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

MEC 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

MEC 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.

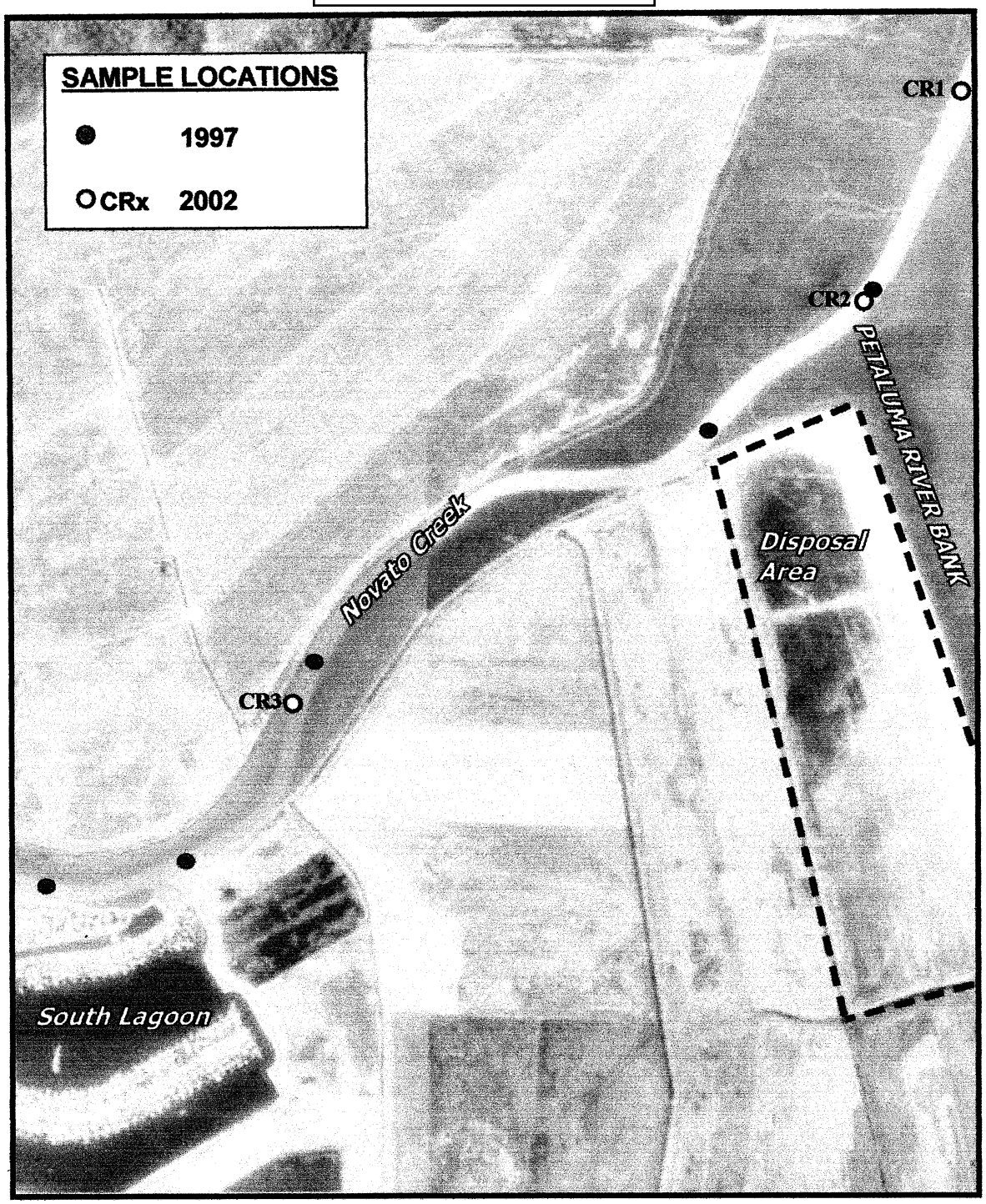
Sincerely,

Scott Bodensteiner
Associate Program Manager

Enclosure

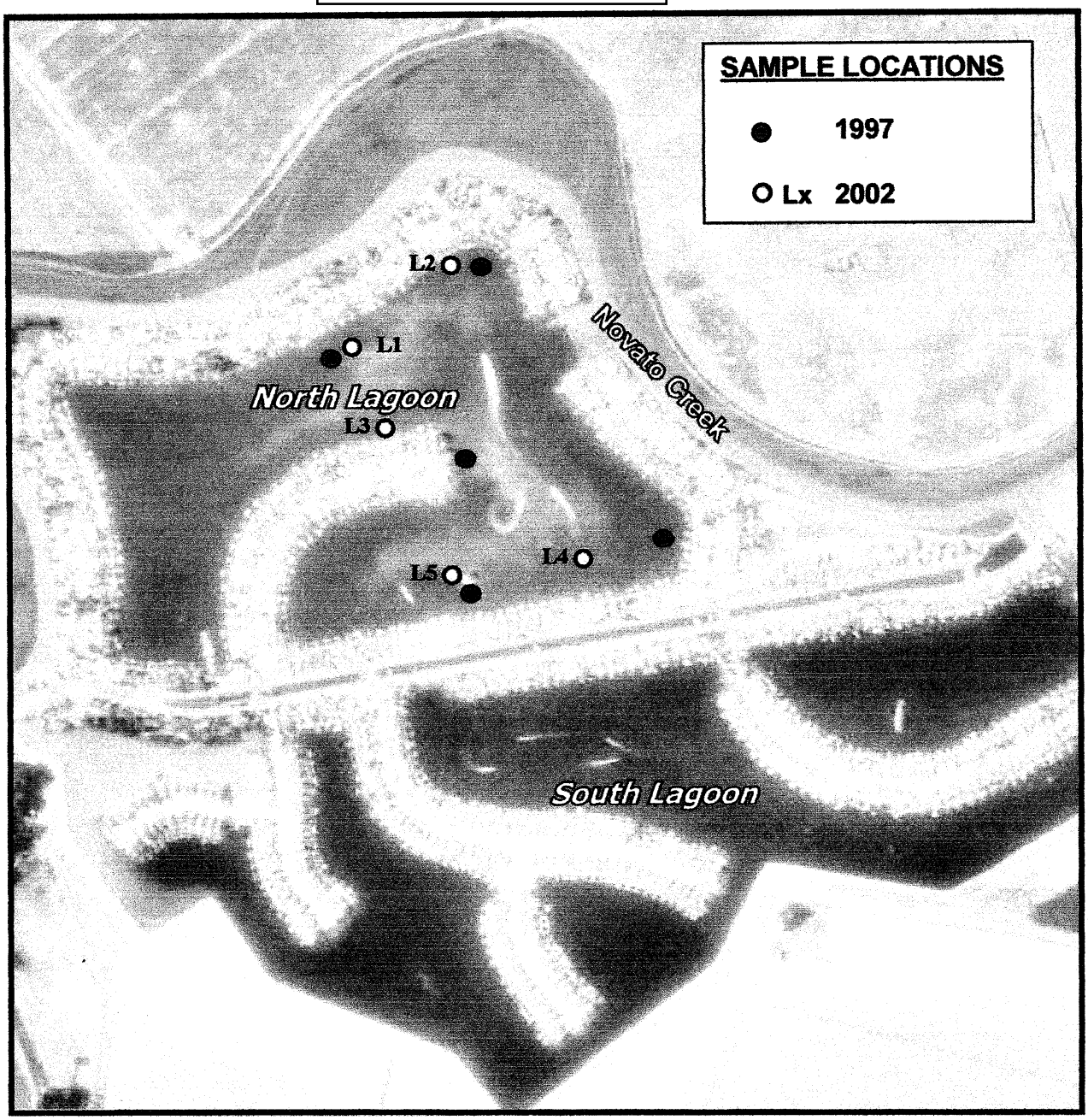
Cc: Mr. Gary Deghy, Huffmann-Broadway Group
Mr. Al Cornwell, CSW Stuber Stroeh

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[a]	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[b]
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
Bel Marin Keys Community Services District
FAX: (415) 883-3683

FROM: Scott Bodensteiner
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[a]	MDL	Creek	Lagoon	50:50 Mixture	Level of Concern[b]
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
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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

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

L-1.3 Con't.

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

RECEIVED
SEP 03 2002
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

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

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. <u>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</u>

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.

<u>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</u>.

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

<u>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.</u>

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 01 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 <u>at no extra premium</u> 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.