to solicit input on the conceptual design elements for the BMKV expansion including hydrology, habitats, levees, trails, and access. In December 2001, a formal scoping meeting and scoping comment period were conducted to solicit further agency and public comment on alternatives and SEIR/EIS scoping. Only after the information developed through this process was considered, were alternatives fully developed.

Alternative 1 and 2, as described in the executive summary table ES-1 differ in the habitat design, number of tidal basins, routing of the Bay Trail, water management structures.

I-34.13

The FNC preferred alternative appears to include the following (as indicated in the comment): A swale of 2,000 feet in width; no breach to Novato Creek; conversion of Pacheco Pond to tidal marsh through introduction of tidal flow into the pond; interpretive center on City property at Hamilton; bay trail at some unspecified location, but not along Pacheco Pond.

This comment is noted. In the preferred alternative, the swale area has been modified to increase the width and allow for greater separation between the outboard levee and the south lagoon and greater upland habitat component. Regarding breaching the BMKV/Novato Creek levee, this is discussed in Master Response 6. Since the hydraulic analysis has not identified a significant adverse effect of the breach on Novato Creek, a breach has been included in the preferred alternative to restore the hydrologic and ecological connection of Novato Creek to its tidal floodplain. Regarding Pacheco Pond, the potential effects of a diversion of outflow are discussed in the Draft SEIR/EIS and in Master Response 7. Further, extension of tidal action to Pacheco Pond was considered (as Alternative Feature 11 – see chapter 3) but not analyzed further in the Draft SEIR/EIS due to impacts on existing pond habitats and loss of flood control function of the pond. The impacts of Bay Trail routings are discussed in the Draft SEIR/EIS. The City of Novato and Marin County have both included a trail around Pacheco Pond in their General Plan documents. The ABAG Bay Trail project also includes planning for such a trail.

I-34.14

As noted above, the Monitoring and Adaptive Management Plan for the HWRP applies to the BMKV project. This plan has been updated to include the BMKV expansion and is included as an appendix to

the Final SEIR/EIS. Responsibility for implementing the plan in the short-term will be assigned to the Conservancy and Corps. The Corps has adopted a 13-year monitoring period after completion of construction for this project. Responsibility for implementing the plan after the involvement of the Corps would be the responsibility of the Conservancy or its successor in interest.

I-34.15

The *Water Quality* section of chapter 4 and the executive summary already identify the potential significant and unavoidable impact related to methylmercury. Mitigation Measure WQ-1 is included in table ES-2 in the summary and in chapter 4 to reduce this impact.

I-34.16

See response to comment I-34.12.

I-34.17

The purpose of an executive summary is to summarize the key conclusions of the SEIR/EIS, not to provide detailed analysis of all relevant issues. The SEIR/EIS presents the design parameters of the project concerning dredged material quality, presents the current RWQCB sediment screening criteria (see table 4-11), and describes the role of the DMMO in evaluating dredged material quality. The effects of using dredged material versus a natural sedimentation approach are evaluated throughout chapter 4 in the comparative analysis relevant to Alternatives 1 and 2 versus Alternative 3 (see in particular the *Water Quality* and *Hazardous Substances and Waste* sections). Where significant effects are identified, mitigations are proposed, such as those above concerning water quality monitoring of dredged material placement.

I-34.18

The purpose of an executive summary is to summarize the key conclusions of the SEIR/EIS, not to provide detailed analysis of all relevant issues. As noted in the General Response to Comment I-34 above, remedial issues at the HAAF and Navy Ballfields are are the subject of the BRAC remedial process. The Coastal Salt Marsh sites at HAAF are also being addressed by the BRAC program. Existing data on the SLC site and the BMKV site is summarized in the SEIR/EIS. The potential planning constraints regarding the SLC parcel are noted on page ES-13. The potential planning constraints related to HTRW on BMKV are discussed on page 2-20 ; as identified on page 2-20, any necessary remediation on BMKV is not expected to impact the addition of BMKV to the authorized HWRP.

I-34.19

Scoping for the SEIR/EIS is discussed in chapter 6. Specific issues raised during scoping, including hydrologic and other concerns are noted in chapter 6 and in the scoping report included in appendix G. Comment letters on the NOI/NOP are also included in appendix G. Input from the BMK CSD and other agencies, individuals, and organizations during the design workshops in fall 2001, during the formal scoping period, and in informal meetings subsequent to the scoping period were considered by the lead agencies during development of the alternatives and preparation of the SEIR/EIS. Where appropriate to support the impact assessment, supporting technical studies, such as concerning surface water hydrology and hydraulic modeling were conducted and are considered adequate for the purposes of impact assessment. Public Issues and Areas of Controversy were discussed on pages ES-8 and ES-9 in the Draft

SEIR/EIS; this section has been updated with information generated during the public comment period on the Draft SEIR/EIS.

I-34.20

Key prior reports concerning remedial issues at HAAF have been mentioned in the revised *Hazardous Substances and Waste* section in the Final SEIR/EIS. However, extensive description of remedial issues, as noted in General Response to Comment I-34 above is not necessary to characterize the environmental effects of the BMKV expansion.

I-34.21

The Outboard Marsh parcel is on the HAAF site and no actions included in the BMKV expansion would change the existing HWRP related to this location – thus it does not need to be included in the study area.

For the SEIR/EIS, project effects on Novato Creek, Pacheco Pond, Arroyo San Jose, and Pacheco Creek were assessed in issue areas where such off-site effects were identified to occur. Thus, the study area for the individual subject areas was broader than the expansion site itself in areas such as hydrology and tidal hydraulics and water quality. A note to this effect has been added to Section 2.2 of the GRR.

Regarding potential levee breaches, impacts are discussed in Master Response 6 and in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS.

I-34.22

In the mid-1800s, the shoreline was located just east of the BMK residential area. The area west of the shoreline was tidal marsh and salt pond, including the current location of the BMK community, the western side of BMKV and Pacheco Pond. The comment is correct about the accretion of sediment due to hydraulic mining in the mid to late 1800s. These details have been added where appropriate in the GRR and the SEIR/EIS. Diking and draining of the site and use for dryland farming is noted in Section 2.3.2 and other portions of the text already. Current groundwater quality is described on page4-48 of the Draft SEIR/EIS.

Regarding alleged "bombing range" use, the Enhanced Preliminary Assessment (Weston, Roy Inc., *1990 Enhanced Preliminary Assessment, Hamilton Army Airfield, Novato California*) noted a "hearsay" report of possible bombing areas near the East Levee landfill, north of the aircraft parking areas, and in Bel Marin Keys (north of runway overrun) (Weston 1990). However, the Enhanced PA noted that "the use of any areas on or around Hamilton Army Airfield for bombing range activities could not be documented" (Weston 1990). The Enhanced PA recommended further investigation to verify the existence of any bombing ranges; if any documentation (such as written or first-hand verbal reports) of bombing ranges were located, the Enhanced PA recommended an ordnance sweeep of any such identified suspect areas (Weston 1990).

Record reviews were conducted subsequent to the Enhanced PA, but no evidence was found to substantiate the presence of the ranges (ETC 1994). Privately owned farmland to the north of the Hamilton Army Airfield was also inspected for the Community Environmental Response Facilitation Act Report (Earth Technology Corporation (ETC) 1994, *Community Environmental Response Facilitation Act Report, Hamilton Army Airfield*). Physical evidence or other records of bombing ranges were not

identified during the CERFA windshield, walk-through and aerial site surveys. The CERFA report concluded that the operation of a bombing range in areas used for farming and residences is atypical. The CERFA also report concluded that "the lack of substantiating documentation or physical evidence for the ranges identified in any of the site investigations conducted since the Enhanced PA, in conjunction with the unlikelihood of the site as a bombing range due to safety considerations, support the...conclusion that there never was a bombing range at Hamilton Army Airfield" (ETC 1994).

Regarding ordnance issues, the ASR makes no mention of ordnance uses adjacent to Hamilton. There is mention in the ASR (on p. 2-1) of "gunnery training"over Hamilton Field in 1933 by a squadron from Crissy Field, which the ASR judged to be strafing training. However this was conducted during construction of the airfield and it is unlikely that such activity could be conducted safely once the field was in use. The ASR did not identify use of the Hamilton site as a "bombing range" in its review of historical use and did not identify any bombing ranges as ordnance or explosive concerns in its conclusions and recommendations (USACE St. Louis 2001).

I-34.23

Section 2.3.4 concerns HTRW (Hazardous, Toxic, and Radiological Waste) related to the BMKV expansion site itself. See General Response to Comment I-34 above. The characterization of contamination issues on the BMKV expansion site is considered adequate for the purposes of NEPA/CEQA impact assessment.

I-34.24

Page 2-11 of the GRR describes the historical network of natural channels leading to Novato Creek consistent with that noted by the comment. It should be noted that the current outlet channel from Pacheco Pond to Novato Creek pre-dates Pacheco Pond itself and was likely installed as part of agricultural use of the Leveroni parcels.

See Master Response 7 regarding Pacheco Pond diversion. As noted in the master response, the baseline for impact assessment of the BMKV expansion are the conditions present today, not 1850. The condition today is that Pacheco Pond is not a tidal marsh and the MCFCWCD tidal flapgates prevent tidal intrusion into the pond.

The preferred alternative has been modified to retain use of the outlet to Novato Creek, at least for dry season outflow, and possibly for dual use with a new outlet to BMKV in the wet season. The preferred alternative is not expected to result in a change in habitats in Pacheco Pond itself.

Extension of tidal flow to Pacheco Pond was considered during alternative development (see Alternative Feature 11 in chapter 3 of the SEIR/EIS), but was rejected from further consideration because it would seriously hinder the flood control function of Pacheco Pond and would convert the existing brackish and riparian habitats in the pond and in the confluence of Arroyo San Jose and Pacheco Creek. Further, the pond is not owned by the Conservancy and it is unlikely that MCFCWCD, who owns the pond and operates under an agreement with DFG, would support conversion to a tidal marsh.

I-34.25

The BMKV expansion does not include any changes to the HWRP design for the seasonal wetlands on Hamilton. Hydrology for the expansion site itself and connections to adjacent water bodies are presented in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS. Discussion of topographic features at the HAAF parcel is not provided because the BMKV expansion does not propose any changes to the wetland design at the HAAF parcel, which was the subject of the 1998 EIS/EIR.

I-34.26

The description on page 2-12 of the Draft GRR describes hydrology, not habitat. No statement is made about what elevation the pond is actually managed at – reference is only made to the operating agreement between MCFCWCD and DFG. No other specifics are provided in the comment concerning purported information being outdated.

I-34.27

No basis for the assertion that the 1996 top of levee surveys are "incorrect" or "outdated" is provided. The 1996 levee surveys are the most recent surveys available that surveyed the entire perimeter levees at the expansion site along Novato Creek, San Pablo Bay, HAAF, and Pacheco Pond. The lead agencies are unaware of any other, more recent survey that has examined the entire perimeter levees.

The cited pictures are identified as showing flooding of BMK Blvd and overtopping of the BMK lock. These locations are both outside the proposed restoration area and are not located on the BMKV perimeter levees. The discussion in Section 2.3.5.1 notes that the BMK community is susceptible to flooding during high tide stages

I-34.28

The referenced easement (Marin County Recorders Serial No. 97-000917) was executed in late 1996 and recorded in 1997 between the BMK CSD and California Quarter (the former owner of BMKV). The easement contains the following language: "The easement granted herein includes the following use of the Servient Tenement by Grantee.....c) the right to discharge water onto the Servient Tenement from the lagoon; provided that water from the lagoon shall only be discharged onto the Servient Tenement when the lagoon and Novato Creek reach a level of 1.5 feet NGVD." The Servient Tenement is defined as "a portion of Grantor's property" (Parcel 157-172-07) "and is more particularly described in Exhibit "A" attached." Exhibit "A" describes the "Bahama Reef Easement" as real property in Marin County, "containing 3.034 acres, more or less," and is noted on the attached map as the same acreage. There is no mention of the 300-acre MCFCWCD easement in the 1996 easement for the lagoon overflow. The 300-acre MCFCWCD easement is located on Parcels 157-172-08 and 157-172-38. <u>These details have been updated in the *Surface-Water Hydrology and Tidal Hydraulics* section of the Final SEIR/EIS.</u>

I-34.29

Re: flooding Although the potential exists, there is no evidence that stormwater flows have resulted in contaminant migration from HAAF to BMKV. Soils testing of ditches and fields on BMKV have revealed no elevated levels of contaminants of concern.

I-34.30

Section 2.3.6 of the GRR and the *Geology, Soils, and Seismicity* section of chapter 4 of the Draft SEIR/EIS describe site conditions relative to the BMKV expansion area. The summary information presented in the GRR and in the SEIR/EIS is based on the data in the Geotechnical Design Requirements in GRR Technical appendix C. Settlement impacts are described in Impact G-2 concerning wetland formation and levees. As noted in the discussion in this impact, detailed site-specific geotechnical investigations would be conducted to support the engineering design of levees and specifications for dredged material placement components. Site-specific design-level geotechnical investigations would include review of any locally available recent data on settling, such as at the NHP levee. As noted in the Draft SEIR/EIS, the results of the design-level geotechnical investigation would be incorporated into the construction plans for levees and dredged material placement and would adequately account for anticipated settlement and this impact is considered less than significant.

I-34.31

Section 2.4.2.1 is about the potential for delays in implementing portions of the HWRP on the HAAF and SLC parcels due to the time necessary to resolve HTRW remediation issues. This section is not about contamination issues present at HAAF, SLC, or BMKV. The *Hazardous Substances and Waste* section of the SEIR/EIS discusses contamination issues relevant to the actions included within the BMKV expansion. The *Water Quality* section of the SEIR/EIS discussed the current water quality status of San Pablo Bay and Novato Creek. Special status species are discussed in the *Biological Resources* section of the SEIR/EIS. The PDD is located on the HAAF and outside the area included in the BMKV expansion. Bay-wide impacts of contaminants on special-status species is outside the scope of the SEIR/EIS, which focuses on potential effects of the BMKV expansion on special-status species.

I-34.32

The alternatives analyzed in the Draft SEIR/EIS all include an array of wetland and other habitats. The preferred alternative, Revised Alternative 2 includes open water, seasonal wetland, upland, high transitional marsh, tidal marsh, tidal mudflat, and subtidal channel and the lead agencies have determined that this alternative best meets the identified project goals and objectives in relation to habitat components. These habitats would provide for threatened and endangered species as well as migratory and resident species. In addition, transition areas and high-tide refugia are included in the conceptual designs and the large increases in tidal marsh and adjacent habitats are expected to substantially benefit clapper rail, salt marsh harvest mouse, and other species.

The comment asserts that the habitat design mix should be different than that included in the alternatives and is noted. However, this comment concerns project outputs rather than the effects of the proposed project. Project alternatives included in the Draft SEIR/EIS and dismissed from further consideration (including varying habitat mixes, see Alternative 4 and others) are disclosed in chapter 3 of the Draft SEIR/EIS.

The comment about "contiguous" seems to assert that the separating levee should be entirely removed between HAAF and BMKV. This possibility was considered as Alternative Feature 12 (see page 3-41 of the Draft SEIR/EIS) and rejected from further consideration because of the need to accommodate the NSD pipeline and access to that pipeline. The 2 sites are immediately adjacent to each other, though in ultimate design they would not be hydrologically connected.

Predation of California clapper rails on salt marsh harvest mouse is not relevant to the impact assessment. Increase of habitat for both species would be expected to increase the population of both species. The comment would seem to assert that tidal marsh should be designed to somehow increase habitat for California clapper rail and increase habitat for the salt marsh harvest mouse without creating any opportunities for clapper rail predation. Since these habitats occur naturally adjacent to each other, predation, when it occurs, is part of the natural order.

I-34.33

The current HWRP design includes a separating levee between the HAAF/SLC areas with a final design height of 8 feet NGVD. Without the BMKV expansion, the expansion site itself would need to be protected from the introduced tidal regime on HAAF/SLC. This is described in appendix A of the Draft SEIR/EIS, which provides the relevant project description from the 1998 EIS/EIR for the HWRP. With the BMKV expansion, the SLC site can be integrated into the expansion site, and the levee/berm separating the tidal areas on the HAAF and expansion sites only needs to be sufficiently high to protect the NSD pipeline and NSD access. This would result in a cost savings.

I-34.34

See subsequent responses re: ES-11.

I-34.35

Project effects on threatened and endangered species are discussed in the *Biological Resources* section of the Draft SEIR/EIS. Where significant effects are identified to these species, mitigation measures are identified for significant effects, where feasible.

I-34.36

Regarding historic flooding and fate and transport of contaminants on HAAF, remediation issues at HAAF are being addressed through the BRAC remedial process.

Regarding acid-sulfate soils, impact WQ-9 on page 4-57 of the Draft SEIR/EIS discusses the potential for release of sulfuric acid. As discussed, with the channeling of drainage through water quality detention ponds prior to discharge would dilute the small amount of sulfuric acid that could be released to Novato Creek and San Pablo Bay and this impact is thus considered less than significant. Mitigation Measure WQ-4 includes a water quality monitoring program to be implemented in compliance with WDRs to be established in the site permit from SFRWQCB.

Hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas of the SLC parcel is under the FUDS program. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SF RWQCB, and conducted in compliance with applicable state and federal regulations. Similarly, if any new, previously unknown areas of potential contamination were to be identified during restoration activities, state and federal regulations would apply to any potential remedial actions. The areas of potential concern on the BMKV and SLC site are described in tables 4-8 and 4-10. Overview figures of the areas of potential concern have been added as Figures 4-13 and 4-14 in the final SEIR/EIS for information purposes.

I-34.37

Section 2.5.6 references the guidelines and guidance to be used to determine dredged material suitability. Determinations of suitability would be made by the DMMO. As stated on page 3-16, the project would only accept material determined to be suitable for use at wetland cover by the DMMO. Sediment quality is discussed on pages 4-131 to 4-135 in the Draft SEIR/EIS related to dredging projects and wetland reuse of dredged material. RWQCB screening criteria are presented in table 4-11. This information adequately describes the method of screening material for potential use at the project.

I-34.38

Regarding alleged HAAF groundwater, HAAF storm drainage, and "base-wide" DDT issues, these are relevant to the HAAF parcel. Wetland restoration of the HAAF parcel itself is unchanged by the BMKV expansion and is the subject of the BRAC remedial process. Regarding potential release of contaminants, hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas on the SLC parcel is under the FUDS program, which is described on page 2-9 of the Draft SEIR/EIS, and is presumed to be completed prior to wetland restoration activities associated with the BMKV expansion, as noted on page 2-1. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SFRWQCB, and conducted in compliance with applicable state and federal regulations. These actions are presumed to leave the site in a suitable conditions for wetland reuse.The comment appears to assert that episodic flooding has resulted in contaminant (such as DDTs) migration from Hamilton to BMKV through surficial flow. However, no evidence is provided to support this assertion. As stated on page 4-129 of the Draft SEIR/EIS, shallow soil sampling conducted in 1989 by Blymer Engineers, Inc., along the HAAF property boundary with BMKV and on the BMKV parcel was done to test for petroleum hydrocarbons and herbicides/pesticides with no detection of the tested compounds. Drainage ditches were later sampled by EKI, Inc. in 2000. No herbicides, pesticides, or phenols were detected in the samples collected from these ditches.

I-34.39

See Master Response 7 regarding Pacheco Pond diversion. Reference to "1987" map is probably a typo; reference is probably to mid-late 1800s or early 1900s mapping.

I-34.40

In the preferred alternative, there would be no spur to Novato Creek.

I-34.41

As noted above, remediation of the SLC site is being addressed separately through the FUDS process. The BMKV expansion makes no determinations regarding remedial options for contaminated areas on the SLC site. The BMKV expansion includes a high transitional marsh area on the southeast corner of the SLC site, which is a change from the 1998 project proposal for this area.

I-34.42

Contiguous means adjacent. The final sentence in Section 2.5.3 notes that the NSD access berm would create a hydrologic separation between the combined BMKV and SLC parcels and the HAAF parcel. This is described accurately in the GRR and the SEIR/EIS. However, study of large natural Bay tidal wetlands has identified that internal drainage divides arepresent within larger areas of contiguous wetlands.

I-34.43

See response to I-34.36 and Master Response 10.

I-34.44

Hazardous materials and waste are discussed in the *Hazardous Substances and Waste* section of the Draft SEIR/EIS on pages 4-126 through 4-139. The text and tables described the identified locations of contaminant concerns adequately and incorporate by reference the source prior technical studies, which include mapping. Table 4-9 on page 4-130 discusses the sampling of the BMK CSD dredged material placement area on the northeast corner of the BMKV expansion site.

I-34.45

See Master Response 2 and the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 of the SEIR/EIS and appendix B of the SEIR/EIS.

I-34.46

As shown in table 3-2 in chapter 3 of the Draft SEIR/EIS and in table 4-7 in chapter 4 of the Draft SEIR/EIS, each of the alternatives analyzed would result in a net increase of wetlands overall compared to the existing setting. As described in the *Biological Resources* section of the Draft SEIR/EIS, in order to implement the conceptual design to create the targeted wetlands and other habitats, there would be an impact to existing habitats on the site. However, with project implementation, there is expected to be a substantial increase in wetland habitat on the site.

I-34.47

See the discussion of the Affected Environment and Environmental Consequences in chapter 4 for a discussion of environmental effects including those that may affect neighboring residential areas. Regarding Novato Creek, see Master Responses 6 and 7 and the *Surface-Water Hydrology and Tidal Hydraulics* section of the Draft SEIR/EIS.

I-34.48

See Master Responses 6 and 7. As discussed in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4, the project is not expected to result in significant increased sediment deposition in Novato Creek. Also see the *Water Quality* section in chapter 4 of the Draft SEIR/EIS concerning potential runoff from the dredged material placement areas.

I-34.49

See Master Response 10 and responses above regarding dredged material sources and quality. As noted above, the wetland restoration design at the HAAF was the subject of the prior 1998 EIS/EIR. The BMKV expansion makes no changes to the wetland design on HAAF. See prior responses regarding result of prior studies regarding contaminated areas on BMKV and SLC and the *Hazardous Substances and Waste* section of the Draft SEIR/EIS. Regarding runoff see discussion of Impact WQ-9 and Mitigation Measure WQ-4 on pages 4-57 and 4-58 of the Draft SEIR/EIS. Regarding alleged bombing range use of BMKV and Pacheco Pond, see response above to comment I-34.22. The BMKV expansion makes no determinations regarding HAAF and SLC remediation, which are the subject of the BRAC and FUDS process.

I-34.50

The SLC parcel is a common and widely used reference to the subject parcel. The SLC parcel is already included in the HWRP, which was authorized in 1999. The BMKV expansion does not add the SLC parcel to the HWRP. The SLC parcel is discussed in context with the conceptual design of restoration activity on BMKV parcel due to the advantages from unifying the 2 sites and eliminating a separating levee segment. Remediation of the SLC site is the subject of the separate FUDS process. The BMKV expansion makes no determinations regarding SLC remediation, and the GRR and the SEIR/EIS both note that the remedial process at SLC must be completed prior to restoration activities. In addition, the preferred Alternative 2 (as revised) does not propose a channel cut across the area of concern at the SLC parcel. The SLC remedial process is currently at the feasibility/risk assessment phase.

I-34.51

See Master Response 7 regarding Pacheco Pond outflow diversion. Salmonid access is discussed in the Draft SEIR/EIS in chapter 4 under Impact BIO-9.

I-34.52

The SLC is already part of the HWRP, which was authorized in 1999. As noted on pages 3-24 and 3-25 of the Draft SEIR/EIS, the schedule for Alternative 2 (as well as the other alternatives) is dependent in part upon the completion of the FUDS remedial activities on certain portions of the SLC parcel. Until remedial activities are complete on the SLC site, placement of dredged material to create high tidal marsh in the southeast corner, and breaching of the outer levee for the southern cell of the tidal restoration area cannot be conducted. Other portions of the restoration activity, for instance in the northern cell of the tidal restoration or other parts of the BMKV expansion site could proceed in the interim while SLC remedial activities are completed.

Regarding responsibility for remediation, the HAAF parcel is the responsibility of the U.S. Army under the BRAC process, the Navy Ballfields parcel is the responsibility of the U.S. Navy under the BRAC process, the SLC/NAF parcel is the reponsibility of the Department of Defense under the FUDS process with the U.S. Army Corps of Engineers as the administering agency, and the BMKV parcel is the responsbility of the Coastal Conservancy as the owner.

I-34.53

Soils will not be moved from the HAAF or SLC parcels to the BMKV parcel.

Remedial issues and handling of contaminated soils at the HAAF parcel is the subject of the BRAC remedial process. Remedial issues and handling of contaminated soils at the SLC parcel is the subject of the FUDS process. Contaminated soils identified to date on the BMKV parcel are discussed in the *Hazardous Substances and Waste* section in chapter 4, and as noted in Mitigation Measure HAZ-1, site cleanup of identified areas would be coordinated with DTSC, as well as SF RWQCB, in compliance with applicable state and federal regulations. Handling, transportation, and disposal of contaminated soils would need to comply with applicable state and federal regulations.

I-34.54

As noted in Mitigation Measure HAZ-1, remedial actions would be coordinated with DTSC, as well as SF RWQCB, for any areas requiring remediation in light of the proposed reuse of the site. Remedial activities, as necessary, would be conducted prior to restoration activities. Site cleanup plans, determined in coordination with DTSC, would include any necessary controls to reduce migration of dust during remedial activities. It should be noted that the result of the prior site investigations for the BMKV expansion site have identified only limited soil contamination in discrete areas, not significant or wide-spread site contamination. Thus, the concern about soil handling is relevant to a relatively small portion of the site.

Regarding construction effects on air quality and noise, see the discussion of impacts and mitigation measures in the *Air Quality* and *Noise* sections of chapter 4.

I-34.55

Comment is unclear whether it is referring to HAAF, SLC, BMKV or all of the above. HAAF remedial activities are the subject of the BRAC remedial process. SLC activities are the subject of the FUDS remedial process. Potential remedial actions related to several limited areas of shallow soil contamination on the BMKV expansion site, would be coordinated with DTSC, as well as SF RWQCB, as noted in Mitigation Measure HAZ-1. Only after determinations through these separate processes that remedial activities have been completed suitable to the proposed wetland reuse, can dredged material placement take place.

As noted in Master Response 10, placed dredged material would have to be determined to be suitable for wetland cover use by the DMMO. It should be noted that due to subsidence, the expansion site is at an average elevation of –4 feet to –5 feet NGVD. Target elevations for areas of dredged material placement on the expansion site are 0 feet to 2 feet NGVD in the marsh basin, –1.5 feet NGVD at the deepest point of the swale, and about –1.5 feet NGVD in the seasonal wetland area.

As regard testing and permit requirement prior to water discharge into San Pablo Bay, see discussion under Impact WQ-9 and Mitigation Measure WQ-4 and general discussion in the *Water Quality* section in chapter 4 of the Draft SEIR/EIS.

I-34.56

The SLC parcel is already part of the authorized HWRP. The FUDS remedial process has not yet been completed. At this point, the project sponsors believe that it is speculative to assert that an appropriate remedial approach cannot be developed suitable to wetland reuse of the SLC parcel generally in accordance with the present project design. However, if at some future date, it were to be determined that

no feasible remedial option is available that would leave contaminated portions of the SLC parcel in a suitable state for the restoration activity envisioned in either the original 1998 SEIR/EIS or in the BMKV SEIR/EIS, then the project sponsors would need to develop modifications to the HWRP to allow the remainder of restoration activities to go forward. Since this is speculative at this time, it was not considered as an alternative in the prior EIR/EIS or the SEIR/EIS.

I-34.57

As noted on pg. 3-22 and 3-23, levee and internal peninsula construction activity in Alternative 2 is the same as described for Alternative 1, except the lengths and locations differ as shown in the construction approach figure (figure 3-7). See description of construction activity under Alternative 1 on pages 3-13 to 3-14.

Regarding internal levee stabilization, the specific engineering design of levees would be determined during the detailed design phase through additional site-specific geotechnical investigations.

Regarding channel creation, the design includes berms to separate the site into basins and internal peninsulas to favor sediment deposition, inhibit wave runup, and favor channel network formation. Pilot channels at each levee breach would be excavated to allow tidal intrusion. In the conceptual design, the marsh plain, including 2nd and 3rd order channels, would be restored through natural sedimentation and tidal action.

Regarding habitat diversity, chapter 3 identifies the expected habitats for the conceptual design of each alternative in the associated figures and tables.

Regarding reference sites for conceptual designs, the designs draw on the experience to date in the conceptual and detailed design of the HWRP, Sonoma Baylands, "Carl's Marsh" on the Petaluma River, and Muzzi Marsh as well as development of wetland designs for over 36,000 acres in the South and North San Francisco Bay as part of wetland mitigation assessment for the San Francisco Airport. However, it should also be noted that the designs for the HWRP and for the BMKV expansion are also based on assessment of existing and historic conditions in San Francisco Bay tidal marshes (including China Camp and Petaluma Marsh), hydrologic and hydraulic modeling of the existing conditions at the site itself, and potential future conditions, and the input of a technical advisory committee, stakeholders, and the public through the various workshop and public meetings associated with both projects.

I-34.58

The benefits of each alternative are the habitats to be created through each design, which are summarized by acreage in table 3-2, discussed in the executive summary, and noted where appropriate in the *Biological Resources* section in chapter 4. Other benefits are described in chapter 3, summarized in table 3-1 and include the extension of the Bay Trail and the spur trail. The importance of tidal wetlands, seasonal wetlands, and other habitats is not discussed at length in the document, but is discussed thoroughly in the Baylands Ecosystem Habitat Goals Report, which is noted as a key prior planning effort in chapter 2 of the Draft SEIR/EIS. Also, the *Biological Resources* section of the Draft SEIR/EIS notes some of the species that would benefit from the newly created and expanded habitats.

I-34.59

Comment noted. As noted above, site-specific geotechnical investigations to support final levee design and other earthworks design would be completed during the detailed design phase to follow. These investigations would take into account any recent experience in the immediate project area concerning settlement. Conceptual design has taken into account prior site and local data when selecting general levee heights on a conceptual level.

I-34.60

A noted above, the BMKV expansion does not include changes to the wetland restoration design at HAAF and only minor changes to the design at SLC (mostly related to additional dredged material in the southeast corner of the parcel). The assessment of geology, soils, and seismicity is appropriately based on the prior 1995 assessments of the BMKV parcel itself, which are referenced in chapter 4. It should be noted that the prior studies were conducted to support an assessment of the previously proposed residential/lagoon/multi-use project proposed at BMKV, which included substantial amounts of fill and improved levees. These studies are considered adequate for the purposes of impact assessment in the SEIR/EIS. It should also be noted that geological, soil, and seismicity conditions at the BMKV parcel, the SLC parcel and the low-lying non-filled portions of the HAAF parcel, in general., are highly similar, in that they are all located in areas of thick deposits of Bay Mud. Geology, soil, and seismicity at HAAF and SLC were assessed in the 1998 EIR/EIS. Finally, site-specific geotechnical investigations to support final levee design, other earthworks design, and dredged material placement would be completed during the detailed design phase to follow.

I-34.61

Table 1-1 in chapter 1 of the Draft SEIR/EIS identified that a permit from SF RWQCB pursuant to the Porter-Cologne Water Quality Control Act, including Waste Discharge Requirements, would be required for discharge of water. Table 1-1 also identified that BCDC and DFG would need to issue permits before any Bay or cetain waterway filling or dredging or creek alteration occurs and that an MOA from DFG would be required for state-listed species affected by the project and consultation with USFWS and NMFS regarding federally listed species affected by the project.

As noted above, remedial activities at HAAF are conducted under the BRAC remedial process, activities at SLC are conducted under the FUDS process, and remedial activities at BMKV would be conducted by the Conservancy in coordination with DTSC (as well as SF RWQCB). The BRAC remedial process is described in chapter 2 of the SEIR/EIS and is conducted by the Sacramento District of the Corps under contract to the U.S. Army in coordination with USEPA and DTSC. The FUDS remedial process is also described in chapter 2 and is also conducted by the Sacramento District of the Corps under contract to the U.S. Army as the administering federal agency in coordination with USEPA and DTSC (CORPS to confirm description). Cleanup of limited shallow soil contamination areas on BMKV itself would be conducted by the Conservancy in coordination with DTSC, as well as SFRWQCB.

Required remediation suitable to the proposed reuse of the sites is determined through the separate processes in accordance with applicable state and federal regulations. This is discussed in chapter 2 relative to BRAC and FUDS and in the *Hazardous Substances and Waste* section of chapter 4 in relation to the expansion site. As noted on page 4-137 the lead agencies are required to perform appropriate cleanup of all hazardous waste sites located on the BMKV expansion site, as well as on the SLC, and

HAAF sites in accordance with RCRA, CERCLA, CCR Title 26, and other applicable local, state, and federal regulations. All of the designs presume that remediation of the sites suitable to the proposed reuse would be conducted prior to restoration activities at any identified hazardous waste sites requiring remediation.

I-34.62

The *Water Quality* section of the Draft SEIR/EIS notes the reports in 2000 and 2001 of potential water quality problems in the pond included sulfides and fish kills (see page 4-47) and the possible relation to lack of aeration and circulation (see page4-48).

Regarding the potential to convert Pacheco Pond to a tidal marsh by introduction of tidal flow see Master Response 7. Master Response 7 also discusses potential effects of diversion of flow from the existing Pacheco Pond outlet on Novato Creek morphology, sedimentation, flow, and habitat. Water quality effects on Pacheco Pond are discussed under Impact WQ-8 on page 4-56. Water quality effects on salinity in Novato Creek are discussed under Impact WQ-7 on page 4-55.

As noted in Master Response 1, the preferred alternative does not envision closure of the Pacheco Pond outlet. Rather it envisions that flow in the dry season would be via the existing outlet and flow would not be diverted to BMKV. The invert of the overflow structure to the BMKV seasonal wetland would be set at approximately 1.5 feet, allowing continuance in the current pond management level established in the DFG-MCFCWCD agreement, not change in the pond levels. This is noted (and has been updated to reflect the preferred alternative changes) in Impact WQ-8. During the wet season, it is expected that the new water management plan would result in dual use of both outlets, as determined optimal for both flood control and wildlife habitat purposes.

I-34.63

Water quality conditions in Pacheco Pond, including the results of the RWQCB investigation of the potential water quality problems reported in 2000 and 2001, are described on pages 4-47 and 4-48 in the Draft SEIR/EIS. Text has been added to note that FNC has submitted a request to RWQCB to list Pacheco Pond as an impaired water body for both sediment and pathogens. Contact with San Francisco Regional Water Quality Board staff identified that the Board has reviewed the FNC request and submitted material and has determined that listing of Pacheco Pond as an impaired water body is not warranted at this time (Morre, pers. comm 2002).

I-34.64

As noted on pages 4-47 and 4-48, the Corps has completed extensive environmental investigations at the airfield and runways and discovered no evidence of MTBE or other contaminants migrating in the direction of Pacheco Pond. Investigation of reported water quality problems in 2000 and 2001 by the SF RWQCB did not identify an obvious pollution source for the reported problems. RWQCB identified slightly alkaline pH levels, but did not identify that they were high enough to adversely effect humans or wildlife. Further, RWQCB has not identified to date an apparent link between reported fish kills and sediment data received. RWQCB and County staff have suggested that lack of aeration and circulation combined with stormwater runoff may be causing periodic toxicity. To date, the evidence does not support the assertion by the comment that diversion of high flows (above 1.5 feet NGVD) to the

expansion site would result in spread or increase of contamination that would impair the wetland habitats proposed at the site.

In terms of water quality in the pond relative to potential problems related to circulation , algal growth, and dissolved oxygen, Mitigation Measure WQ-3 requires consideration of water quality concerns during preparation of the new Pacheco Pond water management plan. In order to do this, it is expected that available data on water quality and would be reviewed and the measure notes that additional studies of water quality and circulation may be necessary to support the development of the new management plan.

I-34.65

Information regarding County sediment sampling has been updated per information obtained from Marin County.

I-34.66

The comment asserts that the Archives Search Report (ASR), prepared by the U.S. Army Corps of Enginers in September, 2001 identified "hazardous material dump sites near Pacheco Pond" that have yet to be investigated. However, the ASR itself concludes (p. 2-1) that while "there is a potential for previously unidentified disposal areas to be present"..."the historical information review indicates that these areas would contain construction related debris" and "observations made during site inspection confirmed the presence of construction debris within the indentified areas." The ASR goes on to state that (p. 2-9), "the review of historical information related to the site revealed no areas of concern, in addition to those known HTRW sites." Thus the assertion of identification of new potential hazardous material sites is incorrect. The ASR also notes (p. 3-1) that "all previously documented HTRW sites are in various phases of cleanup and should continue as planned", and no additional assessment or other environmental actions were recommended.

Regarding potential further assessment of ASR sites, the Army has agreed to prepare a preliminary assessment work plan for any sites that the Army agrees that they require investigation (Keller, pers comm. 2002). However, at this time it is not known which sites, if any, may be determined to require investigation. As noted above, the ASR does not present any evidence to demonstrate identification of new potential hazardous material sites beyond those already being addressed under BRAC.

I-34.67

Hazardous materials and waste are discussed in chapter 4 of the SEIR/EIS based on the prior studies conducted on the BMKV and SLC sites. As noted above, remediation of contaminated areas at HAAF is under the BRAC program and remediation of contaminated areas of the SLC parcel is under the FUDS program. As noted in Mitigation Measure HAZ-1, site cleanup of areas of BMKV requiring remediation would be coordinated with DTSC, as well as SF RWQCB, and conducted in compliance with applicable state and federal regulations. Similarly, if any new, previously unknown areas of potential contamination were to be identified during restoration activities, state and federal regulations would apply to any potential remedial actions. The areas of potential concern on the BMKV and SLC site are described in tables 4-8 and 4-10. A map from the BMKV Shallow Soil Investigation study has been included in the Final SEIR/EIS, as well as a map of areas of concern on the SLC parcel. The additions of these maps has not changed the analysis in the Draft SEIR/EIS. Any assessment of risk factors, as necessary, would be conducted as part of the ongoing and subsequent remedial investigations.

I-34.68

Comment noted regarding request to change the name of the site. However, the reference to "BMKV" is reference to the most common name in use at present to refer to the physical site and location.

I-34.69

As a point of information, the cover photo is an artistic representation and is not based on a photo of Novato Creek. The comment is incorrect in its assertion that the Draft SEIR/EIS fails to assess the impacts of the project on Novato Creek, Pacheco Pond, or other parts of the Novato Creek watershed. See the discussion in the *Surface-Water Hydrology and Tidal Hydraulics* section in chapter 4 and the hydrologic and hydraulic modeling in appendix B.

Deposition of sediment from further upstream due to natural forces in the Novato Creek watershed is not an effect of the proposed project. See Master Responses 6 and 7 regarding potential morphological effects of the proposed project from proposed levee breaching and diversion of Pacheco Pond outflow. These responses include discussion of project-related effects on sedimentation.

I-34.70

See Master Response 2 regarding flooding, Master Response 3 regarding Flood Zoning and MCFCWCD easements, Master Response 4 regarding the BMK south lagoon overflow and BMK CSD drainage agreements, and Master Response 5 regarding flood insurance.

I-34.71

See Master Response 2 regarding flooding which includes responses concerning modeling, data sources, and assumptions. See also Master Responses 6 and 7, which provide responses regarding potential changes in morphology of Novato Creek due to the proposed breach and due to potential diversion of Pacheco Pond outflow.

I-34.72

See Master Response 7 regarding the Pacheco Pond outflow, which includes discussion of historic routes of Arroyo San Jose, Pacheco Creek, and Novato Creek.

I-34.73

See Master Response 7 regarding the Pacheco Pond outflow, which includes discussion of salmonid access to Pacheco Pond and its tributaries. Also note that table 1-1 identifies that the Corps will consult with NMFS concerning project effects on listed federal species.

I-34.74

See Master Response 6 regarding the proposed levee breach and effects on morphology, which includes discussion of sedimentation, modeling, data sources, and assumptions.

I-34.75

See Master Response 6 regarding the proposed levee breach and effects on morphology. The estimates for morphological change is an estimate in the form of a range, which covers the different size of tidal cells in Alternatives 1 and 2 that both include a breach to Novato Creek. Alternative 3 has no breach to Novato Creek.

The reference to tidal cells are describing the tidal cells located on the BMKV and SLC parcels. These cells would be separate only by basin divides as described in chapter 3 and would not be separated by the NSD levee/berm which would separate the HAAF parcel from SLC and BMKV.

I-34.76

See Master Response 6 regarding the proposed levee beach, which discusses long and short-term sedimentation effects and morphological effects of the breach on Novato Creek. See Master Response 7 regarding the morphological effects of potential diversion of Pacheco Pond outlet flow on Novato Creek.

Regarding sediment from the upper watershed of Novato Creek being transported into the lower portion of Novato Creek, sediment transport from other portions of the watershed is not affected by the proposed project.

I-34.77

See Master Response 12 regarding existing wildlife habitat.

In the preferred alternative, the interpretive center would not be located on BMKV, but on City of Novato property at Hamilton.

I-34.78

See Master Response 17 regarding agriculture.

I-34.79

See Master Response 15 regarding mosquito breeding habitat. Also see Marin-Sonoma Mosquito and Vector Control District comment letter (L-6).

Contrary to the comment assertion, ponding does occur within the agricultural fields due to poor drainage. This is verified by the analysis in the wetland delineation conducted by LSA in 1997, which identified that observed ponding areas (both direct and via aerial photography review) in the agricultural fields varied from 0 to 675 acres depending on year (LSA 1997). Inadequate agricultural drainage can give rise to increased mosquito breeding habitat.

I-34.80

The Monitoring and Adaptive Management Plan from the HWRP has been updated to include the BMKV expansion. This is included as an appendix to the Final SEIR/EIS. This plan includes an extended 13-year post-construction monitoring period by the Corps and Conservancy. The Draft

SEIR/EIS identifies where significant effects have been identified related to the proposed project and identifies feasible mitigation measures to address the identified significant effects, as required by NEPA and CEQA. Funding for project implementation including the monitoring period is the responsibility of the project sponsors.

Comment Letter I-35

Marin Audubon Society Box 599

September 13, 2002

VIA FAX AND US MAIL

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RE: BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON RESTORATION PROJECT DEIR/EIS

Dear Mr. Gandesberry and Mr. Jolliffe:

The Marin Audubon Society appreciates the opportunity to submit these comments on the Draft Environmental Impact Report and Statement for the Bel Marin Keys Wetland Restoration Project. Our organization has a long history with this site having opposed various development projects over the last 20 years in an attempt to protect the sites resources values. Three of our members (including the author of this letter) censussed wildlife use of the Hamilton-Ammo Hill area including Pacheco Pond and Creek wetlands for the USFWS Diked Baylands Survey in the late 1980's and early 1990's, therefore we are knowledgeable about the site. We are also the recipient of Coastal Conservancy funding to complete the purchase of BMKV. As you will see our primary interest is in protecting the existing and to-be-restored habitat and ensuring that it is not degraded by access uses.

We agree that Alternative 2, the preferred alternative, is the environmentally preferable alternative except for the public access component. We are concerned about the protection of existing habitat functions and values of Pacheco Creek and Pacheco Pond. We are alarmed that this significant publically funded project with the most laudable goal of restoring tidal marsh habitat, that will have far-reaching benefits for the Bay and Estuary, would have design features that threaten the viability of those habitats. Virtually all of the access alternatives, with the possible exception of the existing levee, would have significant adverse impacts on the habitats and the wildlife that currently use the habitats and wildlife that is expected to use the restored wetland. As stated in the Habitat Goals report by the Goals project participants "It makes little sense to expend private or public funds to restore a site, only to have its biological functions compromised...." I-35.1

Purely and simply, the newly restored habitat will be significantly degraded and compromised by the proposed trail system. Claims that the impacts would be mitigated by various measures are not supported by any data or experience. The EIR/S must do a more thorough job of analyzing impacts and potential mitigation measures for access. Relocation of the trail alignments and removal of the spur trails must be included. In addition, the existing and historic biological setting, habitat goals and plans for the upland habitat need to be provided in more detail in order to evaluate benefits and potential impacts of the project.

Our specific comments and questions follow:

BIOLOGICAL RESOURCES

The BMKV site is a very large property located between and among other important habitats. Discuss the regional significance of this property and the habitat that will be created by the project.

San Francisco Bay is a major overwintering habitat for migratory shorebirds and waterfowl of the Pacific Flyway. Discuss the importance of the restored habitat for migratory species.

Pacheco Pond and Pacheco Creek: As referenced in several parts of the DEIR/S, but not noted in others, Pacheco Pond was constructed as mitigation for loss of the shallow fresh water repairman wetland on which the Ignacio Business Park was built. As such the project should make every effort to protect and to maximize the functions and values this mitigation wetland was intended to replace. Arroyo San Jose now runs along the edge of this business park and the western edge of Pacheco Pond borders this development. Pacheco Pond is managed jointly by the Department of Fish and Game, the County of Marin, the City of Novato and the Marin County Flood Control and Water Conservation District for flood control and wildlife habitat.

In order to evaluate the potential impacts of the proposed closure of the connection to Novato Creek and the connection with the newly restored wetland habitat, as shown in Alternative 1, it important to know the current functions and values of Pacheco Creek and of the upstream habitat resources. That discussion should at least include a description of Arroyo San Jose, Pacheco Creek in addition to Pacheco Pond: and the habitat values of these resources. During our years of censussing, we observed a wide variety of species use from shorebirds, long-legged waders, dabbling ducks and, during winter months, rafts of diving birds including Canvasback and Scaup would rest and feed in the pond. In its lower reaches, Arroyo San Jose is a densely vegetated stream that widens into a willow thicket as it enters Pacheco Pond. Fresh water wetlands exist between the Arroyo and Ammo Hill. We observed Salt Marsh Yellowthroat and Song Sparrow nesting in these wetlands every year. Between the area of fresh water wetland and the concrete section of the Creek, there is a wide floodplain/seasonal wetland on which Western Pond Turtle have been observed. Green Herons, an unusual species in the Bay Area. Their numbers are limited because of the lack of year-round riparian streams. They nest in the willows associated with Arroyo San Jose. I-35.2

Alternatives call for expanding Pacheco Pond and cutting-off water flow from Novato Creek. There is no clear analysis of the potential impacts of these activities on the creek and stream habitats. The EIR/S should:

- Describe the habitat that is expected to result from the proposed modifications. When it is expected that these changes in habitat would occur: five years, ten, twenty? Compare the target habitat functions and values with the habitats that exist now and that would be lost with these modifications. Would the habitat for any species be lost or significantly modified so that these I-35.3

species could no longer use these creeks and pond? Does the target habitat comply with the intent of the mitigation of Pacheco Pond? Would the resulting habitat be a shallow, fresh/brackish water pond? I-35.3 Con't.

• Would enlarging Pacheco Pond result in the spreading of the limited water supply from the watershed and reducing the amount of water that remain in the creeks and Pond during the summer. Would be the upstream extent of the impact? What impacts could reduced water supply have on the creek vegetation? I-35.4

Over the last several years there has been a significant die-off of willows in the area where Pacheco Creek meets Pacheco Pond. It is unclear whether this die-off was due to lack of water from blockage by Landfill 26, the access road constructed by the Corps (without environmental review we might add) or some other reason, but we are anxious that this kind of impact not be repeated.

• What are the potential adverse impacts of transferring the connection of Pacheco Creek/Pond to the Bay from Novato Creek to the new tidal marsh? Where was the historic connection of Pacheco Creek and wetlands to the Bay? I-35.5

• Would closing of the culvert from Novato Creek permanently block an historic route for salmon and steelhead? The DEIR/S dismisses the presence of salmon behind the Ignacio Safeway. The IS/R speculates that these were hatchery salmon, which is not relevant. Whether or not one agrees with stocking the estuary with hatchery salmon to compensate for lost population due to impact, salmonoids should be able to continue to find their way into creeks that supported spawning historically. What is the potential for salmon to use the new bay connections for each alternative? I-35.6

• Provide a more complete discussion of the potential impacts to scouring of Novato Creek if the connection is blocked? I-35.7

• Explain why the Pacheco Pond-Novato Creek connection could not be left in place and still allow some drainage into the newly restored wetland, if necessary. This reportedly is what occurs now. I-35.8

Our analysis indicated that the project would result in significant impacts because it would result in the following Threshold of Significance impacts (p 4-76):

- Fragmentation of wildlife habitats resulting from location of the access trail in all of the three locations.
- Substantial disturbance of wildlife resulting from human activities resulting from the location of the trails which would direct people to north of the habitats. I-35.9
- Wildlife of biologically important habitat for substantial periods which may increase mortality or reduce reproductive success. This would occur all around Pacheco Pond with the alternative access routes along the east, west and south side of the Pond.
- Disruption of natural wildlife movement corridors which would occur at the south end of

Pacheco Pond where a trail between the pond and the restored marsh would inhibit wildlife from moving between these habitats. I-35.9 Con't.

Upland/Seasonal wetland/Transition Zone-buffer habitat. There is insufficient description of the treatment of the upland/seasonal wetland component of the restoration. Describe the habitat target for the upland and seasonal wetland component of the restoration? What plant species will be planted in the upland? What species would be planted along the edge of the restored tidal marsh, inland of the new tidal marsh and along the seasonal wetland? I-35.10

Furthermore, several of the Project Objectives (page ES-3) have not been met. The project would not:

"...create and maintain wetland habitats that sustain viable wildlife populations...." The potential impacts of the access trails intruding into the habitats brings into question the viability of the restored habitats and the continued viability of Pacheco Pond. Also, the

"...include buffer areas along the upland perimeter of the project so wildlife would not be impacted by adjacent land uses." The upland perimeter of the project is an important part of the marsh habitat for special status species. Buffers along this area are actually "in" the habitat. Buffers in Alternative 3 are non-existent. I-35.11

"...to be compatible with adjacent land uses and wildlife habitats." The access trail are not compatible.

"...To provide for public access that is not compatible with the protection of resource values...." The proposed mitigation measures are not adequate to mitigate the adverse impacts of the project.

Our comments on proposed impacts and mitigation measures follow:

The sequence of militations and impacts is difficult to follow. Why do the numbers of the mitigation measures rarely match the impacts even initially? I-35.12

BIO 4/Mitigation 2. Potential Impacts to Salt Marsh Harvest Mice. Has trapping and removal ever been done successfully in other projects previously? I-35.13

BIO 5 /Mitigation Bio 3. Impacts to Clapper and Black Rails. The EIR/S should recommend measures to be taken should rails be found when construction equipment is operating during February 1 to July 31. What types of measures have been used on other projects to avoid impacts to Clapper and Black Rails found during construction? I-35.14

BIO 6/Mitigation 6. Bio San Pablo Song Sparrow Impacts As with above, avoidance is the best mitigation. How wide should the buffers around the nest sites or breeding territories be? I-35.15

Impact BIO 9. Anadromous Salmonid Impacts. Dismissing the presence of adult chinook salmon as hatchery strays that do not appear to be self sustaining runs is unacceptable. One of the reasons hatchery fish are stocked in the system is to mitigate for population losses of natural populations caused by the activities of people. The EIR/S should discuss the potential for salmonids to use the riparian system under each alternative, identify salmonid impacts as significant, and recommend mitigation measures to ensure fish passage could continue. I-35.16

Impact BIO 10/Mitigation 7. Special Status Species Impact from Management and Maintenance Activities. The mitigation for possible special status species mortality related to maintenance activities puts off mitigation measures for a future management and maintenance plan. More than the two stated elements need to be included in this plan. Identify the range that should be included? Avoidance of impacts is certainly the preferred measure in all cases. This planning should not be confined to agencies. The interested public should be able to participate. I-35.17

BIO 11. Loss of Refugia for Clapper Rail, Black Rail and Harvest Mice. Mitigation for the loss of refugia due to lowering of the perimeter levee is identified as an impact. It should be evaluated as a significant impact. Mitigation is suggested as being provided by the transition and upland habitat areas (page 4-82) at the upper elevations of the restored tidal marshes. Leaving portions of the perimeter levee in place would provide upland refugia for rails and SMHM whose territories are in the outer areas of the marsh. However, the upland areas created and the landward side would be of limited value as refugia with trails and people so close. Having the only safe refugia on the outer edge of the marsh is not adequate mitigation. In order to ensure adequate refugia, because rails and SMHM live throughout the marsh and cannot be expected to all gather along the outer levee, the trails should be moved away from the upland edge of the marsh and located elsewhere. I-35.18

Impact BIO 13. Increase in Suitable Nesting Habitat for Waterfowl. This discussion claims this as a beneficial impact because the development of undisturbed grassland and seasonal wetland is expected to increase nesting habitat. The grassland and upland areas cannot be claimed as expanded nesting habitat because it has not been demonstrated that they will be free enough from the impacts of people using the trails, to provide suitable nesting habitat . I-35.19

Impact BIO 14/Mitigation 8. Loss of Coastal Salt Marsh. The monitoring program sounds fine, however, the EIR/S should recommend that the agencies commit to taking any actions necessary to correct problems that are apparent with the restoring marsh. I-35.20

Impact BIO 15/Mitigation 9. Loss of Brackish Open Water Habitat and Brackish Marsh. Because Pacheco Pond already supplies this habitat type and because of the uncertainty about potential impacts of expanding Pacheco Pond, we do not see a pressing need to create this habitat type. We recommend that the existing condition of Pacheco Pond be retained as brackish open water habitat and marsh. The more important habitat need is for shallow seasonal wetlands. I-35.21

Impact BIO-16 Loss of Seasonal Wetlands. We see this as the important habitat type needing mitigation because the larger BMKV site now provides the functions and values provided by I-35.22

seasonal wetlands on the project site, and these will be lost. Therefore, we disagree with the DEIR/S analysis that the seasonal wetland loss is less-than-significant. The relative value discussion (page 4.8-7) does not discuss the functions served by seasonal wetlands. What habitat functions and values will these seasonal wetlands serve? Describe how the proposed seasonal wetlands for each alternative will provide shorebird and waterfowl refugia habitat, given the proposals for public access immediately adjacent. I-35.22 Con't.

Impact BIO 18 Loss of Grasslands. Grasslands on the site provide some shorebird refugia and roosting habitat because they are farmed and therefore they were available for shorebirds and other birds for a time, when they are unvegetated or minimally vegetated. This discussion indicates that some loss would be less than significant because the wetland loss would be offset by in-kind and out-of-kind replacement wetlands of higher quality. To ensure they would be superior the EIR/S must demonstrate the vegetative and other conditions, including freedom from impacts of people, of the proposed upland grasslands and buffers habitats would be superior. I-35.23

Impact BIO 19/Mitigation 8. Loss of Habitat for Clapper Rail, Black Rail and Salt Marsh Yellowthroat. This mitigation speaks to the monitoring that will be conducted to document the tidal marsh restoration. However, this mitigation is not adequate because it fails to discuss the inadequacy of the upland buffer/transition zone for these species. Habitat for Clapper and Black Rails and for SMHM is not just tidal marsh but the adjacent upland areas. Buffer/transition zones are essential because at very high tides these species must seek refuge in adjacent uplands and hide in vegetation to avoid predation by raptors. It is unclear whether these transition/refugia habitats will be suitable to provide this refugia function because of the impacts of people on the various paths and the inadequate discussion about vegetation. The EIR/S should address vegetation that will be planted. Planting along the restored marsh should be with species that will ensure high tide refuge habitat. Identify the species that will be planted. Mitigation 8 should recommend that actions be implemented (not just that "could" be implemented) if the restoration is nor proceeding as designed. I-35.24

Impact BIO-20/Mitigation 8 and 9. Temporary Loss of Nesting Habitat for San Pablo Song Sparrow. The potential loss of habitat for this species is magnified by the importance of the high marsh/transition zone for this species. Reliance on these habitats places Song Sparrows at greater risk of impact from nearby trails and presence of people. This impact is even more of a concern because the impacts will not necessarily be temporary. Provide information about the nature of the planting that will occur along the high marsh/transition zone. Reevaluate this analysis in terms of the public access trails, the use of which would cause significant interruption and harassment of the Song Sparrow. Mitigations 8 and 9 should not simply suggest remedial actions, it should recommend actions in accord with the primary purpose and goals of the project. I-35.25

Impact BIO 21 & 22. Impact to Raptors, Golden Eagle and Burrowing Owl. These discussions consider the loss of foraging and nesting habitat for these species to be less than significant because there would be replacement of upland habitat and this represents a small fraction of available habitat for Golden Eagle and Burrowing Owl in the region. This is an inaccurate analysis. Burrowing owl population are decline in the region and because there are many I-35.26

developments being proposed and developed in grasslands, this habitat is declining in the region as well. Also, Golden Eagle nest nearby and it is vital that they have foraging habitat nearby/

Furthermore, it is necessary to know the vegetative species that will be planted in the raptor habitat to assure the upland will continue to provide raptor nesting and foraging habitat. How will their ability to hunt continue with people on trails through the middle of the habitat as with Alternatives 1 and 2? These impacts should be considered significant until the design of the upland has been modified to clearly provide and protect raptor foraging and nesting habitat. I-35.26 Con't.

Impact BIO-23. Temporary Loss of Foraging Habitat for Wintering Waterfowl. This impact also relies on replacement of upland and seasonal wetlands to replace foraging habitat. As above, it is simply not clear how the upland and seasonal wetlands will be an adequate replacement of this habitat type with the close proximity of people on trails. Also, to evaluate the habitat benefits, it is necessary to know the vegetative species that will be planted to provide suitable habitat. I-35.27

Impact BIO-24 . Increase in Suitable Habitat for Migratory Shorebirds. We certainly agree with the analysis that the project will provide increased intertidal flat habitat and that this is beneficial. However, the discussion fails to recognize that shorebirds need a place to wait out high tides when they must leave mudflats because they are covered with water. The mudflats will be considerably reduced in value as a habitat if there is not a suitable and safe high tide refugia habitat nearby. So far high tide refuge is not ensured because of the close proximity of people. I-35.28

The EIR/S should describe how the seasonal wetlands will be designed to ensure high tide refugia habitat for migratory shorebirds? This will destroy the very characteristics that shorebirds need for high tide roosts - broad shallow ponded water with absent or minimal vegetation, so they can see avian predators coming.

Will any vegetation be planted in and/or around the perimeter of the seasonal wetland and adjacent upland? Identify plants species that will be planted.

Impact BIO-27/Mitigation 1 and 3. Disruption of Wildlife During Trail Construction. The discussion in the last paragraph page 4-92 identifies three alternatives for the northward extension of the bay trail, one of which is along existing roads, and this and the trail along the new levee would have little or no impacts to sensitive wildlife. However, there is no discussion of this option. I-35.29

The EIR/S should develop and present an alternative that locates the trail along City streets and another that locates the trail through the city property near landfill 26. It is not clear where this discussion if referring to. Show in a figure.

Impact BIO-28/Mitigation 1 and 3. Disruption of Sensitive Wildlife Due to Public Access. The discussion under this alternative discusses the trail impact study recently undertaken by BCDC, and minimizes the observations, among other things, by observing that only 8 of the 25 were field studies. The important message is that all of the studies found adverse impacts on wildlife I-35.30

from trail activity. Josselyn study found that wildlife use declines as human disturbance increased. We have to question the validity of the Bay Trail Study because at least one of the control sites is not [illegible] the study site.

Nine possible strategies to avoid or minimize impacts are listed; three of the strategies. or possible strategies, are components that would increase the convenience or safety of people users and would have little relevance (except for point access) to protecting wildlife. Our analysis of the remaining five is:

• Buffers- We can protect wildlife habitat although they must be sufficiently large to provide adequate distance and have appropriate vegetative characteristics to protect the adjacent habitat. It is also vital to recognize again that the upland adjacent to tidal marshes and other wetlands is an important component of marsh habitats because special status species use these uplands, often called transition zones, as refugia so the planning must assure adequate upland and buffer the upland transition zone. To be effective, people also may also need to be restricted from adjacent uplands/buffers by fencing or plantings, however, these have their own impacts.

• Boardwalks/bridges - While it is true that these structures do confine users, they more often than not lead to even more disturbance, because they are built over and through the actual riparian habitats, and over wetlands and would directing users into the very heart of the sensitive wetland habitats. Indeed, in this case the boardwalk would be directly over the waters of Pacheco Pond and the bridge would be directly through and over riparian habitat. I-35.31

• Overlook points - these are only effective if they result in avoidance of sensitive areas. The overlook points and other trails must be located away from the sensitive habitats.

• Seasonal Periodic closures - These may work but require enforcement. The main impediment is that there would be a very few times that a trail could be opened because most of the year is sensitive habitat. Unfortunately, the EIR/S failed to recognize the importance of tidal and seasonal habitats, not only nesting jabitat but for overwintering migrating and overwintering shorebirds and waterfowl.

• Use Restrictions - It is necessary to prohibit feeding, dog access etc. but this would not mitigate for people walking/jogging/biking etc. along the trails without dogs.

• We agree that all three access alternatives will impact wildlife, but we strongly disagree that Mitigation 11 would reduce the impacts to less-than-significant. Mitigation BIO-11 - Incorporate wildlife sensitive approaches to Bay Trail design and develop Mangement Plan. This is inadequate because none of the measures, either separately or together, would significantly reduce impacts. Timing of construction would not address the main issues of direct loss of habitat due to construction of the trail and the intrusive presence of people using the trails. Trail construction materials might make the trail nice for people but would still not reduce impacts of the presence of people.

• Use of vegetation, open space, fencing or other buffers. These measures might be beneficial but there is insufficient information provided to assure they would be effective in reducing or avoiding the impacts. The EIR/S should provide a detailed discussion covering: the width of the buffer and open space, vegetation, fencing, how the buffer/transition zone/adjacent upland habitats will be designed to provide for the needs of the species that the habitat is being designed to support, and how wildlife will be able to move unimpeded between and among habitats.

• Use of overlooks, point access and spur trails. We fail to see how these features will protect habitat unless they are used in combination with locating or limiting these features to avoid impacts to sensitive habitat. The DEIR/.S fails to provide sufficinet information to address these issues.

I-35.31 Con't.

• Segregation of trailheads, parking and staging areas from sensitive habitat. These features are fine, but they will not protect sensitive habitat and wildlife if the trail itself is located in or near wetlands and adjacent uplands.

Why are many of the strategies identified in BIO--28 not even included in mitigation BIO-11? Buffers, sasonal closures and use restrictions would provide additional, although not adequate, mitigation.

Finally, a trail management plan is promised. Development of a plan in the future is not adequate mitigation. The public has a right to know now what mitigation measures are being considered in order to evaluate their adequacy. The EIR should at least require that certain components and goals and standards be adhered to, the most important of which is locating the trails where they will not impact habitats or wildlife.

Impact BIO 29/Mitigation 12. Disruption of Sensitive Wildlife due to Public Access. It is hard to follow the discussion of alignments. A trails map should be provided with clearer identification of sections that are being discussed. We are unclear where the grasslands adjacent to the southward extension are? Where would is the area (north and south) that will require wetlands be established north of the bay trail?

Is any buffer/transition habitat planned for adjacent to the existing levee? Although there is a wide slope, it is covered with rocks which do not provide adequate buffer/transition habitat. How would impacts of the use of the trail on wetland species be reduced?

I-35.32

Mitigation 12. Implement specific design and management mitigaiotn for north and south extensions. A trail design and management plan to be developed sometime in the future is not adequate mitigation. The EIR/S should specify how wide the buffers would be? Make specific recommendations to ensure they are adequately wide and vegetated to provide transition habitat and buffer adjacent uses. If buffers are provided and no fencing, what would prevent people from walking onto the habitat?

Who would enforce dog and vehicle restrictions? People in Marin are notorious for ignoring dog

and even leash law restrictions. People are already using the levee for dog walking?

As mentioned above, seasonal closures would have to include the periods migratory waterfowl and shorebirds are in the Bay Area and migrating through it. This would generally be August, for migrating shorebirds, through April. I-35.32 Con't.

Impact Bio-30. Predator Access. Red fox is the major predator of concern. It is unclear where features to slow wave fetch will be located. These can be a pathway for predator access. Discuss and show the location of any berm/levee features and demonstrate that predators cannot use them to access the marsh. I-35.33

Impact BIO-31. Potential Harm to Marine Mammals and Fish Due to Pile Driving and Offloading Facilities. Impacts to native fish that are not special status should also be considered a significant adverse impact. There is experience with this problem in the Bay. Discuss using the bubble devices that have been used in the Bay to reduce fish impacts. I-35.34

Alternative 1, Impact BIO-34: Disruption of Sensitive Wildlife due to Bay Trail and Spur Option 1A. This discussion correctly identifies adverse impacts due to construction through the wetland/riparian areas at the confluence of Arroyo San Jose and Pacheco Creek. This would result in the permanent loss of approximately 4 acres of wetland/riparian habitat, impacts to Pacheco Pond with additional impacts to wetland/riparian habitat due to an approximately 200 foot (long?) Bridge, or maybe this is a boardwalk.

The impacts of Alternative 1 would be significant, even with mitigation of Mitigations 1, 3, 5 and 15, for the reasons stated in discussions above. Another alternative should be developed that locates the trail north along City streets or the City's parklands and the crossover the creek in a less environmentally damaging location. I-35.35

Mitigation BIO-16. Implement Specific Design Measures and Management Recommendations. For the reasons discussed below, this vague mitigation is not adequate to reduce the potential impact to less than significant. Contributing to future riparian restoration is not adequate mitigation. There is no evidence presented that this contribution would in any way offset the habitat and wildlife impacts resulting from slicing through the riparian and wetland habitats and fragmenting and disrupting and destroying habitats. Besides restoration would likely occur anyway. The remainder of the recommendations would not in any way offset the direct destruction of this habitat.

Even if constructed before marsh restoration occurs, Spur 1 will have significant adverse impacts. Impacts will be significant from the use of the trail because of its location between the restored tidal marsh and the seasonal wetland habitat

BIO-35. Disruption of Sensitive Wildlife due to Public Access along Bay Trail Alternative 1. We agree that this alternative would be extremely destructive to the habitat. A trail along western edge of Pacheco Pond would be right next to habitat with no ability for buffer because I-35.36

there is no space. The idea of locating the trail on a walkway over the water is even more egregious because it would be over the pond/marsh habitat, precluding any wildlife from using the waters underneath [illegible] in the immediate vicinity.

A much more benign cross over location would be further upstream in the location where the channel is currently lined with concrete. The EIR/S should develop two additional alternatives, that avoid the impact - in accord with CEQA guidelines - by location access upstream from the sensitive habitats and another that locates the access along city streets. As discussed below, the proposed mitigation measures are inadequate.

Mitigation 12. For the reason discussed above, this alternative would not reduce the impact to less-than-significant level.

Mitigation 16a. Implement specific design measures, Alternative 1. Provide a figure showing the proposed bridge and boardwalk over Pacheco Pond location, so the impacts can be adequately evaluated.
• bullet 1 the recommends placing physical buffers. This recommendation must be inaccurate because there would be no space for a buffer over the marsh or along a trail in this location.
• Prohibiting dogs and fishing would mitibate impacts from those uses, not from the frequent presence of walkers, joggers, bikers and the like.
• Seasonal Closures during breeding season would not adequately mitigate the impacts on migratory waterfowl and shorebirds that depend on the Pacheco Pond habitat during fall, winter and spring months. In addition, the feasibility of this recommendation it is not clear because the enforcement agency is not identified.

I-35.36 Con't.

Question for all Spurs: it is unclear to us why a trail needs to be directed out to the Bay through the new wetland. Why can't a trail travel along the existing levee, which will be the edge of the Bay, and then turn west through the City's park property?

Mitigation 16b Implement Specific Design Measures for Spur 1A. A 300 foot buffer is fine. However, iIn and in accord with the Goals Report recommendations for wildlife, the discussion fails to recognize and discuss the obvious impact of fragmentation of tidal and seasonal wetland habitats by the trail located between the two. This impact must be identified as significant and adequate mitigation addressed.

The mitigation of placing the trail on the northern slope might reduce impacts to the restored tidal wetland, but it would increase impacts to Pacheco Pond. Identify this as a significant adverse impact, and identify and discuss measures to mitigate these impacts. The first mitigation considered should be avoidance of the impacts by not including a trail in this location. Placing physical buffers/barriers would simply serve to block access of wildlife other than birds from moving between the tidal wetland and seasonal wetland habitats. Or maybe someone has thought of a mitigation for that.

Signage is nice and should educate people but cannot be depended on to avoid or signficaintly

reduce impacts to wildlife because people ignore signs on every trail we have seen in Marin County.

Monitoring is fine, but the mitigation has no follow through requirement should impacts be identified. I-35.36 Con't.

See above discussion for ineffectiveness of seasonal closures, dog and fishing prohibitions.

Impacts and Mitigations Bio-36/Mitigation 36 for Alternativ2 Trail and Spur Option 2. Spur 2A would have the same and worse impacts as Spur 1 because this spur is located not only between the tidal wetland and seasonal wetland, but between the seasonal wetland and other seasonal wetlands. In other words, it bisects and fragments more habitats restricting use of more habitats by wildlife. I-35.37

Impact BIO-37 Disruption of Sensitive Wildlife due to Bay Trail Access Alternative 2 and Spur 2A. As discussed above, physical buffers/barriers, where appropriate and necessary, would simply block movement of wildlife other than birds and it is not clear that they would mitigate the impact of people. What barriers/buffers would be used? Where would they be used? Define where they would be appropriate and necessary?

Locating the trail on the northern slope between between Pacheco Pond and restored marsh will fragment habitats, interfere with or block wildlife movement between habitats particularly for non-avian wildlife, but even birds could be impeded. I-35.38

Gated access to the NSD road would not mitigate for wildlife impacts. Prohibiting dogs and fish ing would mitigate against those uses, not the presence of walkers, joggers, bikers etc. Develop an alternative that does not include this spur.

Mitigation 17b This mitigation is inadequate for this impact for the same reasons noted above See and address our comments for 16b for this impact.

Impact BIO-39 Disruption of Wildlife due to Access for Alternative 3. The access impacts of this alternative on the restored tidal marsh habitat and species would be even more significant than for the other alternatives along the length of the Spur because is space for a to be much space for a buffer. What width buffer would be provided? I-35.39
The Mitigations identified in 8a and b are identified in other alternatves and the above discussions apply to Alternative 3.

INTERPRETIVE CENTER

Clarify why an interpretive center is being planned for construction.

Discuss the potential adverse impacts and benefits of the proposed center in the two proposed locations. The BMK Blvd. Location would be away from the main area of the restoration and I-35.40

would, contrary to the statement in the DEIS/R attract large numbers of people to any trails in the eastern corridor. The site shown on the Hamilton parcel would require an access road, parking, and would bring many people out to the habitat area.

Why couldn't an interpretive center be located on the former Hamilton base where there are existing buildings, roads and other infrastructure? Or how about planning as part of the City's park? Evaluate locating the center in an existing building at Hamilton. There seem to be several vacant hangar still remaining. I-35.40 Con't.

What other location alternatives were considered for the center, and why were they rejected? It seems to us that there are a number of other potential loctions in already developed areas

OTHER QUESTIONS:

Discuss the potential impacts of anticipated global warming and climate change on the restored wetlands and associated habitats. I-35.41

Why is the offloading facility in the Bay located so far to the south (figure 3-4)? Why is it not located directly east of the offloading facility, which it appears would be a shorter distance? I-35.42

IN CONCLUSION

This is a wonderful project with unusual cooperation between industry and the environmental community that will provide significant benefits for the Bay ecosystem. Yet it stands to be degraded and diminished in habitat value by the public access component. The public access is in conflict with the state goals of the project, exceed the criteria for significance, and would result in significant impacts as defined in criteria for significance and should be changed to an alternative that eliminates adverse environmental impacts. I-35.43

Thank you for your help.

Sincerely,

Barbara Silverman

I-35 Marin Audubon Society

General Response to Comment I-35

This comment letter questions in numerous comments the significance conclusion and mitigation measure adequacy regarding potential impacts of public access on biological resources. Specific responses are noted below, as appropriate, for individual comments. This general response discusses broader approaches to considerations of impact assessment in the context of this project.

This is a restoration project that, as stated in the document, would result in substantial increases, particularly in the amount of seasonal wetland and tidal wetland acreages on the existing expansion site (see table 4-7). The preferred alternative, Revised Alternative 2, would include an increase of over 160 acres of seasonal wetland and nearly 900 acres of tidal wetlands, compared to the existing setting. These are beneficial outputs of the project. In the assessment of access-related impacts in the *Biological Resources* section of chapter 4, the provision of the increase in wetland habitats (and associated values) was not specifically mentioned in the Draft SEIR/EIS. It was presumed that it was understood that the analysis of these impacts, like analysis of other biological impacts, was done in the context of the restoration alternatives described in chapter 3. The provision of increases in seasonal wetland and tidal wetlands (and other habitat components) is part of the proposed project and is not considered mitigation. However, it was taken into account when determining significance of biological effects. The discussion of access impacts in the *Biological Resources* section has been updated to more clearly identify the proper context used for analysis, which includes the provision of increased wetland habitat on the site.

In addition, many of the comments about access in this letter presume a future baseline rather than a present baseline for analysis. The existing habitats on the site, described in the *Biological Resources* section in chapter 4, are the baseline for the assessment of impact and conclusions about significance. This is described on pages 4-1 and 4-2 of chapter 4, but has been updated to provide a more detailed description of the baseline used for analysis.

As is normal in the analysis of a restoration project, sometimes the discussion will include considerations of project features or measures to further implement the project goals and objectives which include "creating public access compatible with protection of resource values", and "creating and maintaining wetland habitats with viable wildlife populations", among other objectives. However, the inclusion of such featuress, such as the incorporation of design and management recommendations for the Bay Trail, does not change the baseline for impact analysis, which is the habitat that exists at present.

The lead agencies agree with certain comments provided by the Marin Audubon Society that an understanding of the regional context of the San Francisco Bay ecosystem is necessary to understand the potential benefits of the habitats proposed for restoration. The regional importance of restoration is discussed in many of the precedent planning efforts that are mentioned in chapter 2, primary among them is the Bayland Ecosystem Habitat Goals Report. To assist in the understanding of the benefits of the proposed habitat components of the project, additional background concerning the values of the proposed habitat components, additional discussion has been added to the *Purpose and Need* section in chapter 2 and in the existing setting of the *Biological Resources* section in chapter 4.

Numerous comments in this comment letter call for deletion of spur trails to Novato Creek and the removal of any extension of the Bay Trail across the BMKV property or around the west wide of Pacheco Pond. These comments are noted. It should also be noted that as described in Master Response 1, some features of Alternative 2 (the preferred alternative) have been modified since publication of the Draft SEIR/EIS. Specifically, the spur trail has been deleted, in part, to reduce the potential for adverse public access impacts on existing habitats and to further the project objective of creating and maintaining wetland habitats with viable wildlife populations. In addition, as described in Master Response 13, the Bay Trail has been routed around the east side of Pacheco Pond which avoids disruption to the existing willow riparian habitat at the confluence of Arroyo San Jose and Pacheco Creeks, allows for buffering between the trail and Pacheco Pond, and reduces additional construction disruption by averting the bridges and boardwalks necessary to route around west of the pond.

The project sponsors believe that the preferred alternative provides for public access and the Bay Trail while providing habitat as part of the project. The public access trail will be aligned along the southern and western perimeter of the restoration site and the majority of the restored wetlands will be remote from access alignments

I-35.1

See General Response to Comment I-35 above.

The project sponsors do not agree that the restored habitat will be significantly degraded, nor that the public access alignments would have significant unmitigated adverse impacts on existing habitat. Further, the proposed access components, with development of the final design and trail management elements in concert with appropriate agencies, is not expected to result in degradation of future habitats to be restored on the site. The Biological Resources section in Chapter 4 of the SEIR/EIS analyzes the potential impacts of the proposed public access on habitat.

The discussion of biological setting is provided on pages 4-64 through 4-74. Project goals and objectives, as well as related local, regional, and national planning efforts are described on pages 2-3 through 2-10 of the SEIR/EIS, and in Master Response 11 concerning habitat design. The CEQA Guidelines Section 15163 (b) provides that a supplemental EIR "need contain only the information necessary to make the previous EIR adequate for the project as revised."

I-35.2

Regarding Pacheco Pond, the preferred alternative includes a number of features relative to the functions and values of the existing Pacheco Pond. First, the project includes a 21-acre expansion of the pond and 1 12-acre area of emergent marsh to expand the habitat value of the pond and available open water and fringing marsh to support the existing species utilizing these areas of the existing pond. The preferred alternative does not include a Bay Trail along the western side of Pacheco Pond, as described in Alternative 1 because such as trail would disturb the willow riparian area at the confluence of Pacheco Creek and Arroyo San Jose, and such a trail would be directly adjacent to the Pond without any opportunity for buffering.

The biological setting of Pacheco Pond is described in the Draft SEIR/EIS on pages 4-70 and 4-71. The setting has been updated to add the observations noted in the comment.

I-35.3

Pages 3-32 through 3-34 describe, and table 3-6 compares, the features of the alternatives. For each alternative, period to construct, acreage of various habitat. Figure 3-11 provides the tidal habitat evolution for each alternative over time. Table 3-2 shows the estimated habitat acreages (upon maturity) for each alternative.

Regarding Pacheco Pond specifically, the preferred alternative is not expected to result in changes to existing habitats in the pond itself. The expansion of the pond is actually expected to increase the habitat value of the pond. The outlet to the seasonal wetland area would be set at an elevation (expected to be around 1.5 feet NGVD) consistent with the current MCFCWCD-DFG agreement for pond management. The project includes development of a new water management plan to determine the optimal dual use parameters for use of the existing and new outlet from Pacheco Pond. An impact discussion regarding potential changes in Pacheco Pond habitats has been added to the *Biological Resources* section; however this impact is determined to be less than significant for the reasons noted above.

Regarding effects on Novato Creek related to potential Pacheco Pond outlet flow diversion, see Master Response 7.

I-35.4

See Master Response 7 regarding potential diversion of Pacheco Pond outlet flow. Because the existing outlet would be in dual use with the new outlet and the BMKV seasonal wetland area does not require the dry season water, flow during the the dry season months through the existing outlet would be similar to current flows. The outflow diversion is proposed to provide a source of wet season high-stage flow to support seasonal wetlands at BMKV. The design and the outcome of the new water management plan are expected to avoid any significant impacts to water levels in the dry season or existing habitats.

The comment on willows is noted.

I-35.5

See Master Response 7 regarding Pacheco Pond outflow diversion, which includes discussion of impacts and historic routes of Pacheco Creek/Arroyo San Jose.

I-35.6

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative in dual use with the new outlet to BMKV. As discussed in Impact BIO-9 (page 4-81 of Draft SEIR/EIS), the existing tidal flapgates severely hinder salmonid access at present. This is the baseline against which project effects must be evaluated under NEPA and CEQA. Because the outlet would remain in use and it is doubtful that the chinook sighted in 2001 were listed species or constitute a self-sustaining run, the effect of diversion of high flow in wet season months is not considered a significant effect of the project. Because this has not been identified as a significant effect, no mitigation for this effect is proposed. The outlets via BMKV and the tidal marsh restoration area have not been designed to allow fish passage. Although the impact does not require mitigation (because the impact is not determined to be significant), the Draft SEIR/EIS suggests consideration of potential fish passage in development of the new water management plan.

It should be noted that the project would provide additional substantial acreages of rearing habitat in the subtidal channels in the tidal marsh for juvenile steelhead and potentially other salmonids from other tributaries of San Pablo Bay and surrounding parts of the Bay.

I-35.7

See Master Response 7 Pacheco Pond outflow diversion, which discussed morphological effects on Novato Creek.

I-35.8

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative and dual use parameters would be developed in the new water management plan.

I-35.9

The potential biological resource impacts from access trails and from human activities are identified in the SEIR/EIS on pages 4-77 through 4-107. Mitigation is proposed on these same pages to reduce identified impacts related to trail routing to a less-than-significant level.

Also see General Response to Comment I-35 above.

I-35.10

The seasonal wetland and upland habitats are shown in chapter 3 and the acreages are identified. Also see Master Response 11 regarding habitat design. No seeding or planting is proposed in the tidal restoration area as the conceptual design calls for natural sedimentation to provide the final cover material for these areas. This material, from Novato Creek and San Pablo Bay would carry the seed material for eventual colonization of the site by vegetation found in nearby tidal marsh areas. As noted on page 3-17, seeding or planting of non-tidal habitats may be conducted as necessary. Detailed design and consideration of potential seeding and planting for the non-tidal areas would be conducted during the detailed design phase.

As noted on page 3-17, seeding or planting of non-tidal habitats (e.g., seasonal wetland, upland, high transition marsh) would be conducted as necessary. It is anticipated that selected upland habitat areas would be hydroseeded with a native grassland seed mix following the placement of fill material to control erosion. Any additional planting requirements (e.g., planting mix and methodology) for the site will be determined during the detailed design phase of the project. However, it is anticipated that the habitat areas will include the following species commonly found in these habitat zones; many of these species will likely colonize the site following the breaching of the outboard levees, and through overflow from Pacheco Pond and the Bel Marin Keys South Lagoon.

Upland Habitat Area: native annual and perennial herbaceous (e.g., wild rye, needlegrass, fescue, tarweed, lupine) and shrub (e.g., coyote brush) species; moist areas may also support sedges, rushes, and moist grassland species (e.g., blue-eyed grass).

Seasonal Wetland Habitat Area: rushes (*Juncus* spp.), sedges (*Carex* spp.), and grasses (e.g., creeping wild rye); more saline areas may support salt grass, pickleweed and other mid-high marsh species. areas subject to more frequent ponding may also support cattails and bulrushes.

High Transition Marsh Habitat Area: pickleweed and peripheral halophytes (e.g., saltgrass, fat hen, alkalai heath, jaumea, gum plant).

The need for any supplemental planting in these habitat areas will be determined based on the results of the post-restoration vegetation monitoring program.

I-35.11

See General Response to Comment I-35 above. Also see Master Response 13 regarding Bay Trail routing, trail spurs, BMK south lagoon use, and dogs for analysis concerning the impacts of the Bay Trail; and Master Response 11 regarding habitat design, which addresses concerns about type and amount of habitat restored.

Issues concerning Pacheco Pond are addressed in Master Response 7 and in the above response to comment I-35.3.

Based on the analysis in Draft and Final SEIR/EIS, the lead agencies have determined that the preferred alternative does meet the project objectives cited by the comment because of the inclusion of mitigation concerning access impacts, the inclusion of buffer areas south of the BMK lagoon, the trail routing, and the other features discussed in the executive summary and throughout chapter 4.

I-35.12

Each impact and mitigation measure is given a discrete sequential number for tracking purposes (e.g. in the mitigation monitoring program, in the findings document). All potential impacts are identified. If the impacts are less than significant, then no mitigation measure will be listed. In general, there will be more impacts than mitigation measures (although some impacts may have more than one mitigation measure).

I-35.13

See DFG Comment S-1.3 and response to Comment S-1.3 above. Pursuant to the comment, the mitigation measure has been changed as recommended by DFG to delete trapping and removal.

I-35.14

The specific measures to be taken if construction equipment must be located in the marsh during February 1 to July 31, and if a subsequent survey identifies the presence of clapper rail and black rails, would be determined at the time in consultation with USFWS and DFG (page 4-79 and 4-80). The mitigation measure overall reads "avoid operation of equipment in the outboard tidal coastal marsh" during rail breeding season. It is possible that no construction would be allowed by USFWS or DFG during the breeding season. The possibility is noted because the sponsors want to discuss with DFG and USFWS (during consultation) if there are any scenarios under which operation during the breeding season might be allowed.

I-35.15

The buffer width would be determined in consultation with DFG at the time of construction, as the actual width could vary depending on the construction requirements and specifics of the active nest site or breeding territory parameters (page 4-80).

I-35.16

As described in Master Response 1 concerning the preferred alternative, the existing outlet from Pacheco Pond to Novato Creek would remain in the preferred alternative in dual use with the new outlet to BMKV. As discussed in Impact BIO-9 (page 4-81 of Draft SEIR/EIS), the existing tidal flapgates severely hinder salmonid access at present. This is the baseline against which project effects must be evaluated under NEPA and CEQA. Because the outlet would remain in use and it is doubtful that the chinook sighted in 2001 were listed species or constitute a self-sustaining run, the effect of diversion of high flow in wet season months is not considered a significant effect of the project. Because this has not been identified as a significant effect, no mitigation for this effect is proposed. It should be noted that the project would provide additional substantial acreages of rearing habitat in the subtidal channels in the tidal marsh for juvenile steelhead and potentially other salmonids from other tributaries of San Pablo Bay and surrounding parts of the Bay.

I-35.17

Monitoring and adaptive management activities may result in potential effects on special-status species (page 4-82). In order to minimize these effects, the project proponent would coordinate with USFWS, NMFS, and DFG to develop a monitoring and adaptive management program that would utilize Best Management Practices (BMPs). As this program would be designed based on the detailed design process, it is speculative to describe the exact nature and type of practices at this time. The program would be designed to minimize effects, including scheduling activities around sensitive time periods for the various species. The comment regarding public involvement is noted.

I-35.18

The project sponsors agree that leaving portions of the outboard levee as refugia will mitigate impacts to rails and harvest mice whose territories encompass the outboard levee. The commenter may be under the impression that no upland refugia would remain along the lowered perimeter levee. Impact BIO-11 (page 4-83, states that such areas will be included in the design. As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, a portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes would move access far away from the tidal restoration areas of BMKV and thus access effects on the new refugia locations would be averted. For these reasons, Impact BIO-11 concludes that this impact is less than significant.

I-35.19

As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, a portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes would move access further away from most

of the upland habitat and seasonal habitat proposed in the preferred alternative, which would enhance the probability of nesting in the majority of these areas.

I-35.20

Potential corrective actions are noted in the last paragraph of Mitigation Measure BIO-8 on page 4-85. Whether and when corrective actions are undertaken is part of the adaptive management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

I-35.21

Comment noted. As discussed in prior response, the addition of an expanded pond in the preferred alternative is expected to enhance the habitat value of the pond. The preferred alternative includes over 270 acres of seasonal wetland, which is more than the original Alternative 2 and is substantially more seasonal wetland than either of the other alternatives evaluated in the SEIR/EIS.

I-35.22

The preferred alternative, revised Alternative 2, would provide over 270 acres of restored seasonal wetland. The existing site contains 114 acres of seasonal wetlands and an average amount of 151 acres of agricultural ponding wetlands, which are considered of significantly lower value than the existing seasonal wetlands. The revised alternative 2 was selected as the preferred alternative, in part, because it provided a substantially larger seasonal wetland component that better meets the project goal of a diverse array of wetland and other wildlife habitat, while still providing substantial tidal marsh areas to support threatened and endangered species.

Regarding access, mitigation measures are proposed to reduce potential access impacts on adjacent seasonal wetland habitats.

I-35.23

It is presumed that the reference to "wetland loss" should actually be to "grassland lost." As described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, the last portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property. These changes move the potential effects of access to the western edge of the swale area. Due to these changes and the inclusion of approximately 250 acres of upland habitat in the preferred alternative, are considered sufficient to offset the loss of existing grasslands.

See habitat/species discussion above in response to I-35.10

I-35.24

See also Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail, all of which would reduce access impacts on the upland/transition habitat. Regarding Mitigation Measure BIO-8, potential corrective actions are noted in the last paragraph of Mitigation Measure BIO-8 on page 4-85. Whether and when corrective actions are undertaken is part of the adaptive

management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

The alternatives include the construction of a new levee with an intertidal berm that will provide high tide refugia for the California clapper rail, California black rail, salt marsh harvest mouse, and other species. As noted on page 3-17, seeding or planting of non-tidal habitats (e.g., seasonal wetland, upland, high transition marsh) would be conducted as necessary. It is anticipated that the plant community for the high-marsh transition habitat area will include species commonly found in this zone including, picklweed, saltgrass, fat hen, alkalai heath, jaumea, and gum plant; many of these species will likely colonize the site following the breaching of the outboard levees. The initial planting mix and methodology (e.g., planting, natural colonization) for this area will be determined during the detailed design phase of the project. The need for any supplemental planting will be determined based on the results of the post-restoration vegetation monitoring program.

I-35.25

Figure 3-6 shows a schematic cross section of habitats restored under Revised Alternative 2 (the preferred alternative). With regards to impact of access, as described in Master Response 1 concerning the preferred alternative, the spur trail has been deleted, the last portion of the Bay Trail has been routed around the west side of Headquarters Hill, and the spur trail has been relocated to the City of Novato property, all of which reduce access impacts to high marsh/transition areas.

Regarding Mitigation Measure BIO-9, whether and when corrective actions are undertaken is part of the adaptive management approach described in this measure and in the updated Monitoring and Adaptive Management Plan included as an appendix to the Final SEIR/EIS.

I-35.26

See Master Response 12 regarding existing wildlife habitat. See also Master Response 11 regarding Habitat Design (Amount of Upland Habitat), and Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail, which would reduce affects on the upland areas. Impact BIO-22 concerns loss of foraging habitat for golden eagle and burrowing owl. Burrowing owl have not been found to date on the site, although as noted in the Draft SEIR/EIS, this does not preclude their potential presence. The preferred alternative includes approximately 250 acres of upland/grassland that is expected to offset the loss of about 128 acres of existing grassland and provide foraging habitat for raptors.

See habitat/species discussion above in response to I-35.10.

I-35.27

See Master Response 12 regarding existing wildlife habitat; Master Response 11 regarding habitat design (Amount of Upland Habitat); and Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail.

See habitat/species discussion above in response to I-35.10.

I-35.28

See Master Response 1 regarding deletion of the spur trail, routing of the Bay Trail, and relocation of the spur trail would avert access impacts in upland/transition habitats near to the new tidal mudflats which would be utilized by shorebirds.

See habitat/species discussion abovein response to I-35.10. The preferred alternative includes approximately 137 acres of seasonal wetland habitat that will be receive overflow from Pacheco Pond during wet season high flow conditions, and another 140 acres of seasonal wetland habitat will receive overflow from the Bel Marin Keys South Lagoon. These shallow ponded areas will provide refugia for migratory shorebirds during high tides.

I-35.29

The last paragraph reflects early considerations for only the portion of the proposed Bay Trail between the City of Novato levee and Pacheco Pond and concerned the existing dirt road visible on figure 3-5 just east of Landfill 26, the open field/concrete areas east of the dirt road, and the new levee to be built on the west side of the HAAF restoration area. This paragraph has been updated to reflect the actual designs of the 3 alternatives, all of which place the Bay Trail on the new levee to be built as part of the HWRP, which is identified in Impact BIO-27 as resulting in little additional impact to wildlife beyond that of the levee construction which was covered in the 1998 EIS/EIR for the HWRP.

Regarding a potential alternative along City Streets or through the City property near landfill 26, the comment is not specific as to what City Streets or which portion of the City property around Landfill 26 the commenter is referring to. Also see discussion under response to Comment I-36.4 below, regarding a potential route around the south side of Ammo Hill via City streets in the Industrial Park to the west side of Pacheco Pond.

I-35.30 and I-35.31

See General Response to Comment I-35 above.

The discussion of the Bay Trail studies and BCDC's draft report does not minimize the results of these prior study and planning efforts, but describes the nature of these studies, and noted on pg.4-93, as the commenter also notes that "the 8 field studies all showed some adverse effect on wildlife from trail activity." The commenter dismisses 4 of the possible measures as having little relevance to protecting wildlife; however all of the dismissed measures are noted in the context of funneling access to designated routes to reduce the potential of access to sensitive areas via informal routes. Informal routes can and do often have effects on wildlife. The location of the interpretive center in the preferred alternative is an incorporation of one of the measures that the commenter dismisses. Citing of these potential methods is intended to highlight considerations for incorporation in the final trail design.

Comments regarding the mitigation measure components and their desired features are noted. However, the lead agencies disagree with the assertion that the potential suite of mitigation measures mentioned in Mitigation Measures BIO-11, BIO-12, and BIO-17, as incorporated into final trail design and a trail management plan to be developed in coordination with BCDC, DFG, USFWS, Marin County, the City of Novato, and the Bay Trail project, would not mitigate the access impacts of the preferred alternative to a

less-than-significant level, in the context of this restoration project and in comparison to the existing baseline.

The description in the Draft SEIR/EIS of Mitigation Measure BIO-11 was not intended to preclude consideration of the potential measures mentioned in Impact BIO-28. The text of the measure has been updated to include consideration of all the mentioned measures.

I-35.32

Impact BIO-29 discusses the Bay Trail portions proposed to extend southward and northward from the City of Novato levee at Hamilton. A new figure has been added to this part of the document to provide the reader with better geographical reference to the trail segments.

The grassland along the southern extension is west of the existing road/concrete area (which is already informally used as a trail and by periodic vehicles) where the trail is proposed. The seasonal wetlands north (and also) east of the southern extension are shown on figures 3-1, 3-5, and 3-8 and are the seasonal wetlands located in the southwestern bulge of the Hamilton restoration area. Mitigation Measure BIO-12 identifies the measures proposed to reduce impacts of access on adjacent habitats. Because a portion of the southward trail would eventually be directly adjacent to seasonal and tidal wetlands in this area, the mitigation measure specifies establishment of seasonal closures during breeding seasons of sensitive species in consultation with DFG and USFWS once sensitive species begin to use the restored wetland areas. Closure of the trail during migration of waterfowl or shorebirds through the area is not considered necessary to reduce this impact to a less-than-significant levels, unless these are sensitive species breeding in the restored tidal or seasonal wetlands at this location., in the context of the HWRP/BMKV project and in comparison to the existing baseline.

I-35.33

As described on page 4-97, the levees and berms would continue to provide predator access. Predator access would be reduced compared to the existing condition with the introduction of tidal flows, and with the reduction in height of the perimeter levees (east of the new outboard levee) to an approximate high-tide level. The analysis concludes that existing predator access would be reduced with implementation of the project. The precise locations of the internal peninsulas would be determined in the detailed design phase. It is important to note that NEPA and CEQA assessment of impacts are based on a comparison to the existing setting.

I-35.34

Impact BIO-31 has been updated to include discussion of impact on pile-driving to common fish species. However, because of the limited duration and effect area due to the size of the pile-driving equipment to be used, no population-level impacts to fish are expected (as already noted on page 4-99). Potential mortality of individual common fish is not considered a significant impact. Specific measures to reduce impacts related to listed fish species and marine mammals would be determined in consultation with NMFS. It should be noted (as identified on page 4-98) that the size of pile-driving equipment and the duration of pile-driving activity to be used for this project are far smaller than the recent and ongoing pile-driving activity associated with the Carquinez Bridge or the proposed pile-driving for the Bay Bridge East Span project, and the nature of impact would resulting be much more limited. The mitigation measure does not restrict the potential use of other measures such as bubble curtains, but the specific measures

should be determined in consultation with NMFS in light of the specific details of proposed pile-driving activity, which would help to more precisely characterize this impact to support consultation.

I-35.35

The Draft SEIR/EIS identifies approximately 2.7 acres of construction disturbance of habitat, assuming a 50-foot width of disturbance. Permanent loss would be less and would depend on the width of trail features in wetland areas. The Bay Trail in Alternative 1 would not be implemented because Revised Alternative 2 is the preferred alternative. See response to Comment I-36.4 below concerning a suggested alternative routing for Bay Trail along City streets, land, and a different location to cross Pacheco Creek. Comments regarding mitigations noted. Restoration of riparian habitat along the tributaries to the pond is considered a feasible mitigation.

I-35.36

See Master Response 13 regarding Bay Trail routing, trail spurs, and dog use.

See response to Comment I-36.4 concerning MCL's suggested alternative routing further west. The Draft SEIR/EIS already identifies 2 alternatives that avoid the impacts associated with a trail route west of Pacheco Pond, Revised Alternative 2 and Alternative 3. Trail routings that are entirely inconsistent with local and regional planning for the Bay Trail do not meet the project objective concerning access. A reasonable range of alternatives that meet the project objective concerning access and are demonstrably feasible have been considered and analyzed in the document.

Trails further west of Pacheco Pond may or may not be feasible. Nothing in the proposed project precludes any action to create such trails if other parties propose them. However, as noted in the response to Comment I-36.4, these areas are outside the area of authorization for federal involvement related to the HWRP and the lands owned by the Conservancy thus limiting federal and state sponsor involvement relative to the HWRP.

Mitigation measures are identified in the document that are feasible and can reduce the effects of trail access on biological resources to a less-than-significant level, particularly so in the preferred alternative.

I-35.37

The preferred alternative does not include a spur trail. See Master Response 1.

I-35.38

The preferred alternative does not include a spur trail. See Master Response 1. Gated access of the NSD levee/berm is essential to preventing public access to the tidal marsh restoration area. Buffers and barriers would be determined in the detailed design phase. Feasible mitigation measures are identified in the document.

I-35.39

The preferred alternative does not include a spur trail. See Master Response 1. Mitigation measures are identified in the document that are feasible in relation to a spur trail.

I-35.40

As described on page 3-21, an interpretive center is conceptually envisioned as a building that would house exhibits that provide information about the wetland restoration projects and the local flora and fauna. It is also one of the project objectives to provide "for public access that is compatible with protection of resource values and with regional and local public access policies" (page 2-3 and 2-4). Interpretive facilities facilitate protection of resource values, not only on the site, but elsewhere through the education provided to users of the facilities.

As discussed in Master Response 1 regarding the preferred alternative, the location of the interpretive center has been relocated to City of Novato property on the HWRP site. Impacts of the location at BMKV were analyzed in the Draft SEIR/EIS. The HWRP site already has an existing dirt road that reaches the proposed location. The location is adjacent to the future City park proposed at Landfill 26. The location is consistent with local public access policies and plans, which is an objective of the project.

The impacts of placing a center at the proposed location are considered less than significant and thus analysis of further alternative sites beyond those in the document is not necessary to avoid significance effects.

I-35.41

See Master Response 18 regarding climate change.

I-35.42

The off-loading facility must be located at the –24 to –28 foot mean lower low water (MLLW) contour to enable large scows and transports to moor and off-load (page 3-15). Although 2 different pipeline alignments are proposed, this 1 location for the off-loading facility has been identified because it is the closest location with suitable depth.

I-35.43

The preferred alternative, Alternative 2, has been revised to incorporate comments received from agencies, the public, and interested organizations, the response to comments presented in this document, and the revised analysis in the Final SEIR/EIS. As such, it represents the environmentally superior alternative, as well as the preferred alternative, and the impacts identified in the Draft SEIR/EIS would represent a conservative analysis (i.e., the impacts identified for Alternative 2 in the Draft SEIR/EIS would be reduced with implementation of the preferred alternative) in relation to access. Further, mitigation is identified and proposed to reduce access impacts of the preferred alternative.

Comment Letter I-36

September 13, 2002

Mr. Tom Gandesbery
California State Coastal Conservancy
1330 Broadway, 11th Floor
Oakland, CA 94612-2530

Re: BMKV Draft EIR/EIS

Dear Mr. Gandesbery:

The Marin Conservation League(MCL) would like to offer the following comments regarding the Draft Supplemental EIR/EIS addressing the Bel Marin Keys Unit V expansion of the Hamilton Wetland Restoration Project. We appreciated the extra time allowed for submitting our comments. We had difficulty securing a copy for review.

MCL has been a proponent of marsh restoration at Hamilton Field and BMKV for many years. We congratulate the Conservancy and the Corps for now making it possible and appreciate this opportunity to comment on the environmental issues with which you are confronted. The technologies needed to accomplish the project frequently exceed the ability of a layperson to evaluate, but here are some observations for which there could be additional, clarifying information.

The projected time period for the creation of either Alternative 1 or Alt. 2 is about 10 years. During that time there would be considerable earth movement to create the upland peninsulas, stockpile topsoil, build new levees, and introduce dredge spoils. Mitigation measures address avoiding construction during nesting months if there are nest sites found. There exists 1576 acres of habitat with special status species in residence. Can the project be phased so that all the existing habitat is not demolished all at once and some of the existing resident species can continue to survive while the new improved habitat is being readied? If so, how can this be achieved? How would this affect the timeframe and cost? I-36.1

Mitigation measure BIO-8 addresses a 15 year monitoring program to determine the success and rate of tidal coastal salt marsh restoration with some proposed corrective measures if the results do not meet expectations. BIO-9 has a 5 year monitoring program which also recommends remedial actions if the results for brackish open water, emergent marsh and/or seasonal wetlands are not up to expectations, but the potential remedial actions are not identified. There should be some suggested remedial actions. I-36.2

Impact BIO-25 discusses the potential for spread of invasive non-native plants within the restoration area during construction. Mitigation 10a recommends an herbicide spraying program prior to construction. Please suggest other ways of suppressing the spread of invasive weeds. It seems counterproductive to mitigate herbicide and pesticide contamination on site and introduce some at the same time. I-36.3

The Bay Trail alignment north of the HWRP in all alternatives is problematic. The alignment MCL has advocated has been south/west of Pacheco Pond on a route that goes south of Ammo Hill, crossing the Pacheco Creek at a narrow point to the industrial park, crossing San Jose Creek at another narrow point and then following the shore of Pacheco Pond outside the chainlink fence that separates the industrial park from the pond. This would have the least impact on wildlife, would benefit the thousands of people who work at the industrial park and are looking for more pleasant walks than just around a city block. Please discuss this alignment feasibility in the EIR/EIS. I-36.4

The levees are considered upland habitat in the evaluation of resultant habitat types and acreage. With a Bay Trail or spur being considered for all but the most outboard levees, can they be considered habitat, since it is acknowledged in the EIR/EIS that trails discourage wildlife use? I-36.5

The off-loading facility and pump station for the dredge slurry is proposed to be located some 3000' from the project site. Consideration was given to fuel spill from the pumps and booster pumps on this very long 18" steel pipe and mitigation for potential spills, but the potential for a pipeline rupture was not discussed. Are there automatic shutdown mechanisms that could protect the bay from inadvertent dredge spoil dumping? I-36.6

There are a number of issues that are being negotiated with the Marin Flood Control District and the BMK CSD with project sponsors. Although the plan and EIR/EIS seem to address the flooding issues as expressed by the BMK residents, there seems to be some possibility the plan could be adapted changing the environmental benefits of the project. Will the environmental community have an opportunity to comment on such changes prior to any negotiated agreements? I-36.7

Thank you for this opportunity to comment. We look forward to subsequent meetings at which the final preferred plan is discussed.

Yours truly,

Kathy Lowery
President

I-36 Marin Conservation League

I-36.1

The site preparation phase (Phase I) is only about 2 years. However, as described in the Draft SEIR/EIS, this phase would involve disruption of existing habitats onsite due to levee construction, excavations and salvage of topsoil, and removal of existing infrastructure and preparation for dredged material placement. While mitigation measures are proposed, for example, to avoid nest destruction of special-status birds, since dredged material placement would be used on much of the site to raise elevations from the current subsided levels and the site must be prepared to receive dredged material and much of the existing habitat inside the perimeter levees would be affected during the first 2 years of the project. However, construction activity over those 2 years would be expected to move around the site and not disturb all areas at the same time. The dredged material placement phase (Phase 2) would last around 10 years and would be done in phases on the separate areas onsite. The neighboring areas not presently being filled would be available for use by resident species in the interim. It should be noted that tidal marsh is only located outside the perimeter levees. While some nearby construction activity may disturb species in tidal marsh due to noise, the direct disturbance of habitats outside the levee would occur during Phase 3 when outer levees are breached. However, the breaching of the levees represents the end of the construction period.

It should be noted that the entire 1,576-acres of the site does not contain sensitive species habitat. As noted on table 4-7, about 1,200 acres of the site are presently in agriculture, of which only an average of 150 acres ponds annually. These areas are disturbed presently through agriculture activities, and their disturbance, though reducing forage and habitat for common species, is not considered a significant impact on wildlife. The remaining acreage varies in quality, some of which, like coastal salt marsh and seasonal wetlands, support sensitive species habitat.

I-36.2

As discussed in the Monitoring and Adaptive Management Plan, which has been updated from the draft in the 1998 EIS/EIR for the HWRP to include the BMKV expansion, corrective actions could include vegetation management, predator management, topographic modifications such as creation of or enlargement of channels, or levee repairs or modifications. This plan has been included as an appendix to the Final SEIR/EIS.

I-36.3

Mitigation Measure 10a includes construction controls (e.g., wash stations). The mitigation measure notes that the recommended control measures may include wash stations and development of an herbicide spray program, but does not preclude other control measures that may be recommended by the qualified botanist. Any use of herbicides would comply with current state and federal regulations for herbicide application for weed control and handling.

The reference to "mitigate herbicide and pesticide contamination" on the site presumably refers to the discussion in the *Hazardous Substances and Waste* section in chapter 4. As noted in that section, the site investigations of the BMKV expansion site have not identified any widespread herbicide or pesticide

contamination. Several discrete areas of shallow soil contamination containing DDT and dioxins/furans, probably related to prior pesticide/herbicide use. However, as noted in Mitigation Measure HAZ-1, the Conservancy would coordinate with DTSC (and SFRWQCB in addition) for any required site-cleanup of these limited areas. These identified areas are likely related to storage of, and potential spills of, pesticides or herbicides at former agricultural activity centers and do not reflect any widespread contamination related to agricultural spraying or use at the site.

I-36.4

The alternative suggested by MCL would appear to be located on land owned by the City of Novato, possibly the Marin Humane Society, possibly private lands in the Industrial Park, MCFCWCD, and on public street(s) in the Industrial Park. First, none of these lands are owned by the federal and state sponsors of the HWRP and the BMKV expansion. While this does not necessarily conclude anything about the feasibility, per say, of a trail along the alignment suggested, it is outside the authorized project area for federal involvement and outside of areas controlled by the Conservancy, which may indicate the suggested alternative is of lower feasibility than the preferred alternative, which is largely on federal and Conservancy-owned land.

Second, one of the HWRP/BMKV project objectives, as noted in chapter 1 of the Draft SEIR/EIS is to:

"*Provide for public access that is compatible with protection of resource values and with regional and local public access policies*"

As noted in the *Land Use* section of chapter 4 (see page 4-111 of the Draft SEIR/EIS), the Marin Countywide Plan and the City of Novato General Plan both presently contain an alignment north from Hamilton to Bel Marin Keys Boulevard along the eastern side of Pacheco Pond. Further, the City of Novato, studied various Bay Trail options in their Hamilton Public Access Bay Trail Plan (City of Novato 2001). This plan identified that "the streets and existing utility easements within the Novato Industrial Park are not appropriate for a main trail designation because of the lack of right-of-way, potential security issues, lack of adequate visibility, and orientation of the business uses in this area" (page 24). However, the plan goes on to state that "they could be considered for local connections to the Bay Trail...but not as a primary route." The City, County, and the ABAG Bay Trail project all participated in the workshops in fall of 2001 during the conceptual design phase. All have commented on the Draft SEIR/EIS without objection to the routings shown for the main Bay Trail. The County CDA did not express a preference as to west or east of Pacheco Pond; the City of Novato supports a Bay Trail route east of Pacheco Pond as consistent with its General Plan. The project sponsors, in developing the alternatives and selecting those for analysis in the Draft SEIR/EIS took into account the local and regional public access planning and policies and selected alternatives for analysis that could meet the aforementioned objective. All local planning called for a Bay Trail route either east or west of Pacheco Pond; none called for a route through the Industrial Park itself.

The land use and biological effects of the different Bay Trail alignments are analyzed in chapter 4 of the Draft SEIR/EIS and mitigation is proposed where significant effects are identified. It should be noted that most of the existing expansion site primarily consists of agricultural and ruderal land that does not presently support sensitive plants or listed federal or state species, except in the case of occasional foraging by several listed bird species. Habitat for listed species is located outside the outboard levees along Novato Creek and San Pablo Bay and no trail routing is included to or near these areas in the preferred alternative. As a baseline for assessment under NEPA and CEQA, the existing conditions are

used for assessment of impact. Future establishment of habitats that may support listed species is an output and a benefit of the project, but these habitats (e.g., tidal marsh) are not currently established on areas where the Bay Trail is routed in the preferred alternative.

The project includes development of specific trail design measures and a trail management plan in concert with relevant local, state, and federal agencies to minimize effects on existing and future wildlife. The Draft SEIR/EIS concludes that with the proposed mitigation, the effect of routing a trail as described in Revised Alternative 2 (the preferred alternative) would result in a less-than-significant effect on the environment under NEPA and CEQA.

It should also be noted that the potential spur trail to Novato Creek was deleted from Alternative 2 in the preferred alternative in part due to concerns about potential effects of construction and access to existing habitat in Novato Creek and concerns about future management of access related to restored tidal wetland habitat.

I-36.5

In the preferred alternative, there would be no designated trails on the BMK south lagoon levee, the new outboard levee adjacent to the tidal marsh restoration area, or the levees on the north or south of the seasonal wetland area. The upland habitat in the preferred alternative is located from the BMK south lagoon eastward, southward, and westward. Only the upland adjacent to the Bay Trail around the east side of Pacheco Pond would be affected by trail use. The majority of the upland in the swale would not be affected by trail use.

I-36.6

The comment is noted. The pipeline engineering specifications are presently being determined (as part of the HWRP). Pipeline design would be done to handle the range of expected pumping pressures. The offloading facility would be actively manned during offloading of dredged material, allowing for shutdown in the event of pipeline rupture. These project controls would be expected to reduce the potential for significant loss of dredged material to a less-than-significant level.

I-36.7

See Master Response 3 regarding flood zoning and MCFCWCD easements, which discusses the Agreement between the Conservancy, the City of Novato, and the MCFCWCD, which is included as an appendix to the Final SEIR/EIS. The Agreement sets up a process to conduct a confirming hydrologic and hydraulic study to provide the support for the County analysis of the F2 zoning and existing easements. The project sponsors consider the studies conducted to support the impact assessment have adequately assessed potential flooding and not identified a significant environmental effect under NEPA or CEQA, but are willing to fund the additional study to support the County in its separate determinations.

The only scenario in which the project would need to be modified pursuant to the Agreement is if the additional study did not confirm the result of the studies conducted to date and identify an adverse effect of the project on flooding, which is considered by the lead agencies to be highly unlikely. If this were to occur and changes to the project were necessary, the lead agencies would need to determine whether or not additional NEPA and CEQA compliance is or is not necessary pursuant to project changes.

Pursuant to the BMK CSD, there will continue to be consultation because the BMK CSD holds certain maintenance and drainage easements on the BMKV property and has facilities located directly adjacent to the expansion site. However, the preferred alternative has been designed to comply with those easement, such that substantial changes in the design (that might affect habitat components) are not expected to be necessary during the detailed design phase. Similar to the discussion above, if substantial changes were identified as necessary, the lead agencies would need to determine whether or not additional NEPA and CEQA compliance is or is not necessary.

As noted in Master Response 1, Alternative 2 has been revised as the preferred alternative in the Final SEIR/EIS in response to comments provided on the Draft SEIR/EIS and based on lead agencies evaluation of the project purpose and objectives. While some of the changes do improve certain capacities of the site relative to flooding, the overall habitat component of the revised Alternative 2 are believed by the lead agencies to best meet the project goal and objectives.

Chapter 4

References and Acronyms

References

References Cited

City of Novato. 2001. *Hamilton Public Access Bay Trail Plan*. Prepared by Questa Engineering Corporation. October.

Earth Technology Corporation (ETC) 1994. *Community Environmental Response Facilitation Act Report, Hamilton Army Airfield*. Alexandria, Virginia.

Environmental Science Associates, Inc. 1993. *Bel Marin Keys Unit V Final Environmental Impact Report/Environmental Impact Statement*. Volume I – revised draft. August. (Corps Public Notice No. 15813N33A; State Clearinghouse No. 89072519.) San Francisco, CA.

Federal Emergency Management Agency (FEMA). 1989a. Flood Insurance Study, City of Novato, California, Marin County. Community Number 060178, revised September 29.

_____. 1989b. Flood Insurance Rate Maps, City of Novato, Marin County, California. Community Number 060178.

_____. 1986. Flood Insurance Study, Marin County, California, Unincorporated Areas, Community Number 060173, November 19.

_____. 1982. Flood Insurance Rate Maps (FIRM), Marin County, California, Unincorporated Areas, Community Number 060173.

LSA Associates. 1977. Delineation of Clean Water Act Jurisdiction on Proposed Bel Marin Keys Project Site, Novato, CA. Novato, CA.

Marin County Community Development Agency. 2002. Comment Letter on BMK Unit V Expansion of the Hamilton Wetland Restoration Project Draft SEIR/SEIS.

Titus, James G. and Vijay Narayanan. 1995. *The Probability of Sea Level Rise.* Washington, D.C.: U.S. Environmental Protection Agency. 186 pages. EPA 230-R95-008.

U.S. Army Corps of Engineers, St. Louis District. 2001. Archives Search Report Conclusions and Recommendations, Hamilton Army Airfield, Marin County, California.

U.S. Coast and Geodetic Survey. 1863. San Pablo Bay. Available at U.C. Berkeley Bancroft Library.

U.S. Geological Survey. 1942. California: Petaluma. 15-minute Topographic Series. On file, California Division of Mines and Geology Library, Sacramento.

_____. 1914. Reprinted 1924. California: Petaluma Quadrangle. 15-minute Topographic Series. Surveyed 1910-1912. On file, California Division of Mines and Geology Library, Sacramento.

Van Dorn, A. 1860. Map of Marin County. Available at U.C. Berkely Bancroft Library.

Weston, Roy R. Inc., *1990 Enhanced Preliminary Assessment, Hamilton Army Airfield, Novato California.*

Personal Communications

Geusteson. Southern Sonoma-Marin Resource Conservation District. 2001. Personal communication with Tom Gandesbery, California State Coastal Conservancy.

Acronyms

ABAG	Association of Bay Area Governments
BCDC	Bay Conservation and Development Commission
BFE	base flood elevations
BMK	Bel Marin Keys
BMK CSD	Bel Marin Keys Community Services District
BMKV	Bel Marin Keys Unit V
BMPs	Best Management Practices
BPAFRP	Black Point Antenna Field Restoration Project
BRAC	Base Realignment and Closure
CEQA	California Environmental Quality Act
CFS	cubic feet per second
CHRIS	California Historic Resources Information System
cm	centimeter
Conservancy	California State Coastal Conservancy
Corps	U.S. Army Corps of Engineers
CTR	California Toxic Rule
CZMA	Coastal Zone Management Act
DFG	California Department of Fish and Game
DMMO	Dredged Material Management Office
DTSC	California Department of Toxic Substances Control
EFH	Essential Fish Habitat
FEMA	Federal Emergency Management Agency

FIRMs	Flood Insurance Rate Maps
FISs	flood insurance studies
FUDS	Formerly Used Defense Site
HAAF	Hamilton Army Airfield
HWRP	Hamilton Wetland Restoration Project
LIDAR	Light Detection and Ranging
LTMS	Long-Term Management Strategy for Disposal of Dredged Sediments in San Francisco Bay
MCCDA	Marin County Community Development Agency
MCFCWCD	Marin County Flood Control and Water Conservation District
mcy	million cubic yards
MLLW	mean lower low water
MMP	Mitigation and Monitoring Plan
MOA	Memorandum of Agreement
MSL	mean sea level
MSMVCD	Marin-Sonoma Mosquito and Vector Control District
NAF	North Antennae Field
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NGVD	national geodetic vertical datum
NMWD	North Marin Water District
NOAA	National Oceanic and Atmospheric Administration
NSD	Novato Sanitary District
PCA	Project Cooperation Agreement

PED	project engineering and design
RCD	Resource Conservation District
RWQCB	Regional Water Quality Control Board
SEIR/EIS	supplemental environmental impact report/environmental impact statement
SFHA	special flood hazard areas
SFRWQCB	San Francisco Regional Water Quality Control Board
SLC	State Lands Commission
SWPPP	Stormwater Pollution Prevention Plan
USEPA	U.S. Environmental Protection Agency
WDRs	Waste Discharge Requirements