

Individuals and Organizations

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 breaching 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.

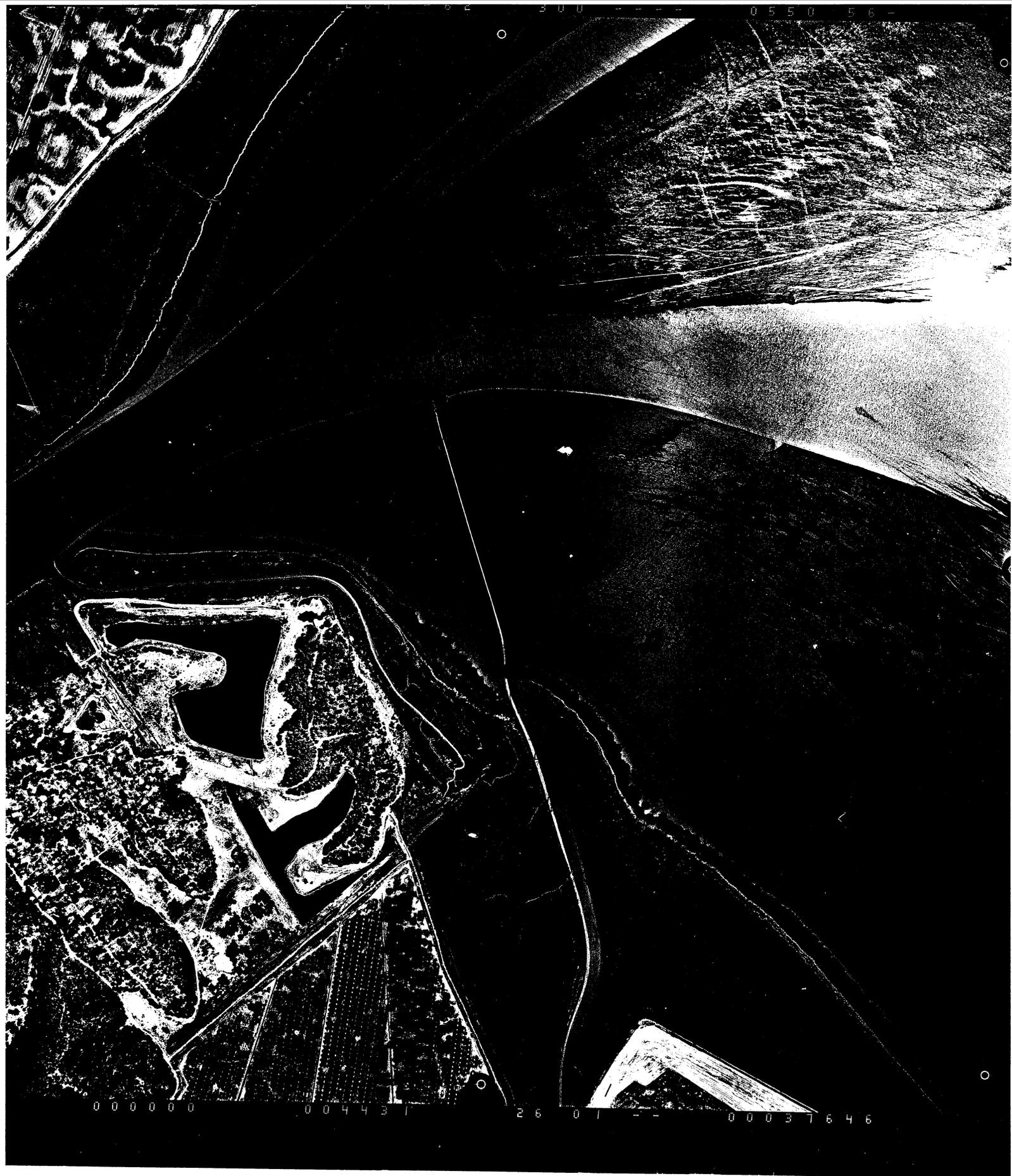
Attached are aerial photos showing the Bel Marin Keys outer channel.

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

1966

JUNE, 1977

10/6/89 Krone Lower # 1 - 1.85 ft
" #14 - .72 feet

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 exercised 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 exercising 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

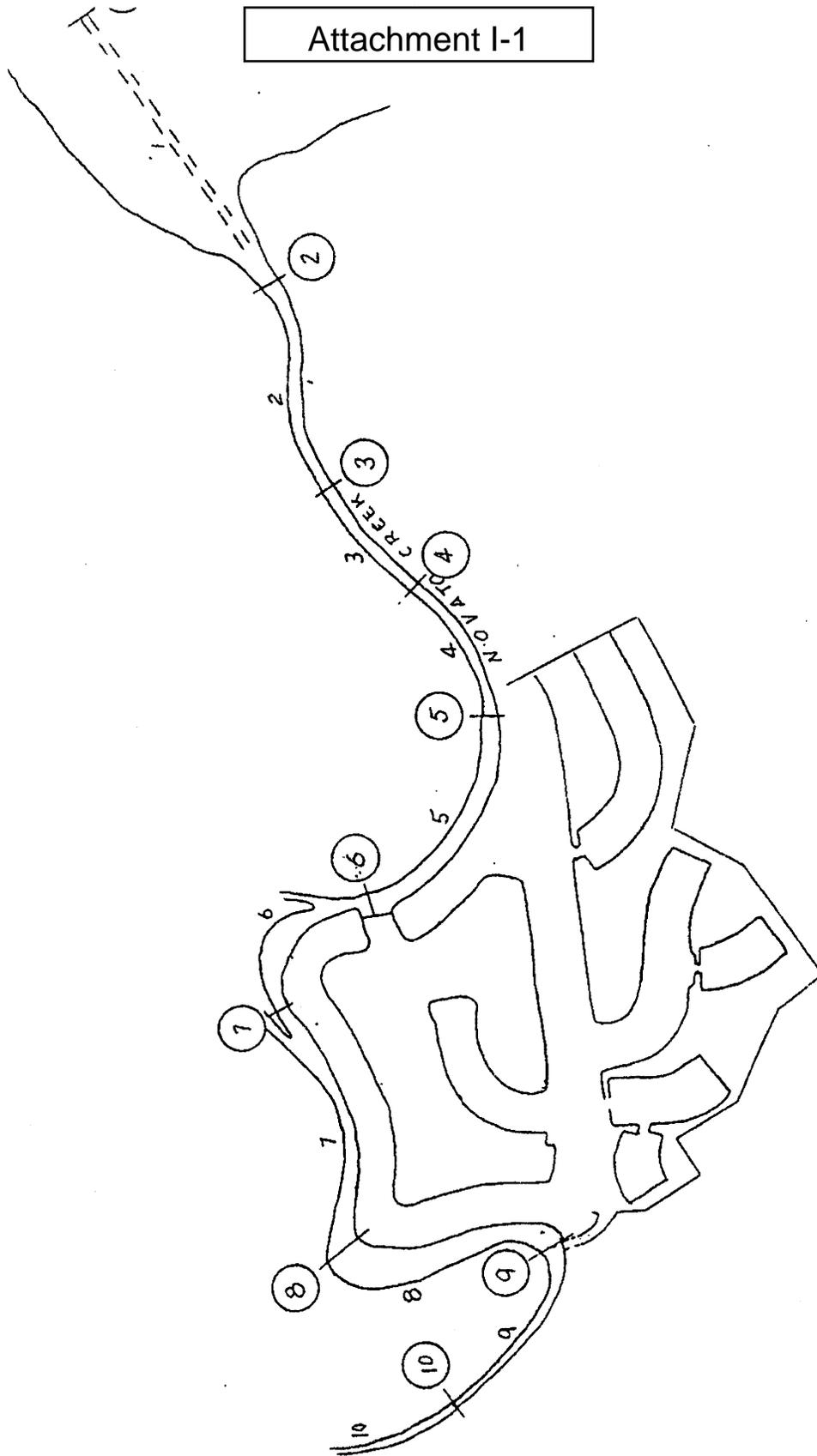


FIGURE 1. REACHES AND NODES OF THE NUMERICAL MODEL OF NOVATO CREEK

Attachment I-1

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 negligible 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

Hours	-----Node-----									
	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	<u>+3.47</u>	+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	<u>-5.05</u>	-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/cm²

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Hours	-----Reach-----									
	1	2	3	4	5	6	7	8	9	10
14.0	-0.8 -2.3	-0.9 -2.9	-0.9 -2.8	-0.9 -2.5	-0.7 -1.5	-0.8 -2.1	-0.8 -2.2	-0.6 -1.1	-0.4 -0.5	-0.4 -0.5
14.5	-1.2 -5.1	-1.4 -6.5	-1.4 -6.9	-1.4 -6.5	-1.1 -4.6	-1.5 -8.1	-1.6 -10.3	-1.4 -7.0	-1.1 -4.6	-1.8 -13.1
15.0	-1.4 -7.9	-1.6 -9.1	-1.7 -10.4	-1.9 -13.0	-2.3 -19.0	-0.5 -0.9	-1.9 -14.2	-1.7 -11.1	-1.4 -7.3	-2.3 -23.1
15.5	-2.3 -23.4	-2.7 -26.3	-2.9 -29.7	-2.9 -30.3	-2.6 -24.3	-1.2 -5.2	-1.4 -8.3	-1.3 -7.1	-1.0 -4.3	-2.2 -21.1
16.0	-2.6 -31.1	-2.7 -27.9	-2.9 -31.6	-2.9 -32.1	-2.6 -25.3	-1.4 -7.6	-1.7 -11.5	-1.5 -8.9	-1.3 -6.8	-2.4 -26.5
16.5	-2.7 -36.7	-2.5 -24.6	-2.8 -28.8	-2.8 -30.0	-2.5 -24.1	-1.4 -8.1	-1.7 -12.7	-1.6 -9.9	-1.4 -7.8	-2.6 -30.7
17.0	-2.7 -40.1	-2.3 -20.3	-2.5 -24.6	-2.6 -26.5	-2.4 -22.0	-1.4 -8.2	-1.8 -13.4	-1.6 -10.5	-1.4 -8.4	-2.7 -33.9
17.5	-2.5 -35.0	-1.9 -13.9	-2.2 -18.2	-2.3 -20.7	-2.1 -18.2	-3.2 -43.9	-3.6 -52.6	-2.9 -33.9	-1.0 -3.6	-1.8 -14.5
18.0	-2.5 -36.8	-1.9 -13.5	-2.1 -17.4	-2.2 -19.8	-2.1 -18.0	-3.2 -44.4	-3.6 -52.4	-2.9 -32.2	-1.0 -3.9	-1.9 -16.5
18.5	-2.5 -35.9	-1.8 -13.4	-2.1 -16.9	-2.2 -19.0	-2.1 -17.2	-3.2 -42.4	-3.5 -50.5	-2.8 -31.1	-1.0 -4.2	-2.0 -17.9
19.0	-2.4 -31.3	-1.9 -14.0	-2.1 -17.2	-2.2 -19.1	-2.0 -16.9	-3.1 -41.6	-3.4 -49.2	-2.8 -30.2	-1.1 -4.5	-2.1 -19.3
19.5	-2.1 -22.4	-1.9 -14.3	-2.1 -17.5	-2.2 -19.4	-2.0 -17.0	-3.1 -41.6	-3.4 -48.5	-2.7 -29.6	-1.1 -4.8	-2.2 -20.7
20.0	-1.4 -10.4	-1.7 -12.2	-2.0 -16.0	-2.1 -18.4	-2.0 -16.7	-3.1 -41.9	-3.4 -48.4	-2.7 -29.3	-1.1 -4.9	-2.2 -21.4
20.5	-0.5 -1.3	-1.2 -5.2	-1.5 -9.1	-1.8 -12.4	-1.8 -13.6	-3.0 -38.6	-3.3 -46.7	-2.7 -28.4	-1.2 -5.3	-2.3 -23.0
21.0	0.1 +0.0	-0.3 -0.4	-0.6 -1.5	-0.9 -2.9	-1.1 -5.0	-2.2 -20.6	-2.7 -31.4	-2.1 -18.3	-1.8 -13.6	-2.5 -27.8
21.5	0.5 +1.1	0.4 +0.6	0.3 +0.3	0.1 +0.1	-0.1 -0.0	-0.6 -1.3	-1.1 -5.1	-1.3 -7.3	-1.4 -8.0	-2.8 -36.8

Attachment I-1

consolidated material. These stresses, applied every two weeks, should maintain channel depths.

Lagoon water surface elevations (NGVD) calculated for this example were:

	<u>Start</u>	<u>End</u>
Unit 1:	+2.3	+0.45 = Lowering 1.85f
Unit 4:	+1.5	-0.78 = Lowering 1.72f

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

Attachment I-1

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.

1 BEL MARIN KEYS UNIT V EXPANSION OF THE
2 HAMILTON WETLAND RESTORATION PROJECT
3 DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
4 TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)
5

6 LEILA TWEED
7

8 I'm Leila Tweed, current president of Bel Marin Keys Community
9 Service District. I'm not speaking on behalf of the Community
10 Services District tonight but as a concerned citizen and one who
11 will hopefully enjoy living alongside a good project. And that's
12 why we're all here tonight -- to make sure it's a project that
13 we can live with and enjoy and be good neighbors with, too.
14

15 First, I want to have everybody from Bel Marin Keys stand up, so
16 you know who came from our community. I want to say thank you
17 very much. Give a hand to yourselves. Thank you. I want to
18 say thank you to Madeleine Swartz and Ben Flacante [phonetic]
19 for holding the education seminars that they did on Sunday --
20 I'm trying to talk quickly.
21

22 This is my personal concern after reading portions of your large
23 document. And a great concern to the boating community of Bel
24 Marin Keys is the outer navigable channel maintained by the Bel
25 Marin Keys Community Services District. This channel starts
26 where Novato Creek meets San Pablo Bay, more commonly known as
27 Marker 25, and proceeds to Marker 1, where the channel meets the
28 Petaluma River.
29

30 The lagoon flushing research and procedural studies by noted
31 hydrologist Dr. Ray Crone has provided our community the
32 professional guidelines necessary to keep the navigable channel
33 open for many years.
34

35 So I cannot be in favor of breaching Novato Creek unless your
36 project will fund the future dredging of the outer channel to
37 the Petaluma River.
38

39 Your draft EIR does not sufficiently address any significant
40 changes to our outer navigable channel. Please illustrate how
41 your proposed changes will affect this very important waterway.
42 I've attached aerial photos showing the Bel Marin Keys outer
43 channel. And I've also attached the Ray Crone report for your
44 review.
45

I-1.2

1 LEILA TWEED, continued

2

3 So that's my personal comment. And I'd like to introduce Mia
4 Mitchell, our new general manager. She'd like to make a couple
5 of comments.

1 **I-1 Leila Tweed**

2
3 **I-1.1**

4
5 See Master Response 6 regarding Novato Creek morphology and Master Response 8 regarding
6 navigation.

7
8 The Krone report identifies optimum flushing procedures to provide scouring flows along the Novato
9 Creek channel to favor navigation of the channel. While these procedures may promote scour in the
10 channel, it is evident by the current planning by the BMK CSD to dredge Novato Creek that these
11 flushing procedures alone are insufficient, in absence of periodic dredging to maintain navigability all the
12 way to the Petaluma channel.

13
14 **I-1.2**

15
16 This comment is identical to I-1.1 and the response is provided above.

Kristine Jackson
141 Bahama Reef

Comment Letter I-2

Subject: Hamilton/BMK V DSEIS/EIS Impacts to Flood plain

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

Attachment I-2

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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5

6 KRISTINE JACKSON
7

8 Good evening.
9

10 Currently, the Bel Marin Keys V properties are zoned F-2. The
11 County of Marin has placed the requirement of 300 acres for
12 flood ponding in accordance with zoning ordinance 22.95.030. All
13 of the previous development planned for this property had to
14 comply with this ordinance. This proposed project to construct
15 tidal wetlands must be required to comply with the County of
16 Marin's zoning ordinance, the same as any other construction
17 project.
18

I-2.4

19 The F-2 zoning allows the community of Bel Marin Keys to be
20 exempt from federally mandated flood insurance. Any changes in
21 the F-2 zoning would require the entire Bel Marin Keys community
22 to be covered by flood insurance. This insurance, including a
23 \$1,000-deductible, would cost approximately \$1,000 per home per
24 year subject to escalation. The cost to the community is about
25 \$750,000. This is in addition to the potential damages that
26 could be caused by actual flooding. How do you plan to address
27 this long-term cost?
28

I-2.5

29 There are three main sources of flood water including rainfall,
30 Novato Creek floodwater, and San Pablo Bay high tides combined
31 with tidal action. During major storm events, rainfall
32 accumulates in the Bel Marin Keys lagoon system, causing water
33 levels to rise. There's a drainage culvert installed in the
34 levee wall south of [inaudible] to help drain this water into
35 the existing flood plain. When the flows in the Novato Creek
36 reach a certain level, Bel Marin Keys experiences some local
37 flooding around the tennis courts overtopping the north lagoon
38 and overtopping the levee at the end of Bel Marin Keys. High
39 flow levels in Novato Creek get relieved by the levee protecting
40 the Bel Marin Keys V property and overtop, causing the water to
41 pond in the flood plain.

I-2.6

1 CHRISTINE JACKSON, continued

2

3 Finally, during the very high tides and wind action we observed
4 in the El Nino of 1997, the seawall along San Pablo Bay was
5 overtopped and damaged by waves, followed by flooding into the
6 flood plain. While it took property owners less than two days
7 to repair the worst damage, the acreage of ponding available in
8 the flood plain was effective in storing the excess floodwaters.

I-2.6
Cont.

9

10 The 300-acre flood plain is the key to maintaining public safety
11 from flooding in Bel Marin Keys. We will not accept any
12 degradation of this protection of public safety. How do these
13 proposed alternatives address these requirements to protect our
14 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.

Lisa and Tom Mowbray
176 Montego Key
Ignacio, CA 94949

Comment Letter I-3

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.

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-3.1

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.

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,



Attachment I-4



Current View

Attachment I-4



VIEW WITH 12 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: 843-7106
Email: COLLINSTA@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 | I-4.7
to 12' when there is no tidal action and there
has been little settling in the past 25 yrs?

Why is the new Buffer Levee only 1000' feet | I-4.8
from our levee not 2000 feet or more?
To protect views + values.

Please feel free to use the back of this form, if needed.

Thank you for your comments!

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5

6 DUANE COLLINS
7

8 Hi, Duane Collins, 124 Bahama Reef.
9

10 I live in that little hook that sticks out right directly across
11 from the wetlands restoration project. And my wife and I
12 purchased our home in Bel Marin Keys in 1997. We looked at many
13 properties in Bel Marin Keys and finally decided on 124 Bahama
14 Reef. The foremost deciding factor was the view of Mt. Diablo to
15 the east and Mt. Tamalpais to the south. We had full sun during
16 the day and were sheltered from the northwesterly winds. We
17 paid a premium for the property, probably 30 to 40 percent above
18 the market compared to the same size in another location.
19 Because of the views, we were willing to pay this premium.
20

21 We understood when we were house-shopping, there was a
22 possibility of a development across the channel -- Unit V.
23 Before buying we went to the County Planning Department and
24 found that Unit V, even if it was built, would enlarge the
25 lagoon behind our home, and the nearest house would still be
26 several hundred yards away. And the only loss we would have
27 would probably be some light as pollution from their homes. The
28 effect on our view would be almost negligible.
29

| I-4.9

30 No one in this community was happier than we were when we found
31 out that Unit V was now owned by the Coastal Conservancy. My
32 wife and I wrote numerous checks to the campaign for Coastal
33 Conservancy, the Audubon Society, and everything else to help
34 secure this. We've been in your corner from the get-go, and
35 we're still there.
36

37 Now if I could I have a couple of comments. There's another two
38 pages, but I don't have time.
39

40 I looked at this graph over here, and the first thing I noticed
41 is they've got two-story houses. Does anybody have anything on
42 their second story besides bedrooms? We all live on our first
43 floor. We're all in one-story houses. These two-story graphs
44 are worthless to us, unless you like lying in bed looking at
45 your view.

| I-4.10

1 DUANE COLLINS, continued

2
3 On the back of my letter I have a photograph that my wife took
4 of the sun rising in our backyard. You can see Mt. Diablo. You
5 can see the East Bay hills at night. You see the lights. You
6 can see the Carquinez Bridge. It's a spectacular view. You see
7 the dark line in front here [indicating]. That's the existing
8 levee.

9
10 This is what I would see if they put a 12-foot levee up --
11 nothing. My questions are, what are you going to do to preserve
12 my views? Who's going to pay for my loss of property value?
13 Why are you putting a 12-foot levee where there's no tidal
14 action against it and the existing levee, which is 25 years old,
15 has only settled a foot or two, when you tell me that this thing
16 is going to be down in a few years?

17
18 And the buffer levee -- the second levee -- you're talking about
19 putting up, why is it only 1000 feet from the existing levee,
20 when it would usually be 2000 or more feet out and have less
21 impact on our views?

22
23 Thank you.

I-4.11

I-4.12

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.

1 **I-4.8**

2
3 In the preferred alternative, the new outboard levee would be constructed to an initial elevation of 10
4 feet NGVD at a location approximately 1,500 feet south and east of the lagoon. The Final SEIR/EIS
5 concludes that this levee height and location would have a less-than-significant effect on visual resources.
6 Also see Master Response 8.

7
8 **I-4.9**

9
10 See response to I-4.2.

11
12 **I-4.10**

13
14 The visual analysis in the Draft SEIR/EIS includes analysis of effects on first-floor and second-floor
15 views so as not to ignore views that residences may have from second-story views, even if they are from
16 upstairs bedrooms. The analysis does not discount the value of views from first-floors.

17
18 **I-4.11**

19
20 The provided photograph shows East Bay hills, Mt. Diablo (the portion above the first range of hills), and
21 the Carquinez Straight bridge. All of these features are located above the horizon, e.g. above a level line
22 of sight from the viewer. As shown in the analysis of Alternative 2 (as revised), first-floor views from
23 viewpoints 2 and 3 (the most effected viewpoints) of San Pablo Bay would not be affected. The East Bay
24 features cited as of concern by the commenter are located at higher elevations than San Pablo Bay and
25 thus would be apparent in views after construction of the levee. Also see Master Response 8.

26
27 **I-4.12**

28
29 In the preferred alternative, the new outboard levee would be constructed to an initial elevation of 10 feet
30 NGVD at a location approximately 1,500 feet south and east of the lagoon. The analysis of this levee
31 indicates that it would have a less-than-significant impact on visual resources.

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: 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 case 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!

1 **I-5 N.C. Nicholas**

2 **I-5.1**

3
4 The comment is not specific as to what environmental effect the commenter is intending to address. The
5 commenter could be talking about the ecological resources associated with the 3 different sources of
6 water - Pacheco Pond, Novato Creek, and San Pablo Bay relative to the project. In that case, the response
7 is that the project analyzes in detail the effects of connecting the project to all 3 water bodies, as well as
8 the beneficial and adverse effects of the project on any associated ecological resources. Lacking any
9 further specifications, no further response is required.

10

1 **I-6 Howard F. Hall**

2 **I-6.1**

3
4 See Master Response 1 regarding the preferred alternative and Master Response 14 regarding the
5 interpretive center. The preferred alternative includes an approximately 387- acre swale and does not
6 currently include the use of mechanical pumping to drain the swale.

7

WRITTEN COMMENT FORM

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PUBLIC HEARING ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT/STATEMENT

WRITTEN COMMENT FORM

Name: MARK KUBIK

Address: 192 Carle Isle Novato Ca 94949

Phone Number: 415 883 5469

Email: _____

COMMENT: *We would like assurances and a mechanism in place for on going 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 to correct unanticipated negative effects from construction of this project on local residents, from this project in a timely manner.*

I-7.1

We want continued access of our leased dogs to present levees, proposed levees and

I-7.2

Please feel free to use the back of this form, if needed.

Thank you for your comments!

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5

6 MARK KUBIK
7

8 Good evening. Mark Kubik, 192 Caribe Island.
9

10 We would like assurances and a mechanism in place to have
11 ongoing monitoring of dredged material content -- timely public
12 access to this data and continued adequate funding for this
13 monitoring. In addition, we would want to see an expedited legal
14 mechanism to address violations of dredging content or to
15 correct unanticipated negative effects from construction of this
16 project in a timely manner.
17

| -7.3

18 Secondly, on a different note, many of us own dogs here. And I
19 believe Bel Marin Keys residents have had an easement on the
20 levee for over 20 years for recreation, including walking our
21 dogs on the levees and on other trails. The present proposal
22 appears to restrict or even prohibit dogwalking on all levees
23 and trails. We would like to maintain our present privileges
24 and not have them removed.
25

| -7.4

26 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: CAMCOHEN@AOL.COM

COMMENT: ~~TRAIL SHOULD BE...~~

I THINK THE ~~TRAIL~~ 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 BUSHES, 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!

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6 RICHARD COHEN
7

8 I'm Richard Cohen. I live at 43 Caribe.
9

10 I want to speak to the question of flooding and the flood
11 calculations. The EIR makes the comment that this is an
12 extremely complex situation: What we have coming from the west
13 are six different watersheds coming up Big Rock Ridge that sort
14 of come together at Bel Marin Keys. Coming from the east, you
15 have the tidal coming up Novato Creek and into San Pablo Bay.
16

17 In a bad storm day when these things meet, Bel Marin Keys is at
18 a very, very difficult -- and has been marginally flooded in the
19 past couple of years. The only reference in the hydrology to
20 the calculations that were done to figure out what these changes
21 are doing to do -- I'm going to read it right out of the report:
22 "However, a detailed assessment of the present and future
23 watershed conditions coincident with storm peak flow analysis
24 and hydrologic routing characteristics that would more
25 accurately define the expected characteristics of storm
26 hydrographs was beyond the scope of this study." In other words,
27 we took a guess at it, looks like it would be okay. A little
28 further down the same page -- page 5: "Detailed and consistent
29 surveys of the physical characteristics of Pacheco Pond and
30 Novato Creek are necessary to identify accurate water surface
31 elevation. These surveys were beyond the scope of this
32 conceptual planning effort." In other words we didn't do it.
33

| I-8.2

34 Additionally, all of the studies are based on a so-called one-
35 dimensional model in which Novato Creek, believe it or not, is
36 considered to be a straight line. Like a channelized flood
37 control. And the deviations between the one-dimensional model
38 that Novato Creek actually is in fact most severe under heavy
39 flooding and fast flow condition.
40

| I-8.3

41 So we need to get some real modeling. We have to remember that
42 the safety of our houses and our lives are dependent on this
43 modeling being right. And once it's done it's not going to be
44 easy to turn back.
45

1 RICHARD COHEN, continued

2
3 We have all seen pictures in the past couple of weeks of
4 flooding in Germany, the flooding in Austria, and flooding in
5 Czechoslovakia. We don't want to see pictures of Bel Marin Keys
6 as a result of poor engineering practices. The modeling --
7 "Well, we thought it was okay."

8
9 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

August 30, 2002

Mr. 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 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.

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.)

I-9.2
Con't.

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 quantitative 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.

I-9.6
Con't.

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.

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

1 BEL MARIN KEYS UNIT V EXPANSION OF THE
2 HAMILTON WETLAND RESTORATION PROJECT
3 DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/REPORT
4 TRANSCRIPT OF PUBLIC COMMENT AT PUBLIC HEARING (8/21/02)
5

6 EDWARD MAINLAND
7

8 I'm Edward Mainland. I live at 1017 Bel Marin Keys Boulevard. I
9 am a senior conservation fellow at the Sierra Club in San
10 Francisco, although my remarks tonight are as a private citizen
11 of Bel Marin Keys.
12

13 The first question is whether all three SEIR alternatives fail
14 to provide sufficient habitat diversity inconsistent with the
15 objective of the project, which is to increase and preserve
16 biodiversity. As we know, restoring San Francisco Bay areas
17 exclusively to the historic habitat may actually cause a loss in
18 the number of birds and other species and a decrease in the
19 diversity of bird species.
20

| I-9.11

21 The three alternatives of SEIR appear to be deficient in the
22 amount of planned upland transition habitat. By contrast, we
23 see in the South Bay restoration projects and major ones using a
24 mosaic approach and estuary restoration projects are normally in
25 conformance with the 1990 Bay line ecosystem habitat
26 [inaudible], which this report does not appear to be. In Bel
27 Marin Keys V, for example, elimination of barns, groves, large
28 trees, and fields used for foraging by various species will
29 adversely impact resident migratory raptors such as golden
30 eagles, red-tailed hawks, red-shouldered hawks, white-tailed
31 kites, kestrels, and possibly peregrine falcons, great horned
32 owls, and barn owls.
33

| I-9.12

34 The SEIR sidesteps the need to restore and manage a mosaic of
35 tidal habitats, natural and artificial. And engineered soils in
36 the upland portion of the project are merely narrow strips of
37 engineered materials that are not adequate in size or shape to
38 fulfill the mosaic function that the expansion of the upland
39 area might correct.
40

| I-9.13

41 Secondly, I'd like to ask a question about creek scouring.
42 Closure of the outlet of Pacheco Pond to Novato Creek would, the
43 SEIR states, reduce creek scouring and increase sediment
44 deposition and reduction in channel depth in the Novato Creek
45 downstream of the confluence of the channel. And this is an
46 irreversible, significant effect that is inconsistent with the
47 objective of ecosystem restoration.

| I-9.14

1 EDWARD MAINLAND, continued

2

3 I might add that fish species such as coho salmon would be
4 blocked irreversibly from access to San Pablo Bay and Pacheco
5 Creek by destroying a remnant of the historic upstream routes.
6 So the increase in creek scouring, deposition of silt and mud in
7 the creek is nowhere in the SEIR specifically addressed by
8 specific mitigation or minimization measures. And we'd like to
9 know what are these measures going to be, how effective can they
10 be? If ineffective, what will be the impact on a [inaudible]
11 that keeps property values at the cost of additional dredging of
12 the creek and failure of creek restoration steps.

| I-9.15

13
14 Finally, just a word about climate change. Nowhere in the
15 EIR/EIS are the anticipated impacts of global warming and
16 climate change addressed. These will be considerable on the
17 watershed and on the creek and tidal hydrology. We might note in
18 the EIS how will they affect the sustainability, repeat,
19 sustainability of the entire project. The SEIR does not address
20 climate change, which many people think may be the most serious
21 environmental challenge to the Bay tidal habitat and natural-
22 based system restoration.

| I-9.16

23

24 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

1 outflow from Pacheco Pond is estimated to have a negligible effect on channel width and depth. With no
2 discernable change in creek morphology, no significant effects on existing habitat within the creek or on
3 navigation is expected.

4
5 Regarding the habitats present in Pacheco Pond at present, the project is not expected to significantly
6 affect these habitats. As noted in Section 3 of the draft SEIR/EIS, the outlet from Pacheco Pond to the
7 BMKV site would be designed so as to further the existing water management of the pond for wildlife
8 and flooding purposes. Averting changes in water levels would avoid habitat-related changes that might
9 otherwise occur if water levels were substantially higher or lower than at present. Discussion in the
10 Biological Resources section of the Final SEIR/EIS has been updated to clarify this impact.

11
12 Regarding analysis of the effects of the project on wildlife in Pacheco Pond, the comment asserts that the
13 project will result in a loss of pond wildlife diversity due to restriction of fish access. However, the
14 comment seems to assert that the pond is easily accessible by fish at present, which is inaccurate. The
15 baseline for impact assessment is that the pond is not tidal and is not easily accessible to fish from Novato
16 Creek due to the MCFCWCD tide gates. It is not reasonably foreseeable that MCFCWCD will allow the
17 pond to be tidal by removing the tide gates, because this would eliminate a large portion of the flood
18 control function of the existing pond. As a result, the reasonably foreseeable future is that flapgates will
19 continue to be operated as at present, which will continue to hinder anadromous fish access to the pond
20 and to Arroyo San Jose and Pacheco Creek. As discussed in the draft SEIR/EIS, with this baseline, and
21 the probable non-listed and non-self-sustaining nature of salmonids who accessed the pond and its
22 tributaries recently, the potential effect of the proposed project on fish access is considered a less-than-
23 significant effect.

24
25 The preferred alternative does not envision permanent closure of the tidal flapgates, utilizes the existing
26 outlet for dry season outflow, and leaves open the possibility of continued operation of the existing outlet
27 in the wet season. The project includes development of a new water management plan for Pacheco Pond
28 by the MCFCWCD, the DFG, and the project sponsors and it is probable that the plan would ultimately
29 call for dual use of the existing outlet to Novato Creek and the new outlet to BMKV in the wet season. If
30 the existing outlet to Novato Creek is operated in the wet season, it would be possible to retain the
31 hindered access at present, at least at those times of operation identified in the new water management
32 plan.

33 34 **I-9.5**

35
36 See Master Response 18 regarding climate change and the discussion of climate change under Master
37 Response 2.

38 39 **I-9.6**

40
41 Refer to Master Response 14. The preferred alternative, Alternative 2 (as revised) places the spur trail on
42 City of Novato property west of the HWRP seasonal wetland in area separated from Pacheco Pond and
43 from the restoration area.

44 45 **I-9.7**

46
47 Proposed routing of the Bay Trail along the railway near Nave Boulevard or along Nave Boulevard itself
48 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

- 1 effects under CEQA (CEQA Guidelines 15131 (a)), and thus are at the discretion of a lead agency
2 whether or not to address in a CEQA document.
3
4 Comments raised on the Draft SEIR/EIS are responded to in this document. Issues raised during the
5 public comment period have been summarized in a new section of chapter 6 of the Final EIS/EIR
6
7 **I-9.11**
8
9 See above response to Comment I-9.2.
10
11 **I-9.12**
12
13 See above response to Comment I-9.2.
14
15 **I-9.13**
16
17 See above response to Comment I-9.2.
18
19 **I-9.14**
20
21 See above response to Comment I-9.5.
22
23 **I-9.15**
24
25 See above response to Comment I-9.5.
26
27 **I-9.16**
28
29 See Master Response 18 regarding climate change.