13.0 COMMENTS AND RESPONSES ON DRAFT EIR/EIS

13.1 Introduction

On December 20, 2003 the California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS) released the Draft Environmental Impact Report/Statement (DEIR/EIS) for the South Bay Salt Pond Initial Stewardship Plan (ISP) for public review. CDFG is the state lead agency for the ISP and will use the EIR/EIS to comply with state California Environmental Quality Act (CEQA) requirements. USFWS is the federal lead agency for the ISP and will use the EIR/EIS to comply with federal National Environmental Policy Act (NEPA) requirements.

Although the DEIR/EIS was prepared as a joint document, the lag time for publication of the document in the Federal Register has delayed the NEPA process. The 45-day public review and comment period for the DEIR ended on February 5, 2004, though comments were accepted through February 6, 2004. The 45-day public review and comment period for the DEIS ended on March 8, 2004. To avoid delays in the CEQA process, the agencies decided to publish a separate Final EIR and Final EIS.

The Final EIS was prepared following the close of the DEIS comment period and was announced in the Federal Register. It includes the revised DEIR/EIS, complete with all chapters, tables, figures, and appendices of that document, showing all revisions made in response to comments.

13.2 Public Participation and Review

CDFG and USFWS notified all Responsible, Trustee and Reviewing agencies, interested groups, organizations, and individuals that a DEIR/EIS had been completed for the proposed Project.

- A copy of the DEIR/EIS was posted on the following website: http://www.southbayrestoration.org

- Copies were available for public review at libraries in Alviso, Hayward, Menlo Park, Mountain View, San Jose and Union City, as well as at the Department of Fish and Game office in Yountville, and the U.S. Fish and Wildlife Service offices in Fremont and Alviso.

- CDFG and USFWS held a public meeting on February 4, 2004 at the Don Edwards Refuge to explain the project and DEIR/EIS and to solicit comments on the document and the project.

13.3 Comments Received on the DEIR/EIS

Pursuant to NEPA requirements, USFWS, as the NEPA lead agency, is required to evaluate the comments received on the DEIR/EIS and prepare written responses to the comments. This section contains written comments on the DEIR/EIS received during the NEPA comment period (beginning January 20, 2004 and ending the extended date of March 8, 2004), the lead agencies' responses to those comments, changes made to the DEIR/EIS in response to comments, and a section containing technical and editorial corrections initiated by USFWS and CDFG staff.

Oral comments were collected at the Public Meeting on February 4, 2004. These comments have been reviewed and it was determined that each comment has been specifically addressed in the response sections to the written comments.

A total of 21 comment letters containing over 190 individual comments on the DEIR/EIS were received from individuals, organizations, and agencies.

Section 13.5 includes copies of all letters received. Following each letter in Section 13.6 is a written response to the individual comments identified by a vertical line and comment number in the right hand margin of each letter. Each of the letters have been assigned a number code which appears as the first number in each numbered comment (e.g., Comment 1-1 is the first comment in the letter from the Regional Water Quality Control Board, coded as Letter 1).

Note that 13 comment letters (Letters 1-13) were received during the DEIR comment period. All of these comments and the responses made in the FEIR have been incorporated fully in this FEIS document. Comment letters 14-21 were received after the close of the DEIR review period, and the responses to these letters are unique to the FEIS.

Each response in this section is preceded by a brief summary of the comment to which it relates. All of the comment summaries have been created by the EIR/EIS preparers and not by the comment author. The comment summaries are intended solely to provide context to the response and are not intended to replace the comment to which the response refers. Although the EIR/EIS preparers have made every attempt to accurately represent the substance of the comment, comment summaries may be incomplete, not wholly accurate, or fail to fully explain the comments. For complete clarity and accuracy, the reader is directed to the original letter, which precedes the comment summaries and responses.

13.4 COMMENT LOG/INDEX – COMMENTS AND RESPONSES

Comments received, and the response(s) to each of them, are identified by the page number below:

Federal Government Agencies					
Agency Code	**Agency/ Person**	**Comment Code**	**Comment**	**Comment Date**	**Comment Page**
			None during the DEIR comment period.		
State Government Agencies					
Agency Code	**Agency/ Person**	**Comment Code**	**Comment**	**Comment Date**	**Comment Page**
1	**California Regional Water Quality Control Board (RWQCB)**	1	Removal of sediment from ponds requires a Section 404 permit from the U.S. Army Corps of Engineers and water quality certification from the Water Board under Sections 404 and 401 of the Clean Water Act.	2/4/04	13-15
		2	Impacts from B6A		13-15
		3	Stratification in Artesian Slough		13-16
		4	Address the extent and magnitude of the increase in salinity in the receiving waters from initial releases from the West Bay Ponds.		13-17
		5a	Request Table 4-5 be revised to show potentially significant impacts in Alviso Slough.		13-22
		5b	The DEIR should propose a lower initial release salinity for Alviso Slough.		13-26
		5c	Explain how reducing the flows during initial release in Alviso Slough will not extend high salinities into the September migration period for adult salmonids.		13-26
		5d	Assess bay shrimp impacts for July initial releases in Alviso Slough.		13-26
		6	Examine options for lowering salinity levels resulting from releases from pond system B8A to Old Alameda Creek.		13-27
		7	Explain method for determining the 10% affected area in receiving waters impacted by pond discharges.		13-27
		8	Acknowledge and address that the potential for diurnal variations in dissolved oxygen increases significantly for initial release in July as opposed to April and include mitigation measures for initial releases in July.		13-28

Regional and Local Agencies					
Agency Code	**Agency/ Person**	**Comment Code**	**Comment**	**Comment Date**	**Comment Page**
2	**City of San Jose (CSJ)**	1a	The City of San Jose provides a description of RWQCB permitting requirements for copper and nickel.	2/5/04	13-34
		1b	Assess the cumulative and potential long-term residual impacts of the pond discharges on ambient dissolved nickel concentrations throughout the bay south of the Dumbarton Bridge.		13-34
		1c	There is less likelihood of Copper Action Plan Trigger exceedances; however, copper should also be evaluated to monitor potential exceedances of Copper Action Plan Trigger levels.		13-34
		1d	Monitor to allow the RWQCB to determine if any observed exceedances of nickel/copper triggers are related to the pond discharges.		13-34
		1e	The City recommends as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined.		13-35
		2a	Island Ponds breaching good for salt marsh long term. Some loss of marsh habitat along sloughs and Coyote Creek due to increase in tidal prism and scour		13-35
		2b	Monitor marsh vegetation		13-35
		3	Pollution associated with sediment will be re-suspended after Island Pond breaches. Conduct additional sampling in channel sediments before breaching		13-35
		4	The City of San Jose expressed concern for the potential impact of scouring on levees adjacent to the Island Ponds.		13-35
		5	The official name of the Plant is San Jose/Santa Clara Water Pollution Control Plant		13-35
		6	Reword statement on page 3-3 to note that, 120 mgd is a dry weather flow trigger, triggering further action and is not a permit limit.		13-36
		7	Correct statement on page 4-9 to note that the average dry weather effluent flow during 2003 was 100 million gallons per day.		13-36
		8	Support the statement that releases of fresh water from the SJ/SC WPCP have caused salinity in Coyote Creek to be lower than it would be under natural conditions.		13-36
		9	The Plant discharges into Artesian Slough (not Coyote Creek).		13-36

Agency Code	Agency/ Person	Comment Code	Comment	Comment Date	Comment Page
3	City of Sunnyvalle (CSV)	1	Location of treatment plant discharge is wrong	2/4/04	13-42
		2	Are fresh water discharges to the Guadalupe Slough from the Sunnyvale East and West Channels and the Moffett Channel included in the overall discharge quantities described for Guadalupe Slough?		13-42
		3	Correct the location of the Sunnyvale Water Pollution Control Plant outfall and update the flow rate listed for the City's discharge.		13-42
		4	Acreage for NOI needs to be updated		13-42
		5	Nickel and copper triggers		13-43
		6	City of Sunnyvale requests that adequate monitoring be committed to allow the RWQCB to determine if exceedances of the triggers are related to ISP discharges.		13-43
		7	City of Sunnyvale suggests as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined if the requested additional analysis finds that exceedances are projected to be likely to occur.		13-43
		8	On Page 8-2 and Table 8-1, recreational access to the Bay Trail is not well described.		13-43
4	Santa Clara Valley Water District (SCVWD)	1	Identify SCVWD as a responsible agency.	2/4/04	13-60
		2	Address impacts from shutting off water inflows to Pond A4 and propose mitigation measures to offset impacts.		13-60
		3a	Provide further analysis of scour and sedimentation impacts		13-61
		3b	Evaluate impact of Island Pond breaches on an underground transmission line beneath the ponds.		13-61
		4	Impact to levees along mud slough		13-61
		Table	See SCVWD Letter, Attachment 1 - Substantive Comments		13-62 through 13-82
5	Alameda County Public Works - Flood Control District (ACPWFCD)	1	Encroachment of Alameda County Flood Control District right of way requires coordination during design and permitting stages.	2/3/04	13-84
		2	Work on the Alameda Creek federal project requires design and permitting coordination with US Army Corps of Engineers.		13-84
		3	Use of Alameda County Flood Control District levees for public access requires license agreement.		13-84
		4	Possible breach of Alameda County Flood Control District levees requires fully funded long term plan regarding exotic and hybrid *Spartina*.		13-84

Individuals and Organizations					
Agency Code	**Agency/ Person**	**Comment Code**	**Comment**	**Comment Date**	**Comment Page**
6	**Hayward Shoreline Citizens Advisory Committee (HASPA)**	1	Baumberg pond complex falls within the area of planning interest of the Hayward Area Shoreline Planning Agency.	2/3/04	13-89
		2	Why is pond 3C included in ISP when it was not purchased from Cargill?		13-89
		3	HASPA suggests assessment of individual ponds for their own best habitat values.		13-89
		4	Request to add Perry Gun Club to Figures 1-1 and 1-4 in the Draft EIR/EIS.		13-89
		5	Request to discuss and include Alameda Flood Control District plans to use Baumberg ponds north of Alameda Creek to widen the creek and increase its flow capacity.		13-90
		6	Request to provide more extensive discussion of salmonids and potential impacts to salmonids in Old Alameda Creek.		13-90
		7a	Statement that sediment sampling in Baumberg ponds has been limited. Request for additional sampling.		13-91
		7b	Comment that there is no explanation in Table 4-7 of high arsenic, cadmium, and lead in Pond B9.		13-91
		7c	Question regarding monitoring and management for heavy metals and hydrology impact on foraging and nesting birds.		13-92
		8	Statement of concern about public access impacts to wildlife.		13-92
		9a	Statement of concern whether proposed mitigation is adequate to control *Spartina* at Baumberg ponds.		13-92
		9b	Can *Spartina* be controlled before opening restoration sites to tidal flow.		13-92
		9c	Concern about funding for *Spartina* control.		13-92
		9d	Statement about *Spartina* herbicide resistance.		13-93
		10a	Spanish explorers arrive in Bay Area in 18th century (date correction).		13-93
		10b	James Marshall incorrectly identified as James Marwill.		13-93
		10c	The Oliver Salt Company ceased to operate in 1982 (date correction).		13-93
		10d	Historic remnants of Archimedes screw should be recorded and protected.		13-93
		10e	Record and protect remains of the Rock Island Salt Works.		13-94

		11	Pond odor mitigation proposed in ISP might hurt birds.		13-94
		12	Statement that the Citizens Advisory Committee supports Alternative 3.		13-94
7	**Citizens Committee to Complete the Refuge (CCCR)**	1a	Cumulative impacts do not address Cargill's consolidation plan for Newark	2/6/04	13-100
		1b	Need to thoroughly document and assess the Cargill consolidation plan		13-101
		2a	Amount and habitat suitability of low salinity ponds under the ISP for waterfowl.		13-101
		2b	Question regarding the correlations between target salinities and pond depth and waterbird roosting, foraging and nesting requirements.		13-101
		2c	Question regarding the principles driving the habitat design of the ISP.		13-102
		3a	Lack of specificity about *Spartina* control in the Baumberg area.		13-102
		3b	Disagree with statement that pepperweed (*Lepidium)* establishment after breaching of the Island Ponds is a beneficial impact. Issue of controlling spread of *Lepidium* inadequately addressed.		13-102
		3c	Potential colonization of restored areas by Asian clam (*Potamocorbula amurensis*) not addressed.		13-103
		3d	Levees and weeds- Suggests management		13-103
		4	Potential impacts from introducing nutrient-enriched wastewater into the low salinity ponds not addressed.		13-103
		5	What about Mowry Ponds 1, 2, and 3?		13-104
8	**Save the Bay (STB)**	1a	Monitoring and collaboration.	2/5/04	13-107
		1b	Monitoring protocols, methods, and time frame should be described.		13-107
		1c	Look at indirect effects when responding to monitoring.		13-107
		2	Cost data for each of the alternatives should be included in the EIR/EIS.		13-107
		3a	Management decisions that affect the mix of wildlife habitat should be made on the basis of optimizing overall benefit to bay wildlife.		13-108
		3b	Include a table to show mix of habitats types resulting from each alternative.		13-108
9	**Libby Lucas**	1	Statement of support for Alternative 3 (phased initial discharge).	2/5/04	13-110
		2	Recommends staggering breaching of the Island Ponds.		13-111
10	**Frank and Janice Delfino**	1	Who will pay for levee repair?	2/3/04	13-113
		2	Change railroad to Union Pacific.		13-113

		3	Spartina control effective?		13-113
		4	Why are ponds I-3 and I-B3 included- Needed data		13-114
		5	Map on 1-27 Eden landing eco reserve is in the wrong location		13-114
		6	Statement Public access should be limited		13-114
		7	Flood protection for surrounding areas		13-114
11	**Thomas Phillips**	1	Comments regarding public access to the pond system. Restricting public access or public hunting would be a departure from past Cargill management and would result in a "taking" of public access and use rights.	2/5/04	13-116
		2	Closing or restricting hunting access on the project lands would have a significant negative socioeconomic impact.		13-118
12	**Thomas Phillips - Addendum**	1	Creeks and channels between ponds are navigable and ponds were historically navigable. Failures or breaches of levees would return these lands to navigable waterways, open to public access and use.	2/5/04	13-121
13	**Richard Santos**	1	Suggested changes in Pond A8 and A12 hydrology.	2/2/04	13-123
		2	Recommended removal of homesteaders in Alviso Slough.		13-124
		3	Sources of freshwater in Alviso Slough need to be monitored and reduced.		13-124
		4	Comment regarding removal of non-native vegetation to allow Alviso Slough to hold more flood water.		13-124
		5	Request to maintain existing trails.		13-124
		6	Request to protect the Alviso community from tidal flooding.		13-126
		7	Comment that return of salt water can increase recreational opportunities.		13-126
The Following Comments were Received During the NEPA review period but after the Close of the CEQA Comment Period					
14	**U.S. Environmental Protection Agency**	1	Air Emissions: The DEIS does not include numeric comparisons between applicable standards and projected emissions.	3/9/04	3-134
		2	Environmental Justice: The DEIS does not include information to support the conclusion that the project would not result in environmental justice impacts.		3-134
		3	Hydraulic Models: EPA recommends that information about the use of sediment transport models be included in the FEIS.		3-134
		4	Monitoring Plans: The EPA recommends the preparation of descriptive monitoring plans for each component of the ISP.		3-135
		5	Funding: EPA recommends the FEIS include cost estimates and funding options for the different alternatives be presented.		3-135

		6	EPA recommends the FEIS contain a revised Table S-3.		3-136
		7	EPA recommends that two mercury studies be reviewed to determine if they provide additional information.		3-135
		8	EPA recommends the FEIS include an update on the status of required permits and consultations.		3-136
		9	EPA recommends the FEIS clarify the basis for the statement regarding S. alterniflora eradication and discuss impact of spartina eradication on California clapper rail.		3-136
		10	EPA recommends the ponds be re-numbered and that all ponds discussed in the FEIS be included on maps.		3-136
15	**U.S. Geological Survey**	1	USGS recommends that data be reexamined to assure that units are correct.	3/8/04	3-139
		2	USGS recommends that water station numbers be checked.		3-139
16	**Alameda County Mosquito Abatement District**	1	ACMAD is pleased that mosquito abatement concerns addressed.	3/8/04	3-141
		2	Effective coordination between the agencies is needed on mosquito issues.		3-141
		3	ACMAD is concerned about creating mosquito habitat in general.		3-141
		4	ACMAD notes the genus name of local Aedes mosquito has been changed.		3-141
17	**City of Mountain View**	1	Ponds A1 and A2W are vital neighbors of Shoreline at Mountain View.		3-145
		2	CMV requests effective communication regarding monitoring Ponds A1 and A2W.		3-145
		3	Figure 1-1 labels Moffat Navel Air Station incorrectly		3-145
		4	Shoreline Park should be changed to Shoreline at Mountain View		3-145
		5	CMV requests review of Mitigation Monitoring and Reporting Program for ponds A1 and A2W.		3-145
		6	CMV requests notification of implementation plans for A1 and A2W.		3-145
		7	CMV requests signage at the four access points between Shoreline at Mountain View and the pond levees.		3-145
		8	CMV requests additional information about ISP impacts to flow or water quality from outer Charleston Slough to inner Charleston Slough.		3-145
		9	CMV requests notification about docent led tours to ponds A1 and A2W.		3-145

		10	City Council has taken the position that hunting should be prohibited in ponds A1 and A2W.		3-146
18	**San Francisco Bay Bird Observatory**	1	Many more surveys and monitoring should be added to the ISP		3-151
		2	Potential interruption of reproductive cycles of benthic organisms could have impacts on birds feeding on the benthos.		3-151
		3	Data collected after the breaches of ponds 2a and 3 in Napa should be evaluated for relevancy in the South Bay.		3-151
		4	Concern about impacts from elevated temperature and decreased DO on benthic organisms with secondary impacts on birds.		3-151
		5	Page 6-45 should include five not four habitat types.		3-151
		6	SFBBO requests that other studies be reviewed for calculation of area required by migrating shorebirds.		3-151
		7	The numbers of plant-eating dabbling ducks can not be explained by the availability of invertebrates in the ponds.		3-151
		8	SFBBO provides information about the presence and location of breeding colonies.		3-151
		9	SFBBO provides information about the presence of long-tailed weasels at the Baumberg complex.		3-152
		10	SFBBO provides information about the presence of southern alligator lizards.		3-152
		11	SFBBO provides information about the presence of special status species nesting sites.		3-152
		12	SFBBO notes inconsistencies in table numbering.		3-153
		13	SFBBO recommends surveys on Guadalupe Slough and Mallard colony.		3-153
		14	SFBBO notes a number of gull nesting colonies.		3-153
		15	SFBBO provides 2003 snowy plover nesting locations.		3-153
		16	SFBBO provides additional information about Caspian and Forster's terns nesting locations.		3-153
		17	SFBBO notes that window surveys have to be timed carefully to include over wintering species. Training of monitors will be crucial.		3-154
		18	Black-necked stilts could be impacted by Wildlife Impact-2.		3-154
		19	Coordination between the USFWS, biological monitors, and construction crews will be critical.		3-154
		20	SFBBO provides information about avocet and black-necked stilt nesting locations.		3-154
		21	Statement about location of avian botulism outbreaks.		3-154

		22	Botulism affects more ducks than any other birds.		3-154
		23	SFBBO notes avian botulism surveys will need to be increased.		3-154
		24	Statement that 50-foot buffer should be increased to 100 feet.		3-154
19	**Save the Bay**	1	STB commented on DEIR/EIS and draft waste discharge requirements.	3/5/04	3-157
		2	STB recognizes the transition plan is unique.		3-157
		3	Only Alternatives 2 and 3 meet all the Initial Stewardship Plan objectives.		3-157
		4	The description of the preferred alternative should be clarified.		3-157
		5	STB agrees the preferred alternative will provide the most benefit and least harm to the Bay.		3-157
20	**Libby Lucas**	1	Ms. Lucas provides information about: an unpublished map and study of sedimentation in the South Bay and sediment transfer studies by Dr.Krone.		3-160
		2	The suggestion is made to install tide gates on the Island Ponds to screen out invasive Spartina and Asian clams.		3-160
		3	The suggestion is made to create a water treatment marsh in pond A18.		3-160
		4	The suggestion is made to breach the Island ponds to Mud Slough to reduce the uptake of nutrient laden waters in Coyote Creek.		3-160
		5	Information is provided about the introduction of Spartina to the Bay. Suggestion to wait to breach the Island Ponds until Spartina is eradicated.		3-160
		6	Suggestion is made to coordinate closely with Cargill watermen.		3-160
		7	The suggestion is made to create a flood control horseshoe of buffer retention basins be set aside.		3-160
21	**Santa Clara Valley Water District**	1	The District is concerned about the potential water quality impacts that will result when water inflows to Pond A4 are shut off.		3-163
		2	The FEIR indicates that the breaches at two of the Island Ponds, A19 and A21, are likely to erode. In light of this information, the District suggests that the quality of these sediments be evaluated so as to identify and address any potential environmental impacts of breaching the levees in advance of the action.		3-163

Staff Initiated Text Changes and Errata					
Agency Code	**Agency/ Person**	**Comment Code**	**Comment**	**Comment Date**	**Comment Page**
22	**Staff Edits and Format Corrections**	1	Additional Abbreviations and Acronyms to Chapter 16.0		3-163
		2	Editorial comments as described by SCVWD Table		3-163
		3	Renumbering of Table of Contents and Section Numbers of Chap. 6		3-163
		4	Make Mitigation Measures Consistent with BMP		3-163

13.5 COMMENTS AND RESPONSE TO COMMENTS

The following corrections and modifications to the DEIR/DEIS have been made in response to agency and public comments.

Commentor: 1 California Regional Water Quality Control Board

California Regional Water Quality Control Board
San Francisco Bay Region

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
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File No. 2199.9438 (RS)

Ms. Margaret Kolar, Refugee Manager
U.S. Fish and Wildlife Service
San Francisco Bay NWR Complex
P.O. Box 524
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Mr. Carl Wilcox, Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
P.O. Box 47
Yountville, CA 94599

Subject: South Bay Salt Ponds Initial Stewardship Plan, U.S. Fish and Wildlife Service and California Department of Fish and Game, Draft Environmental Impact Report, Alameda, Santa Clara, and San Mateo Counties

Dear Ms. Kolar and Mr. Wilcox:

We reviewed the Draft Environmental Impact Report (DEIR), dated December 22, 2003, submitted by the U.S. Fish and Wildlife Service and the California Department of Fish and Game (hereafter collectively referred to as Applicant) to discharge surface water from 54 salt ponds into San Francisco Bay and tributaries to the Bay. The DEIR explains that the purpose of the proposed project is to improve water circulation in ponds, to prevent salinity increases and uncontrolled high-salinity discharges, and to maintain wildlife habitat between the cessation of salt making and implementation of the long-term restoration plan. The DEIR addresses most of our concerns, and we appreciate the effort put forth by the Applicant in preparing the document. Our remaining concerns/comments are enumerated below.

1) We believe the DEIR needs to address the long-term requirement to obtain a water quality certification in accordance with Section 401 of the Clean Water Act for removing deposited sediment near water control structures. On page 3-13, the DEIR indicates that as pond waters become removed from water control structures, the velocity of water will decrease. As this could cause excessive sedimentation to occur that could impede the operation of water control structures, the DEIR indicates that the Applicant will inspect water quality structures annually, and remove deposited sediment, as necessary to mitigate for depositional impacts. The DEIR should acknowledge that this type of operation and maintenance requires a 404 permit from the U.S. Army Corps of Engineers and accompanying water quality certification from the Water Board in accordance with Sections 404 and 401 of the Clean Water Act. Depending on the project, these authorizations may be handled administratively. **1-1**

2) We request that the DEIR address potential water quality impacts from an initial release from Baumberg Pond B6A. On page 4-15, the DEIR indicates that Baumberg Pond B6A will not discharge during the initial release, and therefore, it does not propose initial release limits for this system. However, California Department of Fish & Game recently informed Water Board staff that it would need a discharge limit of 65 ppt for the initial release from this system. Therefore, we request that the DEIR describe potential water quality impacts to Old Alameda Creek for such a discharge. **1-2**

3) We request that the DEIR address the potential for stratification in Artesian Slough/Coyote Creek under the initial release and continuous circulation periods. On page 4-17, the DEIR indicates that the Applicant performed a sensitivity analysis on Alviso Slough and Alameda Flood Control Channel to evaluate the potential for stratification. This evaluation showed very small differences in the daily maximum salinity values. The DEIR indicates that this is because the normal area of stratification, at the interface of bay water and fresh water, moves with the tide cycle. However, stratification in Artesian Slough/Coyote Creek is also related to large freshwater input from the San Jose/Santa Clara Water Pollution Control Plant. Therefore, we believe the DEIR should address stratification in this slough for the initial release and continuous circulation periods. **1-3**

4) We request that the DEIR address the spatial extent and magnitude of salinity increases in receiving waters from the initial release of surface waters from the West Bay Ponds. In Table 4-5 of the DEIR, the Applicant documents the spatial extent and magnitude of salinity increases in receiving waters from all pond systems (except the West Bay Ponds) for which it is requesting waste discharge requirements for the release of salt pond waters. In our view, the DEIR should also address potential salinity increases from the West Bay Ponds. **1-4**

5) To be consistent with the analysis on page 4-36, we request that the DEIR revise Table 4-5 to show that the initial release from pond A7 could have a potentially significant impact on Alviso Slough. Additionally, we request that the Applicant explore options for lowering the salinity levels that it will release from pond system A7 to Alviso Slough. If the Applicant cannot lower salinity levels below the modeled values of 110 parts per thousand (ppt), we request that the DEIR describe how the Applicant has lowered salinities in this system to the maximum extent practicable to minimize impacts. Further, we request that the Applicant address the potential impact of its proposed mitigation measure (slowing the rate of discharge) on Chinook salmon and bay shrimp should it 1-5a 1-5b 1-5c 1-5d

release pond waters from this system in July. **On page 4-36, the DEIR indicates that for the initial release from pond system A7 to Alviso Slough potential impacts could occur because potentially significant impacts are greater than 10% of the slough. As a mitigation measure, the DEIR indicates that the Applicant could slow the discharge rate if monitoring indicates that aquatic life in receiving waters are suffering adverse impacts. We believe the Applicant should propose discharging a lower salinity from this pond system than the modeled value of 110 ppt. In preparing waste discharge requirements, we reviewed past salinities from all pond systems proposed for discharge, and we believe that a discharge limit of 90 ppt is achievable for this system for the initial release period. Additionally, we believe that the Applicant should address the potential impact of this discharge on migrating salmonids if initial release commences in July, and monitoring data indicates that the flow rate should be slowed. This is because Chinook salmon use Alviso Slough as a migration corridor from September to November. If the Applicant extends the time-period for the initial release, it could affect the upstream migration. The DEIR should also discuss the effect of a July initial release on bay shrimp, as this is not the ideal time-period for avoiding impacts to the shrimp population.**

6) We believe the Applicant needs to explore options for lowering the salinity levels that it will release from pond system B8A to Old Alameda Creek. If the Applicant cannot lower salinity levels below the modeled values of 135 ppt, the DEIR needs to describe how the Applicant has lowered salinities in this system to the maximum extent practicable to minimize impacts. On page 4-39, the DEIR indicates that discharges from Baumberg System B8A to Old Alameda Creek will cause salinities in the receiving water of about 70 ppt for one week. As a mitigation measure, the DEIR indicates that it could adjust flow rates to decrease the maximum salinities in Old Alameda Creek. However, minimizing flow rates to the extent that would result in lower salinities might enable enough evaporation to occur for salinities in this pond system to increase above 146 ppt (the point at which calcium sulfate precipitates out). Further, it seems unlikely given the small dilution capacity of Old Alameda Creek that significant impacts could be mitigated by reducing the flow rate alone, if the discharge from pond system B8A commences near 135 ppt. Therefore, we believe the Applicant needs to propose a lower salinity level from this pond system for the initial release, or demonstrate that it is not feasible to lower salinity levels below 135 ppt. **1-6**

7) We request that the DEIR explain how it determined the 10% affected area in receiving waters that could be impacted from salt pond water discharges. The DEIR should qualify how the Applicant calculated the area for determining potentially significant impacts. Considering the profound effect tidal stage has on surface area, the DEIR should clarify how the Applicant determined water body surface area. **1-7**

8) We request that the DEIR acknowledge that the potential for diurnal variations in dissolved oxygen increases significantly for an initial release in July as opposed to April, and that the DEIR include additional mitigation measures for initial releases that commence in the July time-period. On page 4-59, the DEIR indicates that an initial release in July would not represent any significant difference from the dissolved oxygen conditions under an initial release in March/April. Since there is greater potential for algal growth due to increased solar irradiation and temperature, we believe that dissolved oxygen conditions in pond waters could be significantly different between April and July. Therefore, we request that DEIR include additional mitigation measures such as increased dissolved oxygen monitoring, and algae harvesting in ponds systems **1-8**

that might commence discharge in July, or provide supporting information such as empirical observations for the statement on page 4-59.

Again, we appreciate the effort put forth by the Applicant in preparing the DEIR, and the opportunity to comment on this document. If you have any questions concerning this communication, please contact Robert Schlipf at (510) 622-2478.

Sincerely,

Steven Moore
Planning Section Leader

cc: Ms. Barbara Ransom, Cargill Salt Division, Newark
Ms. Lisa Stallings, Life Science, Inc., Woodland

Comment: **1-1** Removal of sediment from ponds requires a Section 404 permit from the U.S. Army Corps of Engineers and water quality certification from the Water Board under Sections 404 and 401 of the Clean Water Act.

Response: Sediment removal is included in our operations and maintenance permit. The following text will be inserted in the EIR

Change to DEIR/DEIS: Chapter 3; Section 3.3.3 Alternative 2; Page 3-14; Paragraph – HYDROLOGY MITIGATION-3A

HYDROLOGY MITIGATION-3A: Conduct annual inspections of all water control structures.

USFWS and DFG will conduct an annual inspection of all water control structures to look for areas of excessive sediment deposition or scour. Results of these inspections will be recorded on maintenance log sheets along with any follow-up inspections or maintenance sediment removal or re-grading operations. **If monitoring determines sediment buildup is excessive and must be removed, the agencies will comply with all regulatory requirements from the U.S. Army Corps of Engineers and the Water Board in accordance with Sections 404 and 401 of the Clean Water Act prior to removing deposited sediment.**

Comment: **1-2** The DEIR should address potential water quality impacts from an initial release from Baumberg Pond B6A.

Response: The Pond 6A system will be managed as a seasonal system. It is expected that the system would be flooded in the fall and drawn down in the spring (April discharge). The ponds were managed as seasonal ponds in 2002 and 2003. Based on salinity data from 2003, maximum salinities in the ponds reached the

mid 60 ppt range in April as the ponds dried. Since the management prescription for the 6A Pond System would be to drain the ponds in the spring, the pond discharge can be metered to minimize salinity increases in the receiving water. Receiving water salinities will be monitored to limit maximum receiving water salinities 100 meters downstream of the discharge to 40 ppt.

Comment: **1-3** DEIR should address potential for stratification on Artesian Slough.

Response:

As stated in the DEIR, the sensitivity analysis for stratification was intended to evaluate the use of bottom salinity vs. depth-averaged salinity to analyze the area and extent of high salinity during the initial release. The sensitivity analysis was performed for Alviso Slough and Alameda Flood Control Channel (AFCC) and because these sloughs show the largest extent and duration of increased salinity in the receiving waters, we were concerned that using bottom salinity instead of depth-averaged salinity would affect the level of significance of the estimated impacts. The sensitivity analysis showed the extent and duration of higher salinity areas in Alviso Slough and AFCC during the maximum day of the IRP were very similar using either bottom salinity or depth-averaged salinity. The effect of using depth-averaged or bottom salinity was not expected to affect the significance evaluation in streams with even smaller areas of high salinity.

However, in response to the comment, we assessed the hydrodynamic model results for the Alternative 2 conditions in Coyote Creek and Artesian Slough based on daily-averaged and daily maximum bottom salinities. Results for Coyote Creek and Artesian Slough show some larger area differences between depth-averaged and bottom salinity than in Alviso Slough and AFCC. This appears to be due to the greater difference between the pond discharge salinity and the ambient slough salinity, particularly at low tide. This is also called a stronger vertical salinity gradient, or stratification.

For the daily-averaged salinity, there is no difference in the area and extent of higher salinity areas using bottom salinity instead of depth-averaged salinity. Due to the mixing which occurs within the channel during the tidal cycle, the higher bottom salinity near the discharge locations does not affect the daily averaged conditions.

For the daily maximum salinity, there would be a larger area of higher salinity using bottom salinity instead of depth-averaged salinity. At the A14 discharge to Coyote Creek, the area greater than 42 ppt (Stage 3 and 4) would increase from 4.2 acres to 20.5 acres. The area in the range 36 to 41 ppt (Stage 1 and 2) would increase from 1.0 acres to 7.6 acres. At the A16 discharge to Artesian Slough, the area greater than 42 ppt would increase from 0.2 acres to 4.2 acres. The area in the range 36 to 41 ppt would increase from 0.2 to 3.0 acres. The overall context area of Coyote Creek and Artesian Slough for the daily maximum salinity condition would increase from 0.4 percent to 1.7 percent. These estimated areas are for the maximum day during the IRP, which would occur in the first week of the initial release, and would decrease over the following one to two weeks.

In summary, using bottom salinity instead of depth averaged salinity to evaluate the extent and area of increase salinity in Coyote Creek and Artesian Slough would show a larger effect areas for the daily maximum salinity on the maximum day of the initial release (acute effects). However, this increase in area would not affect the results of the significance evaluation. The analysis showed no differences for the daily-averaged salinity (chronic effects).

Comment: **1-4** Address the extent and magnitude of the increase in salinity in the receiving waters from initial releases from the West Bay Ponds.

Response: The following text will be inserted in the EIR as well as updates to Table S-3 – Comparison of impacts of project alternatives.

Change to DEIR/DEIS: Chapter Executive Summary; Table S-3 Comparison of Impacts of Project Alternatives; Page S-11: Add the following rows under WQ(S)-8:

WQ(S)-9: *WATER QUALITY (SALINITY) IMPACT-9:* Discharges from ISP ponds could result in water quality impacts from increased salinity inputs to Ravenswood Slough (West Bay Complex).

	No Project/ No Action	Alternative 1	Alternative 2	Alternative 3
	N/A	N/A	IRP-PS CCP-PS	IRP-PS CCP-PS
Post Mitigation Significance	N/A	N/A	LTS	LTS

WQ(S)-10: *WATER QUALITY (SALINITY) IMPACT-10:* Discharges from West Bay Pond SF2 could result in water quality impacts from increased salinity inputs South San Francisco Bay south of Dumbarton Bridge (West Bay Complex)

	No Project/ No Action	Alternative 1	Alternative 2	Alternative 3
	N/A	N/A	IRP-PS CCP-PS	IRP-PS CCP-PS
Post Mitigation Significance	N/A	N/A	LTS	LTS

Change to DEIR/DEIS: Chapter 4; Section 4.3.1.4 Salinity Impacts; Page 4-42; New Paragraph as follow inserted after the end of IMPACT-8:

***WATER QUALITY (SALINITY) IMPACT-9:* Discharges from ISP ponds could result in water quality impacts from increased salinity inputs to Ravenswood Slough (West Bay Complex).**

The total area of Ravenswood Slough considered in the impact assessment is approximately 116 acres. There are four West Bay pond systems proposed to discharge to Ravenswood Slough. Ponds 1 and 4 would intake and discharge to lower Ravenswood

Slough near San Francisco Bay, and Ponds 2 and 3 would intake and discharge farther upstream. The remaining West Bay pond, Pond SF2, would intake and discharge directly to the Bay south of the Dumbarton Bridge and is discussed separately in Water Quality (Salinity) Impact – 10. Based on the proposed transfer schedule, the West Bay ponds will likely not be transferred for 5 or more years, due to salt pond operations to reduce the existing salinities in the West Bay Complex. Therefore, the initial release for West Bay Complex ponds would not be coincident with systems in the Alviso or Baumberg Complexes.

During the Continuous Circulation Period, salinities in Ravenswood Slough are expected to be elevated above existing conditions. For daily-averaged salinity, it is predicted that increases will be in the range of 5-10 ppt and occur in channel areas in the vicinity of the Pond 2 and 3 discharge locations. The predicted daily maximum salinity near the discharge locations may exceed 42 ppt at low tide in September and October, when pond and bay salinities reach their annual maximums, if the discharge salinities are also near the maximum salinity of 44 ppt. Based on limited dilution for Pond 2 and 3 discharges at low tide, approximately 10 acres of Ravenswood Slough in the vicinity of the discharges may have daily maximum salinities greater than 42 ppt for September of the modeled dry year. Approximately 35 acres of Ravenswood Slough may have daily maximum salinities greater than 36 ppt at low tide. Consequently, impacts to aquatic life in Ravenswood Slough resulting from elevated salinity may be potentially significant during the long-term Continuous Circulation Period.

The proposed initial release operation for the West Bay complex ponds includes staged initial releases. The initial release would occur in March/April several years after initial releases from the Alviso or Baumberg systems. The first stage would include initial releases from Ponds 1 and 4 to lower Ravenswood Slough near the bay. The first two weeks would include reduced flows to limit the potential impact within the slough. After the first month, when the salinity in Ponds 1 and 4 have been reduced to approximately 50 ppt, the connections from Pond 2 to Pond 1, and from Pond 3 to Pond 4 would be opened and the initial release from Ponds 2 and 3 would be diluted within Ponds 1 and 2 before discharge to Ravenswood Slough. The proposed initial release operation was not described in the Initial Stewardship Plan. The proposed initial release operation was designed to minimize initial releases into upper Ravenswood Slough which has limited tidal flows or freshwater flows.

During the Initial Release Period for the West Bay Complex, the maximum increase in daily average salinity is predicted to be 5 ppt near the Pond 4 discharge. Salinity increases will be lower in other segments of the channel, and nowhere in the channel will depth-averaged and daily-averaged salinities exceed approximately 36 ppt.

At the end of the Initial Release Period, a maximum salinity increase of 1 to 2 ppt will occur near the Ponds 2 and 3 discharge locations, and lower salinity increases will occur in other segments of the channel.

On the maximum day during the IRP, average daily salinity would be in the range 33 to 35 ppt (Drought Conditions) for approximately 4 to 8 acres near the Pond 4 discharge location.

On the maximum day during the IRP, the daily maximum salinity in Ravenswood Slough would exceed 42 ppt (Stage 3 or greater) for approximately 8 acres, and would exceed 38 ppt (Stage 2 or greater for approximately 23 acres. Impacts to aquatic species may include temporary loss of the most sensitive benthic species. Fish may migrate out of the higher salinity or stream segments during this period. Daily maximum salinities may exceed 38 ppt for 10 percent or more of the channel for approximately one week during the Initial Release Period. The daily maximum salinity would occur for a few hours of the day, with the estimate based on the highest 2 hours during the day. Impacts to aquatic life in Ravenswood Slough resulting from elevated salinity may be potentially significant during the Initial Release Period.

Significance: **Short-term impact (IRP) –Potentially Significant, mitigated (see below), Duration 1 week.**
Long-term impact (CCP) – Potentially Significant, mitigated (see below)

WATER QUALITY (SALINITY) MITIGATION MEASURE-3A: **Conduct pre-discharge and discharge monitoring.**

WATER QUALITY (SALINITY) MITIGATION MEASURE-3B: **During the IRP, if monitoring identifies the potential for significant impacts to benthic invertebrates in Ravenswood Slough, operational changes in releases will be made to reduce discharge flow from Ponds 1 and 4. Reduced discharge flow rates may extend the period of increased salinity during the initial release. Because the predicted salinity impacts occur for an estimated 3 weeks during the IRP it would be feasible to reduce the discharge for a portion of the IRP, and increase the discharge flow later. The modified operation would decrease the maximum predicted salinity conditions in the slough, but may extend the period with more moderate increased salinity.**

During the CCP, if monitoring during the fall identifies the potential for significant impacts to benthic invertebrates, operational changes in releases will be made to reduce salinities in Ponds 2 and 3 or limit releases to Ravenswood Slough from Ponds 2 and 3. These operational changes may include pumping lower salinity water from Pond 1 to Ponds 2 and 3 using the existing siphons and the Ravenswood pump, or stopping discharge from Ponds 2 and/or 3 to

the slough and releasing water from Ponds 2 and 3 to Ponds 1 and/or 4 to dilute the higher salinity water before discharge to the slough. Releases from Ponds 2 and 3 into Ponds 1 and 4 would be similar to the proposed initial release operation, but would be at lower salinity that the initial release conditions. Alternatively, the higher salinity water could be held in Ponds 2 and 3 for later discharge to Ponds 1 and 4 in the winter when the ambient salinity in the Bay, slough and ponds would be lower.

Post-Mitigation Significance: **Less than significant (short-term and long-term impacts)**

WATER QUALITY (SALINITY) IMPACT-10: **Discharges from West Bay Pond SF2 could result in water quality impacts from increased salinity inputs South San Francisco Bay south of Dumbarton Bridge (West Bay Complex)**

West Bay Pond SF2 is proposed to discharge to South San Francisco Bay near the west end of the Dumbarton Bridge. The discharge would be from an intake/outlet structure south of the bridge. Based on the proposed transfer schedule, the West Bay Complex may not be transferred for 5 or more years, due to salt pond operations to reduce the existing salinities in the West Bay Complex. Therefore, the initial release for West Bay Complex ponds would not be coincident with systems in the Alviso or Baumberg Complexes.

During the Continuous Circulation Period, salinities in South San Francisco Bay are expected to be elevated above existing conditions only in the immediate vicinity of the Pond SF2 discharge. For daily-averaged salinity, it is predicted that increases will be approximately 1 ppt and occur in the mud flat area at the pond discharge location. The predicted daily maximum salinity near the discharge location may exceed 42 ppt at low tide in September and October when pond and bay salinities reach their annual maximums if the discharge salinities are near the maximum salinity of 44 ppt. Based on limited dilution within the mud flats near Pond SF2 at low tide, approximately 0.4 acres of mud flat in the vicinity of the discharge may have daily maximum salinities greater than 42 ppt for September of the modeled dry year. Consequently, impacts to aquatic life in South San Francisco Bay resulting from elevated salinity are not expected to be significant during the long-term Continuous Circulation Period.

During the Initial Release Period for West Bay Pond SF2, the maximum increase in daily average salinity is predicted to be 2 to 4 ppt near the Pond SF2 discharge. Depth-averaged, daily-averaged salinities would not exceed approximately 36 ppt. At the end of the Initial Release Period, a maximum salinity increase of 1 to 2 ppt will occur near the SF2 discharge location.

On the maximum day during the IRP, average daily salinity would be in the range 33 to 35 ppt (Drought Conditions) for approximately 0.4 acres near the Pond SF2 discharge location.

On the maximum day during the IRP, the daily maximum salinity in the Bay would exceed 42 ppt (Stage 3 or greater) for approximately 0.8 acres at low tide. The daily maximum salinity would occur for a few hours of the day, with the estimate based on the highest 2 hours during the day. Impacts to aquatic species may include temporary loss of the most sensitive benthic species. Fish may migrate out of the higher salinity or stream segments during this period.

Significance: **Short-term impact (IRP) –Less than Significant**
Long-term impact (CCP) – Less than Significant

Comment: **1-5a** Request Table 4-5 be revised to show potentially significant impacts in Alviso Slough.

Response: The table has been revised as shown below. We have also revised Table 4-6 since some West Bay impacts are also potentially significant.

Change to DEIR: Chapter 4, Section 4.3.1.3; Page 4-26; Table 4-5 and Page 4-28, Table 4-6

Table 4-5
Summary of Short-term (Temporary) Salinity Impacts for Maximum Day During IRP

		Acres By Salinity Class[1]									
Receiving Water and Alternatives	**Date[2]**	**Total Acres**	**Ambient Conditions**	**Drought Conditions**	**Stage 1**	**Stage 2**	**Stage 3**	**Stage 4**	**Duration[3]**	**Context[4] – Percent of Area**	**Impact Significance**
SF Bay - Alviso											
Alternative 2	4-Apr										
Daily Maximum (2-hr)[5]		29,536	27,869	849	316	198	256	48		1.0	LTS
Daily Average (24-hr)[6]		29,546	28,775	385	198	168	10	10		0.6	LTS
Alternative 3	4-Jul										
Daily Maximum (2-hr)[5]		29,536	22,120	5,387	1,384	376	206	63		0.9	LTS
Daily Average (24-hr)[6]		29,546	25,108	3,341	603	119	336	40		1.7	LTS
SF Bay - Baumberg											
Alternative 2	23-Apr										
Daily Maximum (2-hr)[5]		11,868	11,493	304	49	11	5	6		0.1	LTS
Daily Average (24-hr)[6]		11,868	11,630	168	49	1	10	10		0.2	LTS
Alternative 3	4-Jul										
Daily Maximum (2-hr)[5]		11,868	10,884	563	306	100	10	6		0.1	LTS
Daily Average (24-hr)[6]		11,868	11,185	385	208	90	0	0		0.7	LTS
Coyote Creek											
Alternative 2	5-May										
Daily Maximum (2-hr)[5]		1,232	1,212.5	1.7	0.9	0.3	0.2	4.2		0.4	LTS

Acres By Salinity Class[1]											
Receiving Water and Alternatives	**Date[2]**	**Total Acres**	**Ambient Conditions**	**Drought Conditions**	**Stage 1**	**Stage 2**	**Stage 3**	**Stage 4**	**Duration[3]**	**Context[4] – Percent of Area**	**Impact Significance**
Daily Average (24-hr)[6]		1,232	1,226.4	1.1	0.8	0.0	0.2	3.2		0.3	LTS
*Island Ponds***											
Breach		1,236	1,233	3	0	0	0	0		0.0	LTS
Alviso Slough											
Alternative 2	8-Apr										
Daily Maximum (2-hr)[5]		273	120.5	21.8	73.5	54.2	2.5	0.3		1.0	PS
Daily Average (24-hr)[6]		273	224.7	43.2	4.6	0	0.2	0.0		0.0	LTS
Alternative 3	16-Jul										
Daily Maximum (2-hr)[5]		273	151.5	19.6	67	28.0	5.6	1.1		2.4	PS
Daily Average (24-hr)[6]		273	271.0	1.5	0.2	0.0	0.0	0.0		0.0	LTS
Guadalupe Slough											
Alternative 2	22-Apr										
Daily Maximum (2-hr)[5]		376	368.3	4.0	1.7	1.4	0.2	0.2		0.1	LTS
Daily Average (24-hr)[6]		376	369.9	3.6	1.7	0.5	0.2	0.0		0.2	LTS
Alternative 3	24-Jul										
Daily Maximum (2-hr)[5]		376	158.3	92.4	121.3	3.3	0.3	0.2		0.1	LTS
Daily Average (24-hr)[6]		376	299.5	75.1	1.2	0.0	0.0	0.0		0.0	LTS
Alameda FCC											
Alternative 2	2-May										
Daily Maximum (2-hr)[5]		254	132.0	15.5	17.9	60.2	28.3	0.2	1 day	11.2	S
Daily Average (24-hr)[6]		254	187.1	64.7	2.1	0.1	0.0	0.1		0.0	LTS
Old Alameda Creek*											
Alternative 2											
Daily Maximum (2-hr)[5]		70						70	2 wks	100	S
Daily Average (24-hr)[6]		70						70	2 wks	100	S
Alternative 3											
Daily Maximum (2-hr)[5]		70						70	2 wks	100	S
Daily Average (24-hr)[6]		70						70	2 wks	100	S
Ravenswood Slough	**3-Mar**										
Daily Maximum (2-hr)[5]		**116**	**20**	**58**	**15**	**15**	**4**	**4**		**6.9**	**PS**
Daily Average (24-hr)[6]		**116**	**104**	**8**	**4**	**0**	**0**	**0**		**0**	**LTS**

Receiving Water and Alternatives	Date[2]	Total Acres	Acres By Salinity Class[1]: Ambient Conditions	Drought Conditions	Stage 1	Stage 2	Stage 3	Stage 4	Duration[3]	Context[4] – Percent of Area	Impact Significance
All Sloughs (Total)											
Alternative 2	**varies**										
Daily Maximum (2-hr)[5]		**2,321**	**1,853**	**101**	**111**	**131**	**35**	**79**		**4.8**	**LTS**
Daily Average (24-hr)[6]		**2,321**	**2,112**	**121**	**13**	**1**	**1**	**73**		**3.4**	**LTS**
Alternative 3	**varies**										
Daily Maximum (2-hr)[5]		**2,321**	**1,674**	**187**	**222**	**107**	**39**	**80**		**5.1**	**LTS**
Daily Average (24-hr)[6]		**2,321**	**2,088**	**150**	**8**	**0**	**0**	**73**		**3.3**	**LTS**

Notes:
[1] Ambient Conditions = <33ppt salinity; Drought Conditions = 33-35 ppt salinity; Stage 1 = 36-38 ppt salinity; Stage 2 = 36-38 ppt salinity; Stage 3 = 42-45 ppt salinity; Stage 4 = >45 ppt salinity
[2] Date of maximum day of areal impact during IRP.
[3] Duration of period with 10% or more of area within significant category.
[4]Context – Areal extent of significant intensity classes; greater than 10% considered significant.
[5] Daily maximum salinity predicted for approximately 2 hours of maximum day of IRP.
[6] Daily average salinity over 24 hours of maximum day of IRP.
***** Old Alameda Creek was not modeled in the same detail as the other receiving waters.

Table 4-6
Summary of Long-term (Permanent) Salinity Impacts for Late Summer Conditions During CCP

Receiving Water and Alternatives	Date[2]	Total Acres	Acres By Salinity Class[1]: Ambient Conditions	Drought Conditions	Stage 1	Stage 2	Stage 3	Stage 4	Duration[3]	Context[4] – Percent of Area	Impact Significance
SF Bay – Alviso											
Daily Maximum (2-hr)[5]		11,868	11,243	620	5	0	0	0		0	LTS
Daily Average (24-hr)[6]		11,868	11,598	270	0	0	0	0		0	LTS
SF Bay – Baumberg											
Daily Maximum (2-hr)[5]		29,536	7,386	22,150	20.4	0	0	0		0	LTS

Receiving Water and Alternatives	Date[2]	Total Acres	Acres By Salinity Class[1]: Ambient Conditions	Drought Conditions	Stage 1	Stage 2	Stage 3	Stage 4	Duration[3]	Context[4] – Percent of Area	Impact Significance
Daily Average (24-hr)[6]		29,536	11,816	17,719	0	0	0.8	0		0	LTS
Coyote Creek											
Daily Maximum (2-hr)[5]		1,232	1,168	61	3.2	0	0	0		0	LTS
Daily Average (24-hr)[6]		1,232	1,202	30	0	0	0	0		0	LTS
Alviso Slough											
Daily Maximum (2-hr)[5]		273	270	3	0.1	0	0	0		0	LTS
Daily Average (24-hr)[6]		273	271	2	0	0	0	0		0	LTS
Guadalupe Slough											
Daily Maximum (2-hr)[5]		376	372	4	0.2	0	0	0		0	LTS
Daily Average (24-hr)[6]		376	373	3	0	0	0	0		0	LTS
Alameda FCC											
Daily Maximum (2-hr)[5]		254	102	152	0.2	0	0	0		0	LTS
Daily Average (24-hr)[6]		254	164	80	0	0	0	0		0	LTS
Old Alameda Creek*											
Daily Maximum (2-hr)[5]		70	0	70	0.1	0	0	0		0	LTS
Daily Average (24-hr)[6]		70	0	70	0	0	0	0		0	LTS
Ravenswood Slough											
Daily Maximum (2-hr)[5]		**116**	**0**	**56**	**25**	**25**	**10**	**0**		**8.6**	**PS**
Daily Average (24-hr)[6]		**116**	**0**	**116**	**0**	**0**	**0**	**0**		**0**	**LTS**
All Sloughs (Total)											
Daily Maximum (2-hr)[5]		**2,341**	**1,911**	**346**	**28.8**	**25**	**10**	**0**		**0.4**	**LTS**
Daily Average (24-hr)[6]		**2,341**	**2,020**	**301**	**0**	**0**	**0**	**0**		**0**	**LTS**

Notes:

[1] Ambient Conditions = <33ppt salinity; Drought Conditions = 33-35 ppt salinity; Stage 1 = 36-38 ppt salinity; Stage 2 = 36-38 ppt salinity; Stage 3 = 42-45 ppt salinity; Stage 4 = >45 ppt salinity

[2] Date of maximum day of areal impact during IRP.

[3] Duration of period with 10% or more of area within significant category.

[4] Context – Areal extent of significant intensity classes; greater than 10% considered significant.

[5] Daily maximum salinity predicted for approximately 2 hours of maximum day of IRP.

[6] Daily average salinity over 24 hours of maximum day of IRP.

Comment: **1-5b** The DEIR should propose a lower initial release salinity for Alviso Slough.

Response: The proposed initial release salinity of 110 ppt evaluated in the EIR was based on estimates prepared in the spring of 2003 and was intended to be conservative to allow for uncertainties in pond operations and weather conditions. The EIR identified the predicted impacts as being potentially significant and provided a reasonable mitigation measure to assure potential impacts would not be significant.

Currently, the actual pond salinities are expected to be lower than 110 ppt in July of 2004 and the initial release will likely be lower as well. A more accurate estimate will be prepared in May to refine the initial salinity estimate and modify the initial release operation, if necessary. We recognize the Regional Board will be requiring a lower salinity level for release and we will comply with all regulatory requirements

Comment: **1-5c** Explain how reducing the flows during initial release in Alviso Slough will not extend high salinities into the September migration period for adult salmonids.

Response: The discharge flow during the IRP for Alternative 3, July initial release, was established with the goal of reducing the Pond A7 discharge salinity to less than 40 ppt by September to avoid higher discharge salinities during the Chinook salmon migration in September to November.
Based on modeling for the July release with an initial salinity of 110 ppt, the daily-averaged and daily maximum salinity in Alviso Slough would be less than 32 ppt for 100 percent of the slough by approximately the beginning of August. A reduction of the discharge flow to reduce the maximum salinity in the slough may extend the period with salinity greater than 32 ppt further into August, but should not extend into September.

In addition, the proposed initial release conditions described in the EIR are based on an operation plan with constant discharge gate settings. It would also be possible to reduce the discharge flows during the first month of the initial release in July, and increase the discharge flows during the second month in August. This would maintain a more consistent mass flow of salinity into the slough, and provide sufficient flow volume during the two months to reduce the discharge salinity to less than 40 ppt by September. The overall effect would be to lower the maximum salinity increases, but extend the period during which portions of the slough may exceed 32 ppt. In either case, these elevated salinities would not occur into September.

Comment: **1-5d** Assess bay shrimp impacts for July initial releases in Alviso Slough.

Response: The potential bay shrimp impacts of the proposed July initial release have been evaluated using the procedures described in Appendix G. In July, the estimated preferred juvenile bay shrimp habitat would decrease from an existing condition of 70.8 acres to 23.1 acres with Alternative 2, and 8.1 acres with Alternative 3. In August, the estimated preferred juvenile bay shrimp habitat would decrease from an existing condition of 66.1 acres to 24.0 acres with Alternative 2, and 5.7 acres with Alternative 3. In September, the estimated preferred adult bay shrimp

habitat would decrease from an existing condition of 119.2 acres to 52.2 acres with Alternative 2, and 44.2 acres with Alternative 3. It should be noted, that Alternative 3 would not include pond discharges during May and June when juvenile shrimp would be smaller and may be more sensitive to salinity preferences. Alternative 2, March/April initial release, would include discharges in May and June. In July and August, juvenile bay shrimp would be larger and may be closer to the higher adult salinity preference range (adult - 10 to 20 ppt, juvenile - 10 to 15 ppt)

Comment: **1-6** Examine options for lowering salinity levels resulting from releases from pond system B8A to Old Alameda Creek.

Response: Based on the projected transfer conditions submitted by Cargill Salt on January 29, 2004, the 8A Pond system will be transferred in a dry condition. This means that the brines in the ponds will have been pumped out of the ponds. Cargill is currently desalinating this system. Current pond salinities, as of January 30, 2004, are in the 75 to 90 ppt range. Given Cargill's ongoing efforts to reduce the salinities of these ponds and the fact that they will be transferred in a dry condition it is expected that the maximum salinities at the time of discharge will not exceed 90 ppt. It can be expected that if discharges begin in July that ponds 9 and 8A will be freshly filled with bay water and the salinities will reflect bay salinities. In addition pond 8A will not be completely flooded during the summer months, only the borrow ditches will be flooded so the volume of water in the pond will be approximately 10% to the total pond volume, limiting the amount of evaporative surface and minimizing the concentration of salts in the pond.

Comment: **1-7** Explain how 10% of the slough or bay area was calculated for significance determinations.

Response: The significance criteria for the extent of increased salinity areas was evaluated based on whether the percentage of the overall slough or receiving water area in selected salinity classes exceeded 10 percent. The total area in a particular slough was calculated as part of the process to calculate the daily maximum salinity during the maximum day during the initial release period. The daily maximum salinity for each model cell was calculated by identifying the maximum of the calculated salinity for each two hour interval during the day. Cells which were less than 1 cm deep at maximum salinity were considered dry and 'masked' out of the calculation. In addition, any cell with no adjacent lower cell was considered un-drained and was masked out of the calculation. These cells would correspond to salt panne areas in a marsh or mudflat area.. All areas at high tide with estimated maximum salinities were included in the overall slough area.

Because the total area was based on the tidal conditions on a particular day, the total area does not correspond directly to mean high tide, or mean higher high tide. For comparison, the total area estimated from the model and from a separate calculation at mean high water are shown below. Mean high water (mean high tide) is the limit for Corps of Engineers wetland jurisdiction.

Estimated Slough Areas

Receiving Water	Mean High Water (acres)	Model Estimate (acres)
Coyote Creek & Artesian Slough	1574	1232
Alviso Slough	341	376
Guadalupe Slough	266	273

For Alviso Slough and Guadalupe Slough the model estimate area is greater than the area at mean high water. This means that a portion of the area between mean high tide and the higher high tide was been included. However, the model estimate does include the area on the maximum day. For Coyote Creek, the model estimate area is lower than the area at mean high water. This means that a portion of the area below mean high tide has not been included. This was due to extensive portions of the marsh area which were not drained in the topographic information. These un-drained areas collect water at very high tides and show up in the salinity calculations as salt pannes with very high salinity days later. These areas were considered model artifacts and not included in the area calculations as stated above.

Comment: **1-8** Acknowledge and address that the potential for diurnal variations in dissolved oxygen increases significantly for initial release in July as opposed to April and include mitigation measures for initial releases in July.

Response: We agree with the RWQCB statement that diurnal variations in dissolved oxygen (DO) would be higher in July than April. There is a greater potential for algal growth due to increased solar irradiation and temperature in July.

We do not agree with the implication that ponds discharged in April and in the continuous circulation (CCP) phase in July are less likely to have DO sags than ponds discharged in July. The factors that control algal blooms and subsequent DO sags are complex (photosynthesis, temperature, nutrients, salinity, etc.). In July, initial release of stagnant ponds may lead to DO sags and ponds with April release in continuous circulation may also support algal blooms in July which lead to DO sags.

With our current data and understanding, it is impossible to predict exactly where and under what circumstances DO sags might occur. This is why the EIR/EIS states "that DO excursions could occur during the CCP in late summer…" (pg. 4-58). Mitigation is proposed to lower the potentially significant impacts from DO excursions. There is no evidence that July releases will lead to more significant DO excursions than discharges in the CCP and thus require additional mitigation measures.

Commentor: 2 City of San Jose

DIRECTOR'S OFFICE

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Environmental Services Department

February 5, 2004

Mr. Carl Wilcox
Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
P.O. Box 47
Yountville, CA 94599

SUBJECT: Comments on South Bay Salt Ponds Draft Initial Stewardship Plan Draft EIR/EIS

Dear Mr. Wilcox:

The City of San Jose would like to thank you for the opportunity to submit comments on the South Bay Salt Ponds Initial Stewardship Plan (ISP) Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) on behalf of the San Jose/Santa Clara Water Pollution Control Plant (Plant) relating to water quality and habitat issues. Additional comments may be submitted by the City's Planning Department.

The Plant provides wastewater treatment services to the cities of San Jose and Santa Clara, and other cities and agencies within the tributary area. These include the City of Milpitas, West Valley Sanitary District (Cities of Campbell, Los Gatos, Monte Sereno and Saratoga), Burbank Sanitary District, Cupertino Sanitary District (City of Cupertino), Sunol Sanitary District, and Country Sanitation Districts #2 and #3. The Plant service area includes approximately 1.3 million residents and over 16,000 businesses. In addition, as much as 6,000 acres of the 16,500-acre Cargill salt pond purchase is located within the city limits of the City of San Jose. For these reasons, San Jose has a very vital interest in this project.

As a result of our operation of the Plant, we have studied the unique and sensitive South Bay environment extensively, including water quality, habitat, and endangered species issues in this area. San Jose supports restoration of the salt ponds and is prepared to lend policy level and technical expertise and is currently participating on the stakeholder forum for the South Bay restoration project. San Jose understands that there may be temporary impacts from the project;

however, it is our hope that in the long-term the project will result in an improved ecosystem and recovery of endangered species.

The City's concerns with the EIR/EIS relate to the potential temporary impacts of the project within the proximity of the Treatment Plant, one of the most important services we provide to our residents and tributary area. The ISP may have potential effects on the Plant's regulatory compliance with its NPDES permit. The following is a general discussion of our concerns. Once City staff has had an opportunity to review the modeling effort in more detail, we may submit further comments within the Federal reporting period and relating to the proposed discharge permit.

1. Potential for Exceedance of Nickel Triggers:

The EIR/EIS found that discharges from ponds A7, A14, and A16 might exceed the dissolved nickel water quality objective (WQO) of 11.9 µg/L. However the exceedances were predicted to occur only when ponds are discharging at their maximum proposed salinities and would be limited to the Initial Release Period (IRP). The EIR/EIS cited the results of evaluations conducted by Stephen Hansen (2003) (Appendix D) to conclude that after initial mixing there would be no predicted exceedances of the nickel WQO in Coyote Creek, Artesian Slough, Alviso Slough, or in the South Bay near the Alviso Complex. **2-1a**

When the Regional Water Quality Control Board (RWQCB) adopted the site specific WQOs for dissolved copper and nickel for the bay south of Dumbarton Bridge, they required development and implementation of a Copper Action Plan and a Nickel Action Plan. Included in those plans are ambient dissolved copper and nickel concentration trigger values. If these triggers are exceeded, they require investigation and implementation of additional copper and/or nickel control measures by the three South Bay wastewater treatment plants and/or the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and its co-permittees.

The Phase 1 nickel trigger is 6.0 µg/L and the Phase 2 trigger 8.0 µg/L. Compliance is based on an average of data collected from six stations throughout the Lower South Bay during the months of June - November. The EIR/EIS does not currently provide, and needs to provide, an analysis of the impacts on compliance with these trigger values for the various alternatives for the Initial Release and Continuous Circulation Periods. The analysis included in Appendix D appears to only evaluate the independent impacts of the Alviso and Baumberg discharges on the South Bay and the South Bay at Dumbarton, respectively. Therefore the EIR/EIS needs to assess the cumulative and potential long-term residual impacts of the pond discharges on ambient dissolved nickel concentrations throughout the bay south of the Dumbarton Bridge. **2-1b**

The 1997-1999 RMP dissolved nickel data from April each year used in the analysis (1.8 µg/L minimum and 2.9 µg/L maximum) are considerably lower than recorded by the South Bay "trigger" monitoring program (typically 3 to 5 µg/L). The analysis presented may thus underestimate concentrations that may persist in subsequent months. Without the above requested analysis it is not possible to evaluate the potential for impacts related to the POTWs and SCVURPPP having to implement additional nickel control measures (solely due to pond releases causing trigger exceedances). Although the City recognizes that there is less likelihood of Copper Action Plan trigger (4.0 µg/L and 4.4 µg/L) exceedances, copper should also be evaluated to monitor potential exceedances of Copper Action Plan trigger levels.

2-1b Cont.

2-1c

The City requests that adequate monitoring be performed in order to allow the RWQCB to determine if any observed exceedances of the triggers are related to the pond discharges. The City also suggests as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined if the requested additional analysis finds that exceedances are projected to be likely to occur.

2-1d

2-1e

2. Short-Term Loss of Salt Marsh:

While the City expects that breaching Ponds A19, A20, and A21 is beneficial for salt marsh creation over the long term, it is also likely that some loss of fringe marsh habitat along the sloughs and Coyote Creek may occur due to increase in tidal prism and channel scour.

2-2a

The City of San Jose has a long-term monitoring program of marsh vegetation and habitat in the South Bay. The interannual changes observed between the gains and losses of salt and brackish marsh appear to be related to large-scale environmental factors such as rainfall and Bay salinity due to delta outflows. The increased tidal prism anticipated as a result of the proposed levee breaching of island ponds A19, A20 and A21, has the potential to alter significantly the observed annual trends and the marsh vegetation in the near and long term.

Appropriate monitoring of the marshes should be included in the ISP to ensure that potential short-term losses of endangered species habitat that could occur during implementation of the ISP are documented. Such monitoring, along with the accumulated data from the City's monitoring efforts, offers a unique opportunity to observe habitat changes in an estuary as tidal restoration is implemented.

2-2b

3. Legacy pollutants in channel sediments:

The EIR discusses sediment and sediment toxicity in section 5 and in Appendix I. All sediment samples were collected from salt ponds that will be restored. There appears to be no sediment data from the affected channels and sloughs, outside the ponds. There is discussion about increased water velocity and the possibility for resuspension of contaminated sediments in section 3, however, this discussion deals only with contaminated sediment in the ponds themselves, concluding that the water velocities are not likely to be high in the ponds. On page 3-12, where breaching of the island ponds is discussed, the report acknowledges that water velocities may cause sediments to resuspend in and around the Island Ponds, but the levels of contaminants are not elevated in those ponds. The City is concerned that sediments in the main channels surrounding the Island Ponds, particularly in the vicinity of the railroad bridge, were not studied. The channels are expected to experience some degree of erosion and scour. If the sediments in the channels have elevated levels of contaminants, such as PCBs and chlorinated pesticides, those contaminants will be resuspended with the sediments. This resuspension could affect Bay water quality and in turn cause issues for the City's future regulatory requirements. Additional sediment sampling in the channels may need to be conducted prior to breaching of island ponds to document potential issues. **2-3**

An additional concern is the potential impact of scouring on adjacent levees. **2-4**

List of Minor Comments:

- The official name of the Plant is San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP) rather than San Jose WWTP (page 2-6). **2-5**
- Page 3-3 notes that the Plant has a permitted dry season flow of 120 mgd, however, 120 mgd is a dry weather flow trigger, triggering further action and is not a permit limit. Reword to "…with a flow trigger of 120 mgd included in its NPDES permit though flows in recent years have been less." **2-6** **2-7**
- Page 4-9 notes that the Plant's flow is 133 megagallons per day, however, recent flows have been substantially lower. The average dry weather effluent flow during 2003 was 100 million gallons per day. **2-8**
- Page 4-35 and other sections note that releases of fresh water from the SJ/SC WPCP have caused salinity in Coyote Creek to be lower than it would be under natural conditions. A reference is needed to support this statement, as the City's research shows that there is considerable uncertainty as to the "natural conditions." **2-9**
- Page 6-12 states that the Plant discharges into Coyote Creek. This should be restated as discharge to Artesian Slough.

The City of San Jose appreciates the opportunity to comment on the EIR/EIS and looks forward to reviewing your responses to our comments. We believe this is a very exciting project and look forward to being part of the planning and implementation process. Please contact Dan Bruinsma of my staff at 408-277-2993 if you have any questions. We would like to request copies of the Final EIR/EIS.

Sincerely,

Carl W. Mosher
Director, Environmental Services Department

Comment: **2-1a** The City of San Jose describes the RWQCB action plan for South Bay dischargers for copper and nickel.

Response: Comment noted.

Comment: **2-1b** Assess the cumulative and potential long-term residual impacts of the pond discharges on ambient dissolved nickel concentrations throughout the bay south of the Dumbarton Bridge.

Response: The ISP ponds would not represent a new source of nickel or copper in the South Bay. During the continuous Circulation Period (CCP) the ponds will intake bay water with ambient concentrations, and discharge similar amounts of metals in the return flows to the bay. However evaporation will occur within the ponds during the evaporation season and concentrations in the discharge may be greater than in the intake water. The increased evaporation with the ISP ponds would be similar to historic conditions before the construction of the salt ponds, when the surface area of the South Bay was larger.

Based on the analyses included in Appendix D, for average ambient nickel concentrations in the bay, the maximum increase in ambient concentrations in Alviso bay segment 2 would be 0.28 ug/l during the maximum week of the initial release period (Table 11). The estimated increase was 0.23 ug/l for segment 2 during the continuous release period. Segment 2 represents approximately half of the South Bay south of the Dumbarton Bridge. The potential effect in the overall South Bay would be smaller.

The estimates in Appendix D were based on average ambient nickel concentrations in the bay of 2.4 ug/l. Based on more current monitoring data from the City of San Jose, the average ambient concentration should be 3.63 ug/l. Since the estimated pond discharge concentrations were based on current pond sampling data, the estimated discharge values would not be affected by revised ambient bay or slough concentrations. Therefore, the difference between the ambient and pond discharge concentrations would be smaller with higher ambient concentrations, and any increase in bay or slough concentrations due to pond discharges would be smaller.

Comment: **2-1c** There is less likelihood of Copper Action Plan Trigger exceedances; however, copper should also be evaluated to monitor potential exceedances of Copper Action Plan Trigger levels.

Response: We agree there is very little likelihood of Copper Action Plan exceedances. Please see the response to 2-1b above.

Comment: **2-1d** The City requests that adequate monitoring be performed in order to allow the RWQCB to determine if any observed exceedances of the triggers are related to the pond discharges.

Response: The ISP operation will include monitoring of pond discharges. The ponds will be monitored weekly for selected parameters, and quarterly or annually for more

comprehensive testing. The proposed plan would include metals in the water column monitored annually in August or September which is the period likely to be highest in concentrations due to evaporation rates. These annual values during the late summer would provide data for investigation of sources if any trigger concentration were exceeded. Please note, however, the uncertainties in estimating flow into and out of the ponds since flows will be solely influenced by tidal conditions.

Comment: **2-1e** The City recommends as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined.

Response: Comment noted. The RWQCB requirements for other south bay dischargers are not part of the ISP. Any changes to those requirements would be handled under a separate process by that agency.

Comment: **2-2a** Some loss of fringe marsh habitat along the sloughs and Coyote Creek may occur due to increase in tidal prism and channel scour. Habitat changes in the sloughs due to the levee breaches have the potential to alter annual vegetation trends observed in CSJ monitoring studies.

Response: Comment noted.

Comment: **2-2b** Appropriate monitoring of the marshes should be included in the ISP.

Response: We agree that monitoring of the habitat surrounding the Island Pond breaches will provide data that is extremely useful to development of the long-term restoration plan which will certainly involve additional levee breaches. We will not assess the annual trends but intend to monitor the longer term gains and losses of wetlands in the area through use of aerial or satellite photography.

Comment: **2-3** If the sediments in the channels have elevated levels of contaminants, such as PCBs and chlorinated pesticides, these contaminants will be re-suspended with the sediments. Additional sampling in the channels may need to be conducted prior to levee breaching.

Response: We agree that additional sampling and analysis of sediments in the channel where scour may occur is warranted.

Comment: **2-4** Concern for the potential impact of scouring on levees adjacent to the Island Ponds.

Response: No potential impacts to infrastructure due to breaching the Island Pond levees have been identified other than the existing railroad bridge. Potential scour areas are within Coyote Creek, below mean high water and away from existing levees.

Comment: **2-5** The official name of the Plant is San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP).

Response: The name San Jose WWTP has been changed on page 2-6 and SJ/SC WPCP has been added to the acronym list**.**

***Change to DEIR/DEIS*: Add SJ/SC WPCP to Acronym List and run global search and replace with this acronym.**

Comment: **2-6** Reword statement on page 3-3 to note that 120 mgd is a dry weather flow trigger, triggering further action, and is not a permit limit.

Response: The above comments have been incorporated in the EIR/EIS.

Change to DEIR/DEIS: Chapter 3; Section 3.1.3 SSFB Tidal Sloughs; Page(s) 3-2; Paragraph 6 and Page 3-3:

Artesian Slough borders Alviso Ponds A16 and A17 and is a tributary to Coyote Creek. The discharge from the City of San Jose municipal wastewater treatment plant enters the upstream end of Artesian Slough **~~with a RWQCB-permitted dry season flow~~ with a flow trigger of 120 mgd included in its NPDES permit though flows in recent years have been less. ~~of 120 million gallons per day (mgd) though flows in recent years have been less.).~~**

Comment: **2-7** Correct statement on page 4-9 to note that the average dry weather effluent flow during 2003 was 100 million gallons per day.

Response: The following text has been added to the EIR/EIS.

Change to DEIR/DEIS: Chapter 4; Section 4.3.1 Salinity; Page 4-9; Paragraph 4:

Artesian Slough borders ponds Alviso A16 and Alviso A17 and is a tributary to Coyote Creek. The discharge from the **~~City of San Jose municipal wastewater treatment plant~~ SJ/SC WPCP** enters the upstream end of Artesian Slough**. ~~with a flow of approximately 133 megagallons per day (mgd) (Davis et al, 2000).~~** Artesian Slough thus generally has relatively low salinity (Kinnetic Labs, 1987). **During 2003, the average dry weather effluent flow from the SJ/SC WPCP was 100 million gallons per day (mgd).**

Comment: **2-8** Support the statement that releases of fresh water from the SJ/SC WPCP have caused salinity in Coyote Creek to be lower than it would be under natural conditions.

Response: We agree that the DEIR may have oversimplified the issue, since it is not just the treatment plant that has affected conditions in Coyote Creek. We based our statement in part on the report South Bay Marsh Tidal Studies Technical Discussion (Harvey and Associates, 2001). We do believe that fresh water releases from SJ/SC WPCP continue to play a role in the determining the salinity in Coyote Creek.

Comment: **2-9** The Plant discharges into Artesian Slough (not Coyote Creek).

Response: The EIR/EIS has been changed to state that the Plant discharges to Artesian Slough.

Change to DEIR/DEIS: Chapter 6; Section 3.1.3.1 Overview of Impacts…; Page 6-12; Paragraph 1:

> Data from the San Jose/Santa Clara WPCP (2002) studies in the Coyote Creek and Alviso Slough areas provide information on recent salinity levels. The area of study is influenced by the discharge of fresh water from the waste treatment plant that discharges into ~~**Coyote Creek**~~ **Artesian Slough**. Based upon results from continuously recording stations, surface water salinities decreased during falling and low tides and increased on rising and high tides. These results indicate that the creek system is stratified in that fresh water, from all local sources, flows out across the more saline bay water during the falling and low tides. Conversely, during rising or high tides, fresh water flows are impounded upstream or are mixed with more saline tidal waters. The results that are presented in Table 6-2 were selected to show the higher range of salinities measured during the incoming tidal cycle in the summer months from selected stations.

Commentor: 3 City of Sunnyvale

February 4, 2004

FISH & GAME
FEB 05 2004
YOUNTVILLE

Carl Wilcox
California Department of Fish and Game
Region 3 Headquarters
P.O. Box 47
Yountville, CA 94599

Re: Draft Environmental Impact Report for the South Bay Salt Ponds Initial Stewardship Plan

Dear Mr. Wilcox:

The City of Sunnyvale has reviewed the Draft Environmental Impact Report for the South Bay Salt Ponds Initial Stewardship Plan and has the following comments as provided below. Thank you for the opportunity to comment on this important project for the Bay area.

Page 2-24 - Discussion of Alviso System Pond A3W:

The location of the Sunnyvale Water Pollution Control Plant discharge point is incorrectly identified. It is not near the dock structure in the Guadalupe Slough, near the Sunnyvale secondary treatment ponds. The discharge location is into Moffett Channel, directly behind the Plant. Please see attached map that properly identifies the outfall location. This change in location occurred many years ago when the advanced secondary treatment facilities were built at the plant. **3-1**

Also, no mention is made of the fresh water discharges to the Guadalupe Slough from the Sunnyvale East and West Channels, as well as the Moffett Channel. It is not clear that these discharge volumes are included in the overall discharge quantities described for the Guadalupe Slough. **3-2**

Page 3-3 also incorrectly states the location of the Sunnyvale Water Pollution Control Plant outfall. Also, the flow rate listed for the City's discharge needs to be updated. Currently, the flow rate is between 14-15 MGD. This incorrect flow rate for the **3-3**

ADDRESS ALL MAIL TO: P.O. BOX 3707 SUNNYVALE, CALIFORNIA 94088-3707
For deaf access, call TDD/TTY (408) 730-7501

Sunnyvale WPCP should be changed in this section and in other sections of the report where it appears.

Page 4-5 - CWA Section 402 and RWQCB Permitting Procedures:
The current requirement for filing a NOI is for projects that disturb one-acre of land, not five acres. The one-acre change went into effect in March 2003.

Section 4.3.2 Metals and Organic Compounds (Dissolved Nickel):
The DEIR/EIS found that discharges from ponds A7, A14, and A16 might exceed the dissolved nickel water quality objective (WQO) of 11.9 ug/L. However the exceedances were predicted to occur only when ponds are discharging at their maximum proposed salinities and would be limited to the Initial Release Period (IRP). The DEIR/EIS cited the results of evaluations conducted by Stephen Hansen (2003) (Appendix D) to conclude that after initial mixing there would be no predicted exceedances of the nickel WQO in Coyote Creek, Artesian Slough, Alviso Slough, or in the South Bay near the Alviso Complex.

When the Regional Water Quality Control Board (RWQCB) adopted the site specific WQOs for dissolved copper and nickel for the bay south of Dumbarton Bridge, they required development and implementation of a Copper Action Plan and a Nickel Action Plan. Included in those plans are ambient dissolved copper and nickel concentration trigger values. If these triggers are exceeded, they require investigation and implementation of additional copper and/or nickel control measures by the three South Bay wastewater treatment plants (WWTPs) and/or the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and its co-permittees.

The Phase 1 nickel trigger is 6.0 ug/L and the Phase 2 trigger 8.0 ug/L. Compliance is based on an average of data collected from six stations throughout the Lower South Bay during the months of June - November. The DEIR/EIS does not currently provide, and needs to provide, an analysis of the impacts on compliance with these trigger values for the various alternatives for the Initial Release and Continuous Circulation Periods. The analysis included in Appendix D appears to only evaluate the independent impacts of the Alviso and Baumberg discharges on the South Bay and the South Bay at Dumbarton, respectively. Therefore the DEIR/EIS needs to assess the cumulative and potential long-term residual impacts of the pond discharges on ambient dissolved nickel concentrations throughout the bay south of the Dumbarton Bridge.

The 1997-1999 RMP dissolved nickel data from April each year used in the analysis (1.8 ug/L minimum and 2.9 ug/L maximum) are considerably lower than in the subsequent months as recorded by the South Bay trigger monitoring program (typically 3 to 5 ug/L). The analysis presented may thus underestimate concentrations that may persist in subsequent months. Without the above requested analysis it is not possible to evaluate the potential for impacts related to the POTWs and SCVURPPP having to implement additional nickel control measures (solely due to pond releases causing trigger exceedances).

The City requests that adequate monitoring be committed to in order to allow the RWQCB to determine if any observed exceedances of the triggers are related to the pond discharges. The City also suggests as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined if the requested additional analysis finds that exceedances are projected to be likely to occur.

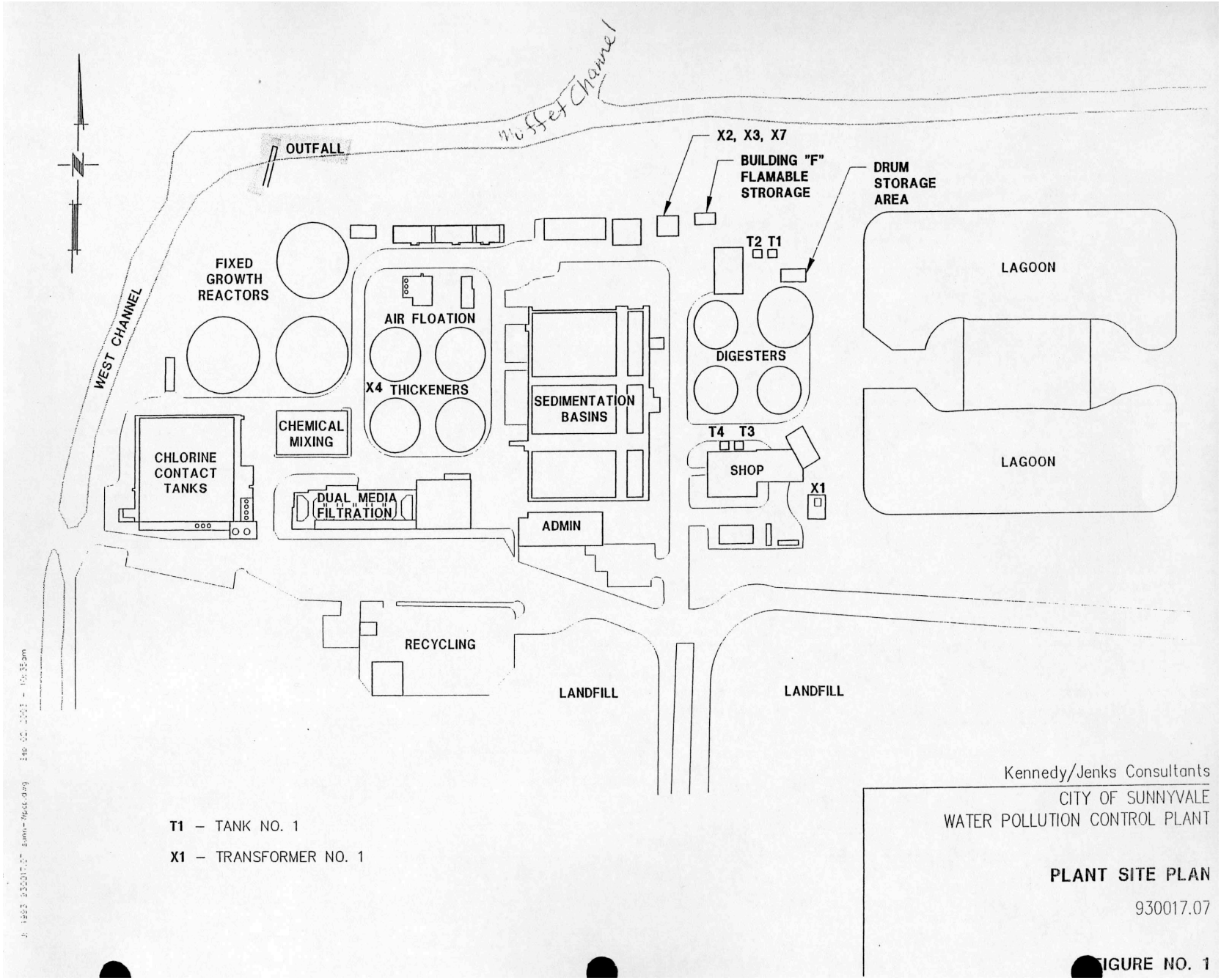
Page 8-2 and Table 8-1 - Recreation and Public Access
The recreational access to the areas along the Bay Trail between the Yahoo Building (off Mathilda Avenue) and along the Moffett Channel, Pond A-4 and past the Baylands Park to Calabazas Creek is not well described. A copy of the City's Bay Trail map is included to show those areas and possible public access points.

If you have any questions, please feel free to contact me @ (408) 730-7260.

Sincerely,

Lorrie B. Gervin, P.E.
Environmental Division Manager
City of Sunnyvale WPCP

Attachments Enclosed


Moffet Channel
OUTFALL
X2, X3, X7
BUILDING "F"
FLAMABLE
STRORAGE
DRUM
STORAGE
AREA
T2 T1
LAGOON
FIXED
GROWTH
REACTORS
AIR FLOATION
X4 THICKENERS
DIGESTERS
WEST CHANNEL
SEDIMENTATION
BASINS
CHEMICAL
MIXING
T4 T3
SHOP
LAGOON
CHLORINE
CONTACT
TANKS
DUAL MEDIA
FILTRATION
X1
ADMIN
RECYCLING
LANDFILL
LANDFILL
T1 – TANK NO. 1
X1 – TRANSFORMER NO. 1
Kennedy/Jenks Consultants
CITY OF SUNNYVALE
WATER POLLUTION CONTROL PLANT
PLANT SITE PLAN
930017.07
FIGURE NO. 1

Comment: **3-1** Page 2-24 incorrectly identifies the SWPCP discharge point.

Response: Page 2-24 has been changed to remove the reference to Sunnyvale WWTP.

Change to DEIR/DEIS: Chapter 2; Section 2.4.3 Pond Management Alternative 2; Page 2-24; Paragraph 5:

The intake location at the northeasterly end of B1 was selected to be near the existing intake and avoid inflow from the Bay near the mouth of Stevens Creek. Stevens Creek has been identified as a potential salmonids fishery and migrating salmonids could be entrained in the intake flow if the intake were at Stevens Creek. The outlet location at the easterly end of A3W was selected to allow outflow into Guadalupe Slough in close proximity to the existing dock structure ~~**near the Sunnyvale WWTP discharge**~~. At that location, the new outfall would have the least impact on existing marsh along the slough levee.

Comment: **3-2** Are fresh water discharges to the Guadalupe Slough from the Sunnyvale East and West Channels and the Moffett Channel included in the overall discharge quantities described for Guadalupe Slough?

Response: Yes, these discharges were included in the overall discharge quantities described for Guadalupe Slough.

Comment: **3-3** Correct the location of the Sunnyvale Water Pollution Control Plant outfall and update the flow rate listed for the City's discharge.

Response: The EIR has been changed to address this issue.

Change to DEIR/DEIS: Chapter 3; Section 3.1.3 SSFB Tidal Sloughs; Page 3.3; Paragraph 2:

Guadalupe Slough borders Alviso Ponds A3W, A4 and A5. Guadalupe Slough receives flow from Calabazas Creek and San Tomas Creek. The Sunnyvale municipal wastewater treatment plant also discharges **Moffett Channel which connects** to Guadalupe Slough (approximately ~~**18**~~ **14-15** mgd) and is the primary source of freshwater to Guadalupe Slough during summer and fall. The bottom elevation of Guadalupe Slough ranges from -1 to -4 m NGVD. The tidal range in Guadalupe Slough is similar to the tidal range in Alviso Slough (NOAA, 2003).

Comment: **3-4** Current requirements for filing an NOI are for projects that disturb one-acre of land.

Response: Page 4-5 of the EIR/EIS has been changed.

Change to DEIR/DEIS: Chapter 4; Section 4.1.1 Regulatory Setting; Page 4-5; Paragraph 2:

It is anticipated that the San Francisco Bay RWQCB will not impose an NPDES point-source discharge permit on the proposed project because (1) there is currently no effluent guideline for this activity, (2) no pollutants have been added

to the ponds as a result of salt making, and (3) available water quality and sediment data do not suggest elevated pollutant levels beyond that expected from evaporation. However, the RWQCB administers the statewide general NPDES storm water permit for general construction activity that applies to projects that disturb more than ~~**5 acres**~~ **1 acre** of land; this permit will most likely be required. The NPDES permit requires filing with the San Francisco Bay RWQCB a public notice of intent (NOI) to discharge storm water and preparation and implementation of a storm water pollution prevention plan (SWPPP).

Comment: **3-5** City of Sunnyvale is concerned about ISP causing Nickel and Copper Action Plan trigger exceedances.

Response: Please see response to the City of San Jose (2-1b and 2-1c).

Comment: **3-6** City of Sunnyvale requests that adequate monitoring be committed to allow the RWQCB to determine if exceedances of the triggers are related to ISP discharges.

Response: Please see response to the City of San Jose (2-1d).

Comment: **3-7** City of Sunnyvale suggests as a potential mitigation measure that the RWQCB agree to consider reassessing how compliance with the triggers is to be determined if the requested additional analysis finds that exceedances are projected to be likely to occur.

Response: Please see response to the City of San Jose (2-1e).

Comment: **3-8** On Page 8-2 and Table 8-1, recreational access to the Bay Trail is not well described.

Response: The following text will be added to EIR/EIS page 8-2, Table 8-1, under Other Recreational Facilities: add Pond A4. Text will be added to page 8-3, last sentence of the section on Alviso Complex: Access to the Bay Trail and spur trails is provided at both Matilda Avenue and Sunnyvale Baylands Park. The Bay Trail runs along Calabasas Creek, Baylands Park, and Pond A4.

Change to DEIR/DEIS: Chapter 8; Section 8.1.1 Recreation and Public Access; Page 8-2; Table 8-1:

Table 8-1
Recreational Facilities in the Project Vicinity

Site	Parks	Reserves & Refuges	Other Recreational Facilities
Alviso Complex	• Mountain View Shoreline Park • Palo Alto Baylands Park • Sunnyvale Baylands Park • Northern Santa Clara	• Don Edwards San Francisco Bay National Wildlife Refuge (NWR) • Palo Alto Baylands Nature Preserve • Stevens Creek Nature	• Bay Trail (existing trail adjacent or very near to A1, A2W,, , A8,-13; proposed trail adjacent or near to A18, A19, A2E, A3W, B2**, A4**)

	County Shoreline Regional Park Complex* • Alviso Marina County Park • Dixon Landing Park*	Study Area	• Stevens Creek Trail • San Tomas Aquino Creek Trail • Guadalupe River Trail • Coyote Creek Trail
Baumberg Complex	• Coyote Hills Regional Park • Hayward Regional Shoreline Park • Hayward Shoreline Interpretive Center • Mt. Eden Park*	• Eden Landing Ecological Reserve • Don Edwards San Francisco Bay NWR	• Bay Trail (existing trail adjacent or very near to 2, 4, 1C, 2C, 3C; planned trail adjacent or very near to 1, 6, 7) • Shoreline Trail • Bayview Trail
West Bay Complex	• Menlo Park Waterfront Park * • Bayfront Park (Menlo Park)	• Don Edwards San Francisco Bay NWR • Ravenswood Open Space Preserve	• Bay Trail (existing trail adjacent or very near to 2, SF2, 3, S5)

Alviso Complex A portion of the Bay Trail consisting of off-street paved or gravel trail provides a large loop route around Alviso Ponds A9 through A13, which are located within the Refuge. Other portions of the Bay Trail, consisting of off-street paved or gravel trail, are adjacent to the Alviso ponds (including Ponds A1, A2W). An unimproved on-street portion of the Trail (no bike lanes and/or no sidewalks) leads from the Alviso Marina and Historic District (adjacent to Alviso Ponds A8 and A12), south toward San Jose and Highway 237. Another unimproved on-street portion of the Trail runs along the north side of Pond A22. **Access to the Bay Trail and spur trails is provided at both Matilda Avenue and Sunnyvale Baylands Park. The Bay Trail runs along Calabasas Creek, Baylands Park, and Pond A4.**

Commentor: 4 Santa Clara Valley Water District

[Emailed doc from Santa Clara Valley Water District]

February 4, 2004

Carl Wilcox
Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
P.O. Box 47
Yountville, CA 94599

Subject: Comments on South Bay Salt Ponds Initial Stewardship Plan Draft Environmental Impact Report

Dear Mr. Wilcox:

On behalf of the Santa Clara Valley Water District (District), I would like to express our appreciation for the opportunity to review the South Bay Salt Ponds Initial Stewardship Plan (ISP) Environmental Impact Report (EIR). The District is pleased to contribute technical expertise on this matter to the South Bay Salt Pond Restoration Project, which promises to be the premier multiple-objective habitat restoration, flood protection and recreational access project on the West Coast.

Our internal team of reviewers has a wide range of technical backgrounds and the District's review focused primarily on the Alviso Ponds. Attachment 1 contains the complete set of District comments on the EIR, and I would like to highlight four of those comments here, as follows:

- First, because the District is interested in participating in the restoration of the Island Ponds (A19, A20 and A21), subject to a future agreement between the District and U.S. Fish and Wildlife Service, language should be included in the EIR that would identify the District as responsible agency. 4-1

- Second, the water inflows to Pond A4 will be shut off, which will result in impacts to that pond that must be addressed in the EIR, especially in Chapter 3, Hydrologic and Hydraulic Conditions, and in Chapter 4, Water Quality. Depending on the nature and severity of these impacts, it may also be appropriate to include discussion of impacts in other chapters (such as Chapter 6, Biological Resources, and Chapter 12, Cumulative Impacts). Mitigation measures to offset impacts caused by ISP implementation also need to be included in the EIR. 4-2

- Third, the restoration of the Island Ponds needs further analysis regarding scour and sedimentation, especially with regard to potential impacts to the railroad bridge and length of time projected for marsh development. 4-3a

- Also, the feasibility analysis prepared by Siegel and Bachand for the salt pond restoration effort identified an underground transmission line beneath the Island Ponds. The potential impact of levee breaches on this transmission line should be 4-3b

included as part of the EIR.

- Lastly, the increased tidal amplitude and water velocities that are projected to result from ISP implementation, especially in Coyote Creek, may impact facilities that lie beyond the project area. For example, the non-engineered levees along Mud Slough in Alameda County may experience increased vulnerability to damage and/or destruction. Such impacts must be evaluated and included in the EIR, and mitigation measures proposed to offset them. 4-4

Thank you again for the opportunity to comment. The District will also provide comments to U.S. Fish and Wildlife Service next month regarding the Environmental Impact Statement required for NEPA compliance. If you have any questions regarding this letter or District comments, please contact Beth Dyer at (408) 265-2607 x3125.

Sincerely,

James M. Fiedler
Chief Operating Officer
Watersheds

Bd
W:/WPU/SF Bay Shoreline/Salt Pond Restoration Integration/Initial Stewardship Program/ISP EIR Comment ltr 2-4-04 final

cc: Nadine Hitchcock, California Coastal Conservancy
Amy Hutzel, California Coastal Conservancy
Marge Kolar, U.S. Fish and Wildlife Service

bcc: B. Allen
D. Chesterman
J. Christie
B. Dyer
S. Fitts
B. Goldie
A. Gurevich
S. Katric
M. Khan
M. Klemencic
L. Lee
J.M. Lo
K. Oven
L. Squires
S. Tippets
J. Wang
S. Wilson
L. Xu

ATTACHMENT 1: Santa Clara Valley Water District Comments on South Bay Salt Pond Restoration Initial Stewardship Plan Environmental Impact Report

February 4, 2004

Substantive Comments

Page	Section	Paragraph	Comment	
N/A	**General Comment**		In the body of the EIR, the acronym ISP is defined as Initial Stewardship Plan, Initial Stewardship Project, and Initial Stewardship Period. The name of the document (in Appendix A) is the Initial Stewardship Plan, and so it seems appropriate to use that name. The term ISP, as Initial Stewardship Period, seems to refer to the timeframe involved with implementation. To lend more clarity, it may be appropriate to use an acronym other than ISP when referring to the timeframe. Could something else be used to describe this period of time?	4-5
N/A	**General Comment**		Please make a global change to the document, replacing "flood control" with "flood protection." The District is working towards this shift in presentations and documents. Please watch, though, because at times the term "flood control protection" is also used in the text, so a blind global change as requested would result in the term "flood protection protection."	4-6
N/A	**General Comment on Executive Summary**		The Executive Summary (ES) is written as if the reader has already read through the entire document. The purpose of the ES is to provide a summary to those who may not wish to read the whole document but would like to get the nuggets of the product.	4-7
N/A	**General Comment**		All alternatives proposed in the EIR would eliminate water inflows to Ponds A4 and A18, owned by the District and the City of San Jose, respectively. Impacts associated with the hydrologic isolation of these ponds should be addressed in the EIR, along with mitigation measures to offset these impacts. Discussion of such impacts and/or mitigation should be included in the EIR, as follows: • Table S-3. Comparison of Impacts of Project Alternatives • 1.1.1 Alviso Pond Complex • 1.9.1 Issue 1: Hydrologic and Hydraulic Resources, including Flood Protection • 1.9.2 Issue 2: Water Quality • 2.4.3 Pond Management Alternative 2: Simultaneous March/April Initial Discharge. Alviso System 7. • Chapter 3. Hydrologic and Hydraulic Conditions • Chapter 4. Water Quality • Alviso Pond A4 and Alviso Pond A18 (Page 12-5) Depending on the nature and severity of these impacts, it may also be appropriate to include discussion in other chapters (such as Chapter 6, Biological Resources and Chapter 12, Cumulative Impacts).	4-8

12-5	Alviso Pond A4	2nd	Please delete the following sentence: "SCVWD would be responsible for preparation of a suitable operation plan for interim management of Pond A4 in coordination with the operation of System A7." The mitigation of the ISP regarding Pond A4 must be coordinated with the District. The District is willing to collaboratively explore options for interim management of Pond A4 with USFWS and CDFG.	4-9

Page	Section	Paragraph	Comment	
N/A S-3, S-4 and S-5	**General Comment** Tables S-1 & S-2 and text between them on pp. S-4 and S-5.		Please standardize the naming and numbering schemes for the alternatives throughout the document. **Regarding Naming.** These tables and text contain inconsistent use of words "release" and "discharge" for description of alternatives. In text on page S-4 "release" is used. In the two tables, sometimes "release" and sometimes "discharge" is used. Suggestion: use "release" consistently to avoid confusion (i.e., change "Phased Initial Discharge" to "Phased Initial Release"). See examples below on how Alternatives 2 and 3 are labeled in various chapters:	

Chapter/Section	***Alternative***	***Title***
Chapter 2	2	"Simultaneous March/April Initial Discharge"
Chapter 2	3	"Phase (sic) Initial Discharge"
Chapter 3	2	"Simultaneous March-April Initial Release"
Chapter 3	3	"Phased Initial Release"
Chapter 4	2	''Simultaneous March-April Initial Discharge" (in one part of the chapter; later, "Simultaneous March/April Initial Release")[1]
Chapter 4	3	"Phased Initial Discharge" (in one part of Chapter; later, "Phased Initial Release;" still later, "Phased July Initial Release"
Chapter 5	2	"Simultaneous March/April Initial Discharge"
Chapter 5	3	"Phased Initial Discharge"
Chapter 6/(6.1 & 6.2)	2	"Simultaneous March/April Initial Discharge"
Chapter 6/(6.3)	2	"Simultaneous March-April Initial Discharge"

4-10

[1] Please standardize the reference to "March" and "April," as March-April may be interpreted as "March to April," and March/April may be interpreted as "March OR April."

			Chapter 6/(6.4) 2 "Simultaneous March-April Initial Release". Chapter 6/(6.1, 6.3 & 6.4) 3 "Phased Initial Discharge" Chapter 6/(6.2) 3 "Phased Initial Release" Chapter 7 2 "Simultaneous March-April Initial Discharge" Chapter 7 3 "Phased Initial Release". Chapter 8 2 "Simultaneous March-April Initial Release" Chapter 8 3 "Phased Initial Release" **Naming and Numbering (continued)** ***Chapter/Section*** ***Alternative*** ***Title*** Chapter 9 2 "Simultaneous March/April Initial Release" Chapter 9 3 "Phased Initial Release" Chapter 11 2 "Simultaneous March-April Initial Release" Chapter 11 3 "Phased Initial Release" (Also, Alternative 2 is sometimes identified as Pond Management Alternative 1, and Alternative 3 is called Pond Management Alternative 2, which can be confusing. This is especially true throughout sections 5.3.3 and 5.3.4.)	4-10

N/A	**General Comment**		It would be helpful to incorporate exhibits and figures as close as possible to the first reference for each. This will minimize the necessity for the reader to flip through pages.	4-11
N/A	**General Comment**		Please reduce/eliminate repetitive text either by referencing earlier discussion or using footnotes. (For example, discussion of horizontal/vertical grid resolution of 3D model appears in more than one place.)	4-12
N/A	**General Comment**		In the discussions of calculation hydraulics, the locations of new flow control structures are described as being least impactful to the environment. However, the process used to site these structures is not well described, so it is difficult to determine whether consideration was also given to water circulation patterns within the ponds. The control structures need to be placed so that flow will not move between the inlet and outlet in such a way that salinity concentration points are created at other locations. Please revise the discussion to include the methodology used to site these structures.	4-13
N/A	**General Comment**		Wherever possible, please state the basis for assumptions made. For example, on Page 9-12, Section 9.3.3.: Please provide the basis for assuming that emissions for all project alternatives are to be less than Cargill's past maintenance and operations.	4-14
S-1 3-4 7-14	Introduction 3.1.4 Flood Protection CULTURAL RESOURCES IMPACT-2	4th, 2nd sentence 3rd 1st, 1st sentence	Throughout the document, there are several statements that imply that the existing salt pond levees provide flooding protection. The District concurs with these statements: "In the Initial Stewardship stage, … "the existing levees will be maintained for minimum flood protection." "… salt pond levees may provide incidental flood control benefits." "… levees that have served in a flood control purpose in the past…"	4-15
S-2	Purpose and Need	3rd bullet	This bullet should include potential flooding of adjacent properties, should the levees deteriorate, as a potential adverse effect.	4-16

S-4		2nd	It seems like Alternative 1 is really the "no project/no action alternative," since it maintains the existing condition. The no project/no action alternative described in the EIR is really a changed condition because the levees would no longer be maintained. Alternative 1 maintains the levees, which is the existing condition. At a minimum, the Lead Agency should describe in the EIR the reasons for selecting the currently-identified Project/No Action alternative as the project baseline. The rationale would probably include the change in ownership and funding issues.	4-17
S-5	Table S-2. Comparison of Alternatives in Meeting Project Objectives		Please provide a legend describing the presence, and significance, of the number of pluses (++) or dashes (- -).	4-18
S-5	Table S-2. Comparison of Alternatives in Meeting Project Objectives		The objectives listed in the table have not previously been discussed. Project Objectives should be presented in a separate section immediately following the Purpose and Need section in the Executive Summary.	4-19
S-5	Hydrology	1st	Are there potential impacts to infrastructure (e.g., underground utility lines, District flood protection facilities) that could result from the breaching of levees and associated increased water velocities and erosion of mudflats? If so, please include these in the discussion. Please consider that project impacts may extend beyond the project area as defined, but result directly from project implementation. All such impacts must be included in the EIR.	4-20
S-6	Biological Resources	Last, last sentence	By using the phrase "… impacts could be mitigated to potentially significant levels…," this sentence implies that mitigation will <u>not</u> reduce impacts to less than significant levels. Please clarify the intent.	4-21
S-8	Environmentally Superior…	Last, 1st sentence	On page S-3, the duration of the ISP is given as 20+ years. This sentence states that impacts of the ISP are short-term. An argument can be made that, since the long-term restoration will most likely require several decades for implementation, the impacts are not limited to a "short-term" timeframe.	4-22
S-9 ff	Table S-3. Comparison of Impacts of Project Alternatives		The term ISP is not included in the text of the Executive Summary. It first appears in Table S-3, and it is not explained there. Please revise the text so that ISP is introduced and explained at the beginning of the Executive Summary. (The fourth paragraph of the Executive Summary provides a good opportunity for this.) Also, add it to the legend at bottom of Table S-3.	4-23
S-9 ff	Table S-3. Comparison of Impacts of Project Alternatives		The acronyms IRP and CCP appear in this table, but are not explained nor are they included in the legend. Although they are defined in Table S-1 on page S-3, it would be helpful to add these acronyms in parentheses to the headers in Table S-1 and explain them in the legend at the bottom of Table S-3.	4-24
S-20	Table S-3. Comparison of Impacts of Project Alternatives	Socio-Economic Resources	The loss or reduction of flood protection that is likely to result from deterioration of the salt pond levees is a Socio-Economic impact (No Project Alternative), since this would impact the Silicon Valley industries along the bay front. There are some significant impacts in this category.	4-25
1-1	1.1.1 Alviso Pond Complex	2nd	Pond A4 will be used by Santa Clara Valley Water District to restore wetland and riparian habitats to mitigate for losses resulting from 1) construction of the Lower Guadalupe River Flood	4-26

			Protection Project and 2) ongoing maintenance of stream channels under the District's multi-year Stream Maintenance Program.

Page	Section	Paragraph	Comment	
1-5	Immediately preceding 1.4 Project Description		A "Project Objectives" section should be added that clearly presents the project objectives, along with discussion of methodology used to develop them and their purpose. Including such a section will clarify the alternatives analysis, which includes discussion of failure to meet project objectives as a rationale for eliminating some alternatives from further consideration.	4-27
1 -5 & 1-6	1.4 Project Description		This section should specifically state that flow of water from other Ponds into Ponds A4 and A18 will be shutoff. The project description forms the foundation of the CEQA impacts and alternatives analyses, and should include this important characteristic of the project so that these analyses are well-framed.	4-28
1-6	1.4 Project Description	Next-to-last paragraph of section, 1st sentence	What is the projected timeframe for installing the water control structures? "Several years" is rather ambiguous.	4-29
1-6	1.5 Overview of CEQA and NEPA Compliance		The District should be identified in Section 1.5 of the EIR/EIS as a "responsible agency" under the California Environmental Quality Act to the extent that the District participates in some manner in the implementation of any of the alternatives contemplated for the enhancement and/or monitoring of the Island Ponds (A-19, 20, and 21), as set forth in the Draft EIR. The potential exists for the District to participate in these actions either by providing in-kind services, funds, the transfer to the refuge of portions of Pond A4 (owned by the District) or by other means.	4-30
1-12, 3-2, & 3-4	1.9.1 Issue 1: Hydrologic and Hydraulic Resources, including Flood Protection, 3.1.3 SSFB Tidal Sloughs, 3.1.4 Flood Protection		Will text address potential impacts to starting water surface elevations used for HEC-2 models when determining flood control levee height requirements?	4-31
1-13	1.9.1 Issue 1: Hydrologic and Hydraulic Resources, including Flood Protection	2nd	Please be specific in describing the methodology used to evaluate "…the increase in risk or severity of flooding caused by the project…" Section 3.1.4 suggests that a review of the 1988 U.S. Army Corps of Engineers San Francisco Bay Shoreline Study comprised the effort to evaluate the increased risk of flooding. Such a review does not consider the effects of any project-related scour and/or deposition on flooding potential.	4-32
1-15	1.9.8 Issue 8: Utilities and Infrastructure		The Feasibility Study conducted by Siegel & Bachand indicates that there is an underground transmission line in the vicinity of the Island Ponds. What are the potential impact(s) to this transmission line of breaching Island Pond levees?	4-33
1-28	Figure 1-2 Alviso Pond Complex		The legend of this map is entitled "Existing and Proposed Structures," but it appears that only proposed flows are shown. A baseline (existing) flow map should be presented and the proposed change of flow illustrated. Pond A4 should be identified on all maps, along with ownership, and the ISP planned shutoff of flow to Pond A4 should also be identified.	4-34

1-28, 1-29, & 1-30	Figure 1-2 Alviso Pond Complex, Figure 1-3 West Bay Complex, & Figure 1-4 Baumberg Pond Complex		Please clearly present whether these maps show the proposed plan for circulation, or the existing condition, or an alternative. If an alternative is represented, please label accordingly.	4-35

Page	Section	Paragraph	Comment	
2-2	2.2 Development of Alternatives	Lettered list at top	The table on S-5 (Objectives) includes item "Maintain existing levels of flood control" as the last Project Objective. It seems that this objective, which would be objective G, is missing from the list of objectives here.	4-36
2-15	Table 2-1 Summary of Existing and Proposed Management for Individual Ponds		Please discuss in the text the circumstances under which the Island Ponds would be operated as a seasonal ponds (column 12 "Possible alternative operations").	4-37
2-26		Last	Please revise to reflect that the District has obtained all permits necessary to implement the Lower Guadalupe River Flood Protection Project, and construction is underway. Completion of the flood protection elements is scheduled for December 2004.	4-38
2-27 & 2-28		3rd	The extent of flooding and results of subsequent pumping of Pond A8 is described in the FEIR for the Lower Guadalupe Flood Protection Project. This information may be helpful with regard to formulating management decisions for that pond. In these considerations, please note that the water levels in Pond A8 must be maintained at a level that does not negatively impact the capacity of the pond for floodwater storage as part of the District's Lower Guadalupe River Flood Protection Project.	4-39
Chap. 3	General comment on Chapter 3		Please standardize the units. Currently, both metric units and American units are used: 1) River flows are provided in cms (cubic meters per second) but treatment plant flows are provided in mgd (millions of gallons per day); 2) water depths are provided in meters, but scour depths are given in feet; 3) drainage areas for creeks are given in square miles; 4) some distances are given in kilometers, others in miles. It is recommended to use both English and metric system together for all the physical variables.	4-40
3-4	3.1.4 Flood Protection	1st & 2nd	The District disagrees with the statements that "… the levees were not designed to Corps standards for flood control. Therefore, the levees do not provide for flood control as they are currently designed and maintained." While the salt pond levees may not meet federal standards for flood protection levee construction, the 1988 U.S. Army Corps of Engineers San Francisco Bay Shoreline Study Interim Report states that: "…overtopping of the salt pond levees is a relatively frequent occurrence." (p.3-__) From this, it is plausible to expect that the levees <u>do</u> provide some level of protection from tidal flooding. The report goes on to say that "Local flood control agencies are concerned that the existing salt pond levees provide a relatively low and uncertain level of protection, and that the Leslie Salt Company [now Cargill] may not adequately maintain the levees in the future." (p. 3-__) Of	4-41a 4-41b

			course with the change in ownership, Cargill will not be maintaining the levees in the future. This potential event was also addressed by the Corps' report, as follows: "If Leslie Salt Company [now Cargill] discontinued use of the ponds, maintenance of levees within the refuge would become the responsibility of the U.S. Fish and Wildlife Service." (Interim Report, page 3-___) On page S-1 of the EIR, the document states that "… existing levees will be maintained for minimum flood protection." The District concurs that this is a necessary and important component of the ISP. It is important that the impacts to flood protection be analyzed.	4-41c

Page	Section	Paragraph	Comment	
3-4 & 3-5	3.1.4, Flood Protection	3rd	After mentioning the 1988 Corps study and its results, a paragraph should be included to state that "Congress has authorized and appropriated funds to the Corps in fiscal year 2004 to initiate a study to review the results of the 1988 study and evaluate the federal interest in`tidal and fluvial flood damage reduction, environmental restoration and protection, and related purposes…'" Including this language is very important because with the FY 04 funding, the Corps is now an authorized and funded partner that can bring additional federal funding for project planning, design and implementation	4-42a 4-42b
3-5	3.2 Criteria for Determining Significance of Effects	2nd	To avoid bias in the impacts evaluation, the criteria for determining significance of effects should include a criterion that addresses substantial redirection of, or alterations to, flows to (or that otherwise affect) adjacent ponds, which are not part of the ISP.	4-43
3-7	3.3.3 Alternative 2: Simultaneous March-April Initial Release	1st, 2nd sentence	How was sedimentation assessed, if it was not modeled? What assumptions were made?	4-44
3-7	3.3.3 Alternative 2: Simultaneous March-April Initial Release	Last on page, last sentence	Is 1995 representative (in terms of salinity, wet/dry cycle dynamics and so on) of a typical wet year, since it was preceded by several drought years?	4-45
3-9	Tidal prism Impacts of Island Pond Breaching	1st	The District has a significant mitigation site on Coyote Creek downstream of Dixon Landing Road that was installed based on the existing tidal influences. An analysis of any impacts on this mitigation site should be considered.	4-46
3-10		1st on page, last sentence	This is a sentence fragment. Please correct.	4-47
3-10, 3-12 & 3-13	Velocity Impacts of Pond Breaching & HYDROLOGY IMPACT-3	5th	UPRR recently reconstructed the railroad bridge across Coyote Creek near Ponds A17 and A21. The extent and nature of these modifications should be considered relative to scour and sedimentation. Potential impacts to the railroad bridge are a critical part of the analysis for breaching the Island Ponds' levees, and should be thoroughly discussed. More study of the hydraulic regime should be conducted before deciding to breach the Island Ponds' levees.	4-48

3-10	Velocity Impacts of Island Pond Breaching	5th	This paragraph states that "… it was assumed that under present conditions neither scour nor deposition occurs." Was this assumption ground-truthed?	4-49
3-13	HYDROLOGY MITIGATION-2A	1st line	The text indicates that "A qualified engineer should conduct regular inspections of …," however, it is also important to know what has changed after each serious storm and flood events. Therefore, it is recommended to add inspection efforts after each serious (10-year occurrence) storm and flood events.	4-50
4-26	Table 4-5 Summary of Short-Term (Temporary) Salinity Impacts for Maximum Day During ISP	Coyote Creek section	The Island Ponds have double asterisks, but there is no explanation of the double asterisks; also, there is no acreage given for these ponds. Please provide the acreage and an explanation of the double asterisk in the footnote.	4-51

Page	Section	Paragraph	Comment	
4-33	WATER QUALITY (SALINITY) IMPACT-4	Last two paragraphs	In these two paragraphs, there is an inconsistency about the size of the area that will have a maximum salinity higher than 45 ppt. In the earlier paragraph, this area is 3.2 acres, while in the later paragraph, the area stated is 4.2 acres. Please clarify.	4-52
5-22	SEDIMENTS IMPACT-3		There appears to be no"SEDIMENTS IMPACT-2." Should the numbering scheme be revised or is something to be added regarding SEDIMENT IMPACT-2? Also, there are Sediment Mitigation Measures associated with this alternative that appear on pages 5-20 and 5-21, which are designed as Sediment Mitigation Measures 1A through 1D. Shouldn't the measures on pages 5-22 and 5-23 be labeled Sediment Mitigation Measures 2A through 2C and 3A through 3C, respectively?	4-53
6-41	VEGETATION IMPACT-2	2nd	The Vegetation Impact-2 discussion needs revision. The Water District's efforts to control *S. alterniflora* and its hybrids are a mitigation element of the District's multi-year Stream Maintenance Program. Under this Program, the District will treat up to 10 acres of *S. alterniflora* and hybrids throughout Santa Clara County and Coyote Slough over a five-year period, starting in 2004. Prioritization of sites targeted for control efforts is currently underway and will center on the most heavily infested areas first. At this point, it is unclear how the patches located in the vicinity of the Island Ponds will be prioritized, as the most heavily infested areas within Santa Clara County are near Palo Alto and Mountain View. In any case, control efforts will occur in the fall of each year, in order to avoid impacts to the endangered California clapper rail.	4-54
6-43	VEGETATION IMPACT-7		Is the loss of pickleweed habitat less than significant without mitigation? Please quantify and discuss.	4-55
6-89		1st, next-to-last sentence	Please indicate source(s) of the estimates contained in the following statement: "It is now estimated that the river supports a moderate Chinook salmon run of approximately several hundred fish with a smaller steelhead run (fewer than 100 fish annually)."	4-56
7-5	History of the Salt Industry in the South Bay	2nd	The statement that "Cargill still retains the salt making rights on these lands" is misleading. An acreage figure should be included (if this is in fact still true), or the statement should be revised or eliminated (if it is not true).	4-57

12-5	Lower Guadalupe River Flood Protection Project	1st	Please revise to reflect that the District has obtained all permits necessary to implement the Lower Guadalupe River Flood Protection Project, and construction is underway. Completion of the flood protection elements is scheduled for December 2004. This project, in addition to accommodating the 17,000 cfs design flood event, will also accommodate up to an additional 1,350 cfs of flow from pump stations and gravity outfalls, for a total project capacity of 18,350 cfs in the lower Guadalupe River. Please revise to reflect these numbers.	4-58
12-5	Lower Guadalupe River Flood Protection Project	2nd, 1st sentence	This sentence seems to indicate that the Lower Guadalupe River Flood Protection Project will *increase* flooding in Alviso. However, the purpose of the project is to provide flood protection to the Alviso community.	4-59
12-5	Lower Guadalupe River Flood Protection Project	2nd	This paragraph states that the Lower Guadalupe River project will "…increase the potential for flooding conditions in the downstream salt ponds." This indicates that all downstream salt ponds will be affected; however, the project is designed to affect only ponds on the west bank of Alviso Slough, primarily Pond A8.	4-60

Page	Section	Paragraph	Comment	
12-5	Lower Guadalupe River Flood Protection Project	2nd	Please clarify the context of the following sentence: "Flood volumes would increase from 15 to 21% and duration of flooding would increase by 12 to 30%."	4-61
12-5	Alviso Pond A4	1st	Please correct paragraph to read, "Alviso Pond A4 will be used by the Santa Clara Valley Water District to restore wetland habitat ~~and riparian habitat~~ as mitigation for ~~losses~~ impacts resulting from the Stream Maintenance Program and construction of the Lower Guadalupe River Flood Control Project."	4-62
12-10	Birds and Other Wildlife	3rd	Based on the description of tidal inundation and pond bottom elevations elsewhere (e.g., page 3-8, "…inundated on higher high tide but would be above water at other times during the tidal cycle"; and the Technical Appendices A and K), restoration of tidal action should result in an increase in middle to high marsh, rather than "lower marsh to middle marsh…"	4-63
12-11	Impacts to Waterbirds…	2nd	Please remember that benefits of pursuing the management option described in this paragraph (i.e., managing Ponds 4, 7, 1C, 5C, 12, 13 and 14 as medium-salinity batch ponds) can be counted only if this option is actually employed.	4-64
Tech.l App. A, 1-7	1.0	Map	Alviso Complex Map incorrectly labels Coyote Creek and Mud Slough.	4-65
Tech. App. A, 4-47	4.2.5.4		Will breaching ponds A19, A20, and A21 change the tidal amplitude such that the existing non-engineered levees/stream banks of Coyote Creek located downstream of Dixon Landing Road (Alameda County) are subject to higher high tides and lower low tides, or subject to higher stream flow velocities (incoming and outgoing tide) such that the non-engineered banks may erode at a higher rate?	4-66

Editorial Comments

Page	Section	Paragraph	Comment
N/A	**General Comment**		Eliminate double periods (for example, the 3rd sentence under Public Health Impact-1, page 8-8).
N/A	**General Comment**		Please standardize acronyms used for U.S. Fish and Wildlife Service and California Department of Fish and Game. Suggestion: Please use USFWS and CDFG so that the affiliation with the federal and state governments remains clear throughout the document.
S-3	Table S-1. Summary of Alternatives		The alternatives are assigned numbers in the text of the Executive Summary, but Table S-1 provides only descriptions of alternatives in left-most column. It would be most helpful to a lay reader if corresponding alternatives' numbers were added to these.
S-5	Table S-2. Comparison of Alternatives in Meeting Project Objectives		Please add appropriate Alternative numbers to the headers in this table to correspond to the text descriptions and make it easier for the reader to follow. The Executive Summary is the first section most people will read, so clearly describing acronyms and alternatives is critical.
S-5	"Hydrology"		Please change to "Hydrological and Hydraulic Conditions," in order to be consistent with chapter titles.
S-6	Vegetation	1st	First sentence: Change "form" to "from."
S-8		1st	In the last sentence of paragraph, remove either "because" or "if" from sentence. The sentence doesn't work with both words in there.
Page	**Section**	**Paragraph**	**Comment**
S-9	Table S-3, Comparison of Impacts of Project Alternatives	Heading: "Hydrology"	Please change to "Hydrological and Hydraulic Conditions," to be consistent with chapter headings.
1-19	Line 1		NMFS should be changed to NOAA Fisheries (formerly National Marine Fisheries Service).
1-28	Figure 1-2. Alviso Pond Complex	Map	Alviso Complex Map incorrectly labels Coyote Creek and Mud Slough
2-11	2.4.3 Pond Management Alternative 2: Simultaneous March/April Initial Discharge	Initial Release Period, last sentence	This should specify March/April, and not just the year, as the intended release period.
2-41	2.4.3	4th	Strike the "e" in the first sentence ["…habitat), e D (maintain…]
2-41	2.4.4 Pond Management Alternative 3: Phased Initial Discharge	2nd	Shouldn't the two references to Alternative 2 in this paragraph (first and last sentences) refer to Alternative 3? Strike the "e" in the first sentence ["…habitat), e D (maintain…]
3-2	3.1.2	1st	The term "cms" represents cubic meters per second, NOT centimeters per second.
3-7	Description of Hydrologic Models Used	5th, 1st line	"A three-dimensional hydrodynamic model was used" should be changed to "A three-dimensional hydrodynamic model, TRIM3D, was used"
3-8		last	An Appendix reference is missing.
3-13	HYDROLOGY	4th	At end of sentence, "to1" should be "to."

	MITIGATION-2B		
3-13	"HYDROLOGY MITIGATION-2A"		Please change to "HYDROLOGY MITIGATION-3A"
3-13	HYDROLOGY MITIGATION-2B"		Please change to "HYDROLOGY MITIGATION-3B."
3-13	HYDROLOGY MITIGATION-3A		Section title should be "HYDROLOGY MITIGATION-2A."
3-13	HYDROLOGY MITIGATION-3B		Please change to "HYDROLOGY MITIGATION-4B."
5-2	5.1.2	2nd, 1st sentence	The purchase of Pond A-18 has been completed already. Please revise text to reflect this.
5-24	Sediments Mitigation Measure-1A		It seems that this should reference Appendix I and not Appendix J.
6-41	VEGETATION IMPACT-2	2nd	Pease revise to read: "If the existing populations are not removed, the introduction of favorable conditions for there their expansion could be a significant impact."
6-72	WILDLIFE MITIGATION MEASURE-3	5th line	Change "incrase" to "increase."

Page	Section	Paragraph	Comment
Page 6-85	6.4.1.1 Regional Overview	2nd,2nd sentence	Please correct as follows: "Shrimp and crabs, as with many of the fish species, also support recreational and/or commercial fisheries within the Bay and coastal waters and, hence, are an important element of the aquatic community to be considered when evaluating potential effects of the proposed project on habitat quality and availability, and the population dynamics of aquatic resources that may be ~~effected~~ affected by the proposed project."
9-1	9.1.2 Regulatory Setting	1st, 4th line	Revise to read: "… standards (AAQS) to protect…"
9-9	9.3.3 Simultaneous Marsh/April Initial Release		In Section title, change "Marsh" to "March"
10-1	10.0 Socio-Economic Resources	1st	The sections referenced should be 10.1 and 10.2 (not 11.1 and 11.2).
10-3		2nd, last sentence	The Appendix number is missing.
11-7	11.2 Criteria for Determining Significance of Effects	2nd bullet	Remove question marks.
12-3	12.1.2 Projects Addressed in the Cumulative Impacts Analysis	6th	Add "River" to the sentence beginning, "The Lower Guadalupe…"
12-5	Lower Guadalupe River Flood Protection Project	1st , 4th line	Please change "Control" to "Protection."

12-5	Lower Guadalupe River Flood Protection Project	2nd, 4th line	Please change "6,800 cfs" to "8,600 cfs."
12-5	Lower Guadalupe River Flood Protection Project	3rd, 1st line	Change "addition" to "additional."
12-5	Alviso Pond A4	2nd, 2nd sentence	This sentence essentially repeats the first paragraph. Please eliminate.
12-9	Vegetation and Wetlands	2nd, 2nd sentence	In the sentence that begins, "Specifically, breaching the Island Ponds under Pond Management Alternatives 1 and 2…," it seems that the alternatives should read "2 and 3…"
12-13	Fish	3rd, next-to-last line	Remove double comma.

Santa Clara Valley Water District Comment Team: Belinda Allen; Jason Christie; Beth Dyer; Jim Fiedler; Scott Katric; Liang Lee; Jen Men Lo; Terry Neudorf; Katherine Oven; Lisa Porcella; Louisa Squires; Sue Tippets; Scott Wilson.

Comment: **4-1** Include SCVWD as responsible agency since they are interested in participating in the restoration of the Island Ponds.

Response: Several regulatory agencies will also adopt this EIR for their purposes as well. We do not believe it is required that all potential users of an EIR be named in the documents. However, we will make the following change in the DEIR.

Change to DEIR/DEIS: Chapter 1. Section 1.5.1, Page 1-7, Paragraph 4, New last paragraph:

CEQA compliance…

Similarly, other agencies having involvement in this project, such as regulatory agencies (e.g., RWQCB), land owning agencies for which rights-of-way are needed (e.g. Alameda Flood Control District and Santa Clara Valley Water District), and funding agencies (e.g., the Wildlife Conservation Board, SCVWD) may utilize this document to fulfill CEQA requirements.

Comment: **4-2** Address impacts from shutting off water inflows to Pond A4 and propose mitigation measures to offset impacts.

Response: Cargill will shut off the brine flows from Pond A3W to Pond A4 (owned by SCVWD) and from Pond A17 to Pond A18 (owned by the City of San Jose) prior to the implementation of the ISP at these sites. These disconnections are part of the various acquisition agreements and are not part of the ISP. Although the shutoff could be considered an indirect effect of the federal and state agencies' acquisition of the ISP salt ponds, this shutoff of brine flows could also have occurred at any time under Cargill's ownership based on its salt-making needs. Nonetheless we have added information about this shutoff in Chapter 3 Hydrology.

Change to DEIR/DEIS:Chapter 3; Section 3.1.5; Add new section as follows.

3.1.5 Ponds A4 and A18

Alviso Pond A4 has been purchased by the SCVWD to restore wetlands and riparian habitat to mitigate for losses resulting from construction of the lower Guadalupe River Flood Protection Project and from ongoing maintenance of stream channels under the District's multi-year Stream Maintenance Program. Pond A18 has been purchased by the City of San Jose. During Cargill's operations of the salt ponds, water flowed into Pond A4 from Pond A3W through an intermediate

saline channel, and Pond A4 discharged through a siphon under Guadalupe Slough into Pond A5. The intermediate saline channel between A3W and A4 is still owned by Cargill. Water flowed into Pond A18 through a siphon under Artesian Slough from Pond A17, and discharged through a siphon under Coyote Creek to Island Pond A19. Prior to implementation of the ISP, Cargill will take Ponds A4 and A18 out of the existing circulation pattern, as part of its various acquisition agreements. These disconnections are not part of the ISP. However, the USFWS will work with both the SCVWD and the City of San Jose to determine the feasibility and need for maintaining some flow connections between A4 and A5 and/or between A17 and A18 during the ISP.

Comment: **4-3a** Provide further analysis of scour and sedimentation impacts of breaching Island Ponds, especially impacts to the Union Pacific railroad bridge and the length of time projected for marsh development.

Response: Please see DEIR/DEIS Technical Appendix K Alviso Island Pond Breach Initial Stewardship Plan Study for complete analysis of scour and sedimentation. We assume that marsh development mentioned in the comment, is the potential marsh that would form if the Island Ponds are breached. The Island Ponds are presently at approximately elevation 2 and above (near mean high water). Within 1 to 2 years the majority of marsh plant species should be present. As secondary succession progresses, the site will continue to increase in species richness and cover.

Comment: **4-3b** The Siegel and Bachand report identifies an underground transmission line in the Island Ponds.

Response: The Siegel and Bachand feasibility analysis was incorrect in describing underground transmission lines in the Island Ponds. They are overhead electric distribution lines to the Cargill pumps. Those lines along the Island Pond levees can be removed after the pumps are not needed. The distribution line along the Union Pacific railroad tracks will not be disturbed by the Island pond restoration process.

Comment: **4-4** Evaluate impacts from ISP implementation on facilities outside the project area (e.g., non-engineered levees along Mud Slough) and propose mitigation to offset impacts.

Response: No potential impacts to infrastructure due to breaching the Island Pond levees have been identified other than the existing railroad bridge. Potential scour areas are within Coyote Creek, below mean high water

and away from existing levees. No underground utilities have been identified.

Comment: **4-5** The acronym ISP is used inconsistently.

Response: Generally, the acronym ISP refers to the Initial Stewardship Plan. Although the DEIR/EIS may sometimes refer to the ISP as the period of time during which this plan would be implemented (the proposed project), we do not think this use of the term should confuse the reader.

Comment: **4-6** Make global change to document, replacing "flood control" with "flood protection."

Response: Other jurisdictions besides the Santa Clara Valley Water District (e.g., Alameda County Public Works) may not adopt the SCVWD terminology. Therefore, we have made the change from "flood control" to "flood protection" only when dealing specifically with specific projects of the SCVWD.

Comment: **4-7** The Executive Summary should summarize important points of the EIR and should serve as a stand-alone document.

Response: We agree that the Executive Summary should serve as a stand-alone document and that the reader should be able to understand its content without referring to other chapters of the EIR/EIS. We have made a number of changes to the Executive Summary that should help to clarify the summary and improve it as a stand-alone document. For example, we have defined the Initial Release Period (IRP) and Continuous Circulation Period (CCP), first referred to in Table S-1 under the "Project Alternatives" heading. We have also added the list of project objectives, used to evaluate the various project alternatives, to that section of the Executive Summary. Please see the responses to SCVWD Comments-19, -23, and -24, below.

Comment: **4-8** Address impacts from shutting off water inflows to Ponds A4 and A18 and propose mitigation measures to offset impacts.

Response: Please see response to Comment 4-2.

Comment: **4-9** District is willing to explore interim management options for Pond A4 with agencies. Delete sentence beginning "SCVWD would be responsible…" on Page 12-5.

Response: We have deleted the requested sentence.

Change to DEIR/DEIS: Chapter 12; Section 12.1.2; Page 12-5; Paragraph 5 – Pond A5:

Pond A5 includes an existing siphon under Guadalupe Slough from Pond A4. Pond A4 has been acquired by the SCVWD for a proposed restoration project. Based on the proposed schedule for the long-term restoration of pond A4 there may be a requirement for interim management of the pond during the initial stewardship period for the CDFG and USFWS ponds. One or more alternatives being considered by the SCVWD for interim management may include operation of Pond A4 as a batch pond with periodic outflows through the siphon to Pond A5. If SCVWD and USFWS agree that flows from A4 are appropriate, the flows would be restricted to time periods and salinity levels that would not have a significant effect on flow rates or discharge salinities from Pond A7. ~~**SCVWD would be responsible for preparation of a suitable operation plan for interim management of Pond A4 in coordination with the operation of System A7.**~~

Comment: **4-10** "Release" and "discharge" are used inconsistently in the description of alternatives.

Response: We agree that there is some inconsistency in the use of the term "release" and "discharge." We have replaced "discharge" with "release" in the titles of the alternatives (i.e., Alternative 1, Simultaneous March/April Initial Release; and Alternative 3, Phased Initial Release). We agree with the minor editorial corrections noted here. These corrections have been made to the EIR/EIS, but are not noted in detail here. However, these changes will be shown in the FEIS.

Comment: **4-11** Incorporate exhibit and figures as close as possible to the first reference for each.

Response: This convention will be followed in production of the FEIS, which will include the revised DEIR/EIS in its entirety. The FEIR includes only the errata from the DEIR/EIS.

Comment: **4-12** Reduce/eliminate repetitive text.

Response: Without specific page references provided, it is difficult to respond to this comment. We have attempted to minimize redundancy in the document. A certain amount of repetition is unavoidable and appropriate because it preserves the flow and readability of the document and prevents the reader having to constantly refer to other sections.

Comment: **4-13** Provide discussion of methods used to site new flow control structures.

Response: Discharge structures were located in a three-step process. First, the overall complex was divided into systems based on functional grouping of the existing ponds. Most divisions were located at physical obstructions such as a siphon or pump station. Second, inlet and outlet structures were identified to be as close as possible to the Bay to minimize effects on narrow sloughs. Consideration of internal flow patterns within the ponds was considered in locating the structures where flow patterns would vary from existing conditions. For example, the connection from A5 to A7 was relocated to maintain circulation within the ponds. Finally, the specific structure location was selected to be in an area with a minimum of existing marsh between the levee and open water.

Comment: **4-14** State basis for assumptions (e.g., assumption that emissions for all project alternatives will be reduced).

Response: Regarding reduced air emissions, it is anticipated that the on-going maintenance and operation during implementation of the ISP will require similar or lower level of activities than the existing salt making operations. In all alternatives, the number of pumps and the amount of time they will operate will be reduced. All proposed project alternatives will require reduced staffing and operation of fewer emissions-producing vehicles, compared to Cargill's past maintenance and operations.

Comment: **4-15** District concurs with statements that imply existing salt pond levees provide flood protection.

Response: Comment noted. Although the existing salt pond levees provide de facto flood protection, this was not the planned purpose for the levees and they were not designed to provide adequate flood protection for urban environments.

Comment: **4-16** Add potential flooding of adjacent properties as an impact of levee deterioration under Purpose and Need.

Response: We have revised the text (bullet) as requested.

Change to DEIR/DEIS: Chapter S; Section Purpose and Need; Page S-2; Paragraph 2 – Bullet 3:

The project is needed because:

- The ponds will be disconnected from ongoing salt making operations.
- Without initial stewardship the ponds will be subject to increasing salinity and declining ecological value.

- Deterioration of levees could lead to levee breaches and uncontrolled high-salinity discharges, resulting in potential adverse effects on aquatic populations in the adjacent open bay **and potential flooding of adjacent properties.**
- Restoration costs would be increased with site deterioration.
- Water levels would become unmanageable and, especially during the summer months, would result in increased salinity, acidic conditions, and drying of most of the ponds.

Comment: **4-17** The No Project/No Action Alternative should be the existing condition, which includes levee maintenance. Alternative 1 should be the No Action alternative.

Response: The existing condition is actually commercial salt production. However, that is no longer a feasible alternative. As stated in the EIR/EIS (e.g., see page 2-9) , the No Project alternative does not maintain the existing condition since, without maintenance, levees would deteriorate from the existing condition. In this DEIR we used the existing condition as the baseline to assess impacts, but not as the No Project/No Action alternative, since the existing condition is not feasible to maintain.. The comment identifies Alternative 1 (Seasonal Pond Management) as being the alternative closest to the baseline condition. However, the conversion of actively managed ponds to seasonal ponds under Alternative 1 also represents a significant change from the baseline with substantial environmental consequences. None of the four alternatives describe the existing baseline condition, but all four alternatives are compared to this baseline and to each other. The comment implies that the No Project Alternative should be identical to the baseline condition, but this is not a requirement under CEQA or NEPA.

Comment: **4-18** Explain significance of "+++" and "---" in Table S-2.

Response: The pluses and minuses provide a subjective rating of the alternatives. This is explained in added text introducing Table S-2.

Change to DEIR/DEIS: Chapter Executive Summary; Section Project Alternatives; Page S-5; Table S-2:

Table S-2 provides a subjective evaluation of the degree to which each of the alternatives meets the project objectives listed above. Plus (+) and minus (-) signs are used, with more plus signs signaling greater achievement of the project goals, and more minus signs signaling failure to achieve those goals.

Table S-2. Comparison of Alternatives in Meeting Project Objectives

Project Objective	No Project/ No Action	Seasonal Ponds **(Alternative 1)**	Simultaneous **March/April Release ~~Discharge~~ (Alternative 2)**	Phased **Initial Release ~~Discharge~~ (Alternative 3)**
Cease Salt Making Process[1]	+	+	++	+++
Circulate Bay waters through ponds/ Introduce tidal waters to Island Ponds[1]	**- - -**	**- - -**	++	+++
Maintain existing open water and wetland habitat	**- - -**	**- - -**	+++	+++
Maintain ponds in restorable condition	**-**	+	+++	+++
Meet all regulatory requirements, including discharge[2]	**-**	+	+++	+++
Work within existing funding constraints	+++	+++	++	++
Maintain existing levels of flood control	**- - -**	+++	+++	+++

Comment: **4-19** Introduce project objectives in a separate section before Table S-2.

Response: Project objectives have been added to the Executive Summary under the heading "Project Objectives."

Change to DEIR/DEIS: Chapter Executive Summary; New Section Project Objectives; Page S-3; Paragraph 3:

Project Objectives

The ISP Team sought to develop a reasonable range of alternatives to be considered in this EIR/EIS that meet this general goal and a number of specific objectives of the ISP. The specific objectives of the ISP include:

A. Cease salt concentrating process.
B. Circulate bay water through the ponds and introduce tidal hydrology to Island Ponds, if feasible.
C. Maintain existing open water and wetland habitat for the benefit of wildlife, including habitat for migratory shorebirds and waterfowl and resident breeding species.

D. Maintain ponds in a restorable condition to facilitate future long-term restoration.
E. Meet all regulatory requirements, especially discharge requirements to maintain water quality standards in the South Bay.
F. Work within existing funding constraints.
G. Maintain existing levels of flood control

Comment: **4-20** Describe potential impacts, including impacts beyond the project area, to infrastructure that could result from the breaching of Island Pond levees and associated increased water velocities and erosion of mudflats.

Response: No potential impacts to infrastructure due to breaching the Island Pond levees have been identified other than the existing railroad bridge. Potential scour areas are within Coyote Creek, below mean high water and away from existing levees. No underground utilities have been identified.

Comment: **4-21** It appears that impacts to birds will not be mitigated to less than significant levels.

Response: This is correct. Even with mitigation, impacts would remain potentially significant for water birds that use medium salinity ponds. The EIR/EIS acknowledges this as a significant unavoidable impact of the proposed project.

Change to DEIR/DEIS: Chapter Executive Summary; Section Environmental Impacts and Mitigation Measures; Page S-6; Paragraph 6 – Wildlife:

Wildlife- Changes in pond management under all the alternatives would result in wildlife habitat changes with positive or negative impacts for some wildlife species. For example conversion of project area salt ponds to seasonal ponds would result in a substantial loss of open water foraging habitat for water birds. This conversion would be beneficial to snowy plovers. Reduction in medium and high salinity ponds will substantially reduce the available foraging habitat for water birds, which favor this habitat. These impacts **would likely remain at ~~could be mitigated to~~** potentially significant levels **following implementation of ~~by implementation of~~** mitigation measures identified in this EIR/EIS **(i.e. – this is a significant, unavoidable project impact)**.

Comment: **4-22** Duration of ISP (20+) is not short term.

Response: The point made on the page S-3 is that the ISP will operate over a range of time depending on the specific pond system, the exact duration of

which is not presently known and depends on a number of factors, including the time needed to provide additional flood protection, resolution of mercury issues, adequate sources of sediments, and the availability of funding for long-range restoration planning and implementation. A range of 5 to 20+ years is given to account for differences in pond systems and locations. The use of the phrase "short term" is relative to the long-term restoration program.

Comment: **4-23** Define acronym "ISP" at the beginning of Executive Summary.

Response: We have added a reference to the ISP and defined this acronym at the beginning of the Executive Summary. It is not necessary to redefine the acronym in Table S-3.

Change to DEIR/DEIS: Chapter Executive Summary; Section Introduction; Page S-1; Paragraph 4:

In the second stage of restoration, the ponds will be managed by the agencies in a manner that provides habitat values while the long-term restoration plan is being developed and implemented. **The South Bay Salt Pond Initial Stewardship Plan (ISP), dated June 2003, addresses management of the ponds at this stage. Under the ISP,** ~~**In this Initial Stewardship stage,**~~ Bay waters will be circulated through the ponds following installation of water control structures and the existing levees will be maintained for minimum flood protection. This EIR/EIS covers only the second stage of restoration, i.e., ~~**Initial Stewardship**~~ **management under the ISP.**

Comment: **4-24** Define the acronyms "IRP" and "CCP" before they appear in Table S-3.

Response: Text is added before Table S-1 introducing the terms Initial Release Period (IRP) and Continuous Circulation Period (CCP) and these acronyms are added to the Table S-3 legend.

Change to DEIR/DEIS: Chapter Executive Summary; Section Project Alternatives; Page S-3; Paragraph 3:

The purpose of this project is to provide a biologically sound interim management program for the ponds during planning and implementation of the long-term salt pond restoration. One No Action and three action alternatives were analyzed in detail in the EIR/EIS. A summary of the alternatives is shown on Table S-1 **which shows the differences of the alternatives with respect to levee maintenance, Initial Release Period (IRP), Continuous Circulation Period (CCP), and Public Access. The IRP is the start up period for the circulation of bay water through the pond systems. This**

period is expected to last approximately two months and involves release of higher salinity water to the bay. The CCP is the management period following the IRP during which bay waters will be continuously circulated through the ponds and which may last from five to twenty or more years. A ~~, a~~ comparison of alternatives in meeting project need is shown on Table S-2, and a comparison of project impacts of project alternatives is shown on S-3.

Comment: **4-25** The loss or reduction of flood protection that is likely to result from deterioration of the salt pond levees is a Socio-Economic impact (No Project Alternative), since this would impact the Silicon Valley industries along the bay front. There are some significant impacts in this category.

Response: Mention of this potential impact has been added to the chapter on socio-economic impacts (Chapter 10). Because this impact pertains to the No Project/No Action Alternative only, no mitigation measures are required or proposed.

Change to DEIR/EIS: Chapter 10; Section 10.4; Page 10-4 – The following paragraph is inserted after Paragraph 4:

In addition, the No Project/No Action Alternative would result in potentially significant socioeconomic impacts to Silicon Valley industries along the bay front due to deterioration of the salt pond levees and consequent flooding problems that may result from the alternative. Although this is a potentially significant impact, since this alternative would result in the project not being implemented, no mitigation measures are proposed.

Comment: **4-26** Include text clarifying uses of Pond A4 by District.

Response: We have revised the EIR/EIS text accordingly.

Change to DEIR/EIS: Chapter 1; Section Introduction 1.1.1 Alviso Pond Complex; Page 1-1; Paragraph 6:

The Project does not include Ponds A18 and A4. Pond A4 will be used by **the** Santa Clara Valley Water District to restore wetland and riparian habitats to mitigate for losses resulting from **(1)** construction of the Lower Guadalupe River Flood Protection Project, **and (2) ongoing maintenance of stream channels under the District's multi-year Stream Maintenance Program.** The City of San Jose recently purchased Pond A18 from Cargill. The USFWS acquired fee title to Ponds A1 to A8 (with the exception of Pond A4) and portions of A22

and A23. Cargill Salt gave up its reserved salt-making rights on Ponds A9 to A17, Ponds A19 to A21 and portions of Ponds A22 and A23. The FWS previously held fee title to these ponds.

Comment: **4-27** Add "Project Objectives" section to Chapter 1.

Response: The project objectives are explained in the Alternatives chapter (Chapter 2, Section 2.2). The discussion of project objectives is placed here rather than in Chapter 1 because alternatives were evaluated and selected for further analysis based on their ability to meet these objectives. Thus, the list of objectives is a convenient reference for this chapter.

Comment: **4-28** State in Project Description that flow of water from other ponds into Ponds A4 and A18 will be shut off.

Response: Text stating that Cargill will shut the flow of brines to Ponds A4 and A18 has been added to Section 1.4; however, this action is not part of the ISP and impacts from this action are not directly evaluated in the EIR/EIS. This action has been added to hydrology chapter. (see Response to Comment 4-2).

Change to DEIR/EIS: Chapter 1; Section 1.4 Project Description; Page(s) 1-5; Paragraph 6 and Page 1-6

The ISP proposes the following changes to existing operations:

1. Circulate bay waters through reconfigured pond systems and release pond contents into the Bay. The plan will require installing new water control features, consisting of intake structures, outlet structures and additional pumps to maintain existing shallow open water habitat. In addition, existing levees, dredge locks, and water control structures will be maintained and modified, as needed. The three complexes (Alviso, Baumberg, and West Bay) that are currently managed as one system will each be subdivided into several systems within which water will circulate. Some of the systems will be further divided into two or more subsystems. Smaller systems allow circulating water to have a shorter residence time, with less time for evaporation and salt concentration. **Prior to implementation of the ISP, Cargill will shut the flow of water from other ponds into Pond A4 (owned by SCVWD) and A18 (owned by CSJ); however, this shut off action is not part of the ISP.**

Comment: **4-29** What is the projected timeframe for installing water control structures?

Response: The water control structures in the low and medium salinity ponds will be installed in two years; structures in other ponds may be installed in five years.

Comment: **4-30** Identify SCVWD as a "responsible agency" in Section 1.5.

Response: See Response to Comment 4-1.

Comment: **4-31** Address impacts to starting water surface elevations used for HEC-2 models when determining flood control levee height requirements.

Response: Based on existing SCVWD design documents, the District has used the 10-year high tide elevation at the Bay for starting water surface elevations for estimated flood control levee height requirements. The starting water level and design flows would not be affected by the ISP project. All pond discharge flows would occur at low tide, or periods of low water in the sloughs, not during flood events.

Comment: **4-32** Specify methods used to evaluate the increase in risk or severity of flooding from project. Review of the 1988 Corps Shoreline Study does not consider flooding impacts of project-related scour or deposition.

Response: The Corps'1988 Shoreline Study was used to evaluate the areas that may be subject to increased risk from tidal flooding due to levee failures within the ponds. Project related scour and deposition were evaluated qualitatively based on the extent and location of maximum tidal velocities. No areas of increased project related deposition were identified outside existing deposition areas below mean high water, or within the ponds. All areas of increased project related scour were within Coyote Creek, below mean high water, and would increase the existing flood capacity. In addition, storage within the Island Ponds may reduce downstream flows and therefore lower flood elevations. This may be a benefit to flood control in large flood events.

Comment: **4-33** What are the potential impact(s) to the underground transmission line described in the Feasibility Study conducted by Siegel & Bachand of breaching Island Pond levees?

Response: See Response to Comment 4-3b. The Feasibility Study indicates an underground electrical transmission line on the south side of the Island Ponds to serve the Coyote Pump at Pond A19. The study is incorrect. The line is an overhead service. The service for the pumps along the Island Pond levees will not be needed after the levee breach and can be removed. The line along the Union Pacific railroad tracks will not be disturbed by the Island Pond restoration..

Comment: **4-34** Only proposed flows are shown in Figure 1-2. Add a baseline map showing existing flows and proposed changes. Add A4 with ownership and proposed shutoff to maps.

Response: Figures 1-2, 1-3, and 1-4 were incorrectly labeled "Existing and Proposed Structures" and have correctly labeled as "Proposed Structures". The location of Ponds A4 is added to Figure 1-2.

Comment: **4-35** Clarify whether Figures 1-2, 1-3 & 1-4 show the existing or proposed plan for water circulation and label accordingly.

Response: Figures 1-2, 1-3, and 1-4 show water control structures and circulation proposed under the ISP. As noted in the Response to Comment 4-34, above, the title of these figures has been corrected.

Comment: **4-36** Add "Maintain existing levels of flood control" to the list of project objectives on page 2-2.

Response: This objective has been added to the list of objectives in Chapter 2.

Change to DEIR/EIS: Chapter 2; Section 2.2 Development of Alternatives; Page(s) 2-1; Paragraph 4 and Page 2-2:

The general goal of the Initial Stewardship Plan (ISP) is to operate and maintain the South Bay Salt Ponds in an environmentally sound and cost-effective manner while long-term restoration plans are developed and implemented. See Appendix A. The ISP Team sought to develop a reasonable range of alternatives to be considered in this EIR/EIS that meet this general goal and a number of specific objectives of the ISP. The specific objectives of the ISP include:

A. Cease salt concentrating process.
B. Circulate bay water through the ponds and introduce tidal hydrology to Island Ponds, if feasible.
C. Maintain existing open water and wetland habitat for the benefit of wildlife, including habitat for migratory shorebirds and waterfowl and resident breeding species.
D. Maintain ponds in a restorable condition to facilitate future long-term restoration.
E. Meet all regulatory requirements, especially discharge requirements to maintain water quality standards in the South Bay.
F. Work within existing funding constraints.
G. Maintain existing levels of flood control

Comment: **4-37** Discuss the circumstances under which the Island Ponds would be operated as seasonal ponds.

Response: Seasonal pond operation is discussed on page 2-31 of the DEIR/EIS. Managing the Island Ponds as seasonal ponds is an option if the ponds were not able to be breached in a timely manner, for example, if additional studies were requested by regulatory agencies.

Comment: **4-38** Revise to reflect that the District has obtained all necessary permits to implement the Lower Guadalupe Flood Protection Project, construction is underway, scheduled for completion in December 2004.

Response: Text has been revised as requested.

Change to DEIR/EIS: Chapter 2; Section 2.4.3 Pond Management Alternative 2; Page(s) 2-26; Paragraph 6 and Page 2-27:

The Santa Clara Valley Water District ~~**is in the process of obtaining permits**~~ **has obtained all permits necessary** to implement the Lower Guadalupe River Flood Protection Project, which will accommodate the 17,000 cfs 100-year flood capacity of the Guadalupe River Flood Control Project currently under construction. The Guadalupe River Project is located upstream of the Lower Guadalupe River Flood Protection Project and is scheduled to go on line in spring 2004.

Comment: **4-39** Water levels in Pond A8 must be maintained at a level that does not negatively impact the capacity of the pond for floodwater storage as part of the SCVWD's Lower Guadalupe River Flood Protection Project.

Response: Under all three pond management alternatives, Pond A8 would be managed as a seasonal pond. The ISP does not include plans to lower water levels during winter to provide additional flood storage capacity for the Lower Guadalupe project.

Comment: **4-40** Standardize use of metric and American units.

Response: We have attempted to maintain consistency of units where it is important to the analysis of impacts to do so.

Comment: **4-41a** Levees do provide some level of protection from tidal flooding.

Response: We acknowledge that salt pond levees have provided de facto flood protection in the past. However, they were never engineered to provide adequate flood protection for urban environments.

Comment: **4-41b** Commenter provides quote from 1988 Corps of Engineers study.

Response: Comment noted.

Comment: **4-41c** Maintenance of levees for flood protection is a necessary and important component of the ISP. Analyze impacts to flood protection.

Response: Impacts to flood protection from increases in tidal flow and breaches to the Island Ponds were addressed in the DEIR/EIS (see, for example, Hydrology Impact-1, pages 3-11 and 3-12).

Comment: **4-42a** Add paragraph re: 2004 funding for a Corps of Engineers flood damage study.

Response: This text has been added.

Change to DEIR/EIS: Chapter 3; Section 3.1.4 Flood Protection; Page(s) 3-4; Paragraph 7 and Page 3-5:

This list may not include all salt pond levees that may provide incidental flood control benefits. The Coastal Conservancy has recently retained a flood control specialist to review and update the list of critical flood control levees as part of Long-term restoration planning effort. The work on this review is under way at this writing and there are no results that are suitable for reporting here. **Congress has authorized and appropriated funds to the Corps in fiscal year 2004 to initiate a study to review the results of the 1988 study and evaluate the federal interest in tidal and fluvial flood damage reduction, environmental restoration and protection, and related purposes.**

Comment: **4-42b** The Corps is now an authorized and funded partner that can bring additional federal funding.

Response: Comment noted.

Comment: **4-43** Add significance criterion that addresses substantial redirection or alterations of flows to ponds adjacent to ISP ponds.

Response: The significance criteria for hydrological impacts has been revised accordingly.

Change to DEIR/EIS: Chapter 3; Section 3.1.4 Flood Protection; Page(s) 3-5; 2nd and 3rd bullets:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river **or by altering or otherwise affecting flow to adjacent ponds that are not part of the ISP**, in a manner which would result in substantial erosion or siltation on-or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river **or by altering or otherwise affecting flow to adjacent ponds that are not part of the ISP**, in a manner which would result in flooding on-or off-site.

Comment: **4-44** How was sedimentation assessed, if it was not modeled? What assumptions were made?

Response: As described in Appendix K (the Alviso Island Pond Breach Initial Stewardship Plan Study), sedimentation and scour were evaluated based on changes in the tidal flow velocities and using empirical relationships between the tidal prism and channel cross section.

Comment: **4-45** Is 1995 representative of a typical wet year?

Response: The wet year in 1995 was used to evaluate the winter operation during a year with high rainfalls. A wet year was chosen to address the primary concern for winter operation, which is hydraulic capacity in the system structures. Because most of the system will depend on gravity culverts to discharge, high rainfall in combination with high stream flows and storm tides could limit discharge capacity and increase water levels in the ponds.

Comment: **4-46** Analyze impacts to mitigation site on Coyote Creek downstream of Dixon Landing Road.

Response: As described in Appendix K (the Alviso Island Pond Breach Initial Stewardship Plan Study), the maximum change in the tidal range upstream of the Island Ponds, downstream of Dixon Landing Road, is less than 0.3 feet at high tide. This is based on the conservative assumptions that the levee breach size expands to allow full tidal inflow to the ponds, and that there is no change in the channel cross-section in Lower Coyote Creek. The actual effect will be much smaller, probably closer to 0.1 feet. This is not expected to affect existing marsh areas.

Comment: **4-47** Please correct sentence fragment on page 3-10.

Response: This sentence has been completed.

Change to DEIR/EIS: Chapter 3; Section 3.3.3, Page(s) 3-10; Paragraph 1:

The maximum predicted velocities at the downstream breach for Pond A21 and the downstream breach for Pond **A19 exceed this range, which suggests that these breaches may scour to be wider than 25 m (the initial breach width for both breach scenarios modeled).**"

Comment: **4-48** Conduct additional study of impacts of breaching Island Pond levees on the UPRR railroad bridge, including the extent and nature of modifications across Coyote Creek near Ponds A17 and A21 relative to scour and sedimentation.

Response: As described in Appendix K (the Alviso Island Pond Breach Initial Stewardship Plan Study), the hydraulic regime was evaluated, including the Island Pond breach conditions. The maximum scour at the bridge was estimated to be approximately 2.5 feet, based on conservative assumptions regarding the sizes of the breaches (see also, Hydrology Impact-3, page 3-12 of DEIR/EIS). This is comparable to the type of scour which could be expected during a large flood event, and was not considered significant. Proposed mitigation measures include monitoring of the scour conditions following breaching of the Island Ponds (see Hydrology Mitigation-2A, -2B, page 3-13 of DEIR/EIS).

Comment: **4-49** Was the assumption that "…under present conditions neither scour nor deposition occurs" ground-truthed?

Response: As described in Appendix K (the Alviso Island Pond Breach Initial Stewardship Plan Study), Coyote Creek has been a deposition area. The assumption was made to provide a conservative estimate of the potential scour.

Comment: **4-50** Add provision for a qualified engineer to inspect mudflats and RR piers following major storm and flood events.

Response: Provision has been added to Hydrology Mitigation-2A for inspections of mudflats and railroad bridge piers adjacent to the Island Pond breaches after serious flood events until the system stabilizes.

Comment: **4-51** Provide the acreage of Island Ponds and an explanation of the double asterisk in Table 4-5 on page 4-26.

Response Add to Notes: Acreages for the Island Ponds were also provided in Table 2-1 of the DEIR/EIS. The total for all three Island Ponds (A19, A20, and A21) is 475 acres. Island Ponds** notes that the Island Pond breach would not occur at the same time as any other initial release.

Change to DEIR/EIS: Chapter 4; Table 4-5, Page 4-27:

Notes:
[1] Ambient Conditions = <33ppt salinity; Drought Conditions = 33-35 ppt salinity; Stage 1 = 36-38 ppt salinity;
Stage 2 = 36-38 ppt salinity; Stage 3 = 42-45 ppt salinity; Stage 4 = >45 ppt salinity
[2] Date of maximum day of areal impact during IRP.
[3] Duration of period with 10% or more of area within significant category.
[4]Context – Areal extent of significant intensity classes; greater than 10% considered significant.
[5] Daily maximum salinity predicted for approximately 2 hours of maximum day of IRP.
[6] Daily average salinity over 24 hours of maximum day of IRP.
*** Old Alameda Creek was not modeled in the same detail as the other receiving waters.**
**** Island Ponds - notes that the Island Pond breach would not occur at the same time as any other initial release**

Comment: **4-52** Correct inconsistency in the stated size of the area that will have a maximum salinity higher than 45 ppt.

Response: There is not an inconsistency in the stated size of the areas in these paragraphs. The 3.2 acres is for daily averaged salinity greater than 45 ppt. The 4.2 acres is for the daily maximum salinity greater than 45 ppt. The daily maximum is based on the highest 2 hours during the day and would have a greater area than the daily average. This is consistent with the discussion for other systems.

Comment: **4-53** Confusion regarding numbering of sediments impacts and mitigation under Alternative 2.

Response: The numbering of sediments impacts and mitigation measures is correct. Sediments Impact-2 appears under Section 5.3.2, the analysis of impacts for Alternative 1 (p. 5-18 of the DEIR/EIS). This impact does not apply to Alternatives 2 or 3. The proposed mitigation for Sediments Impacts-3 and -3A is identical to the proposed mitigation for Sediments Impact-1; therefore, reader is referred back to the Impact-1 mitigations (Sediments Mitigation Measures-1A, -1B, and -1C).

Comment: **4-54** Revise Vegetation Impact-2 to reflect the District's efforts to control *Spartina alterniflora*.

Response: The EIR/EIS text has been revised as requested.

Change to DEIR/EIS: Chapter 6; Section 6.2.3.3, Page(s) 6-41, *Vegetation Impact-2*:

…If the existing populations are not removed, the introduction of favorable conditions for ~~there~~ **their** expansion could be significant. ~~**At present, the Santa Clara Valley Water District plans to remove these populations in spring of 2004, prior to the expected date for ISP implementation.**~~ **The Water District's efforts to control *S. alterniflora* and its hybrids are a mitigation element of the District's multi-year Stream Maintenance Program. Under this Program, the District will treat up to 10 acres of *S. alterniflora* and hybrids throughout Santa Clara County and Coyote Slough over a five-year period, starting in 2004. Prioritization of sites targeted for control efforts is currently underway and will center on the most heavily infested areas first. At this point, it is unclear how the patches located in the vicinity of the Island Ponds will be prioritized, as the most heavily infested areas within Santa Clara County are near Palo Alto and Mountain View. In any case, control efforts will occur in the fall of each year, in order to avoid impacts to the endangered California clapper rail.**

Comment: **4-55** Is the loss of pickleweed habitat less than significant without mitigation?

Response Yes, as stated on page 6-43 of the DEIR/EIS, the expected loss of pickleweed habitat and other vegetation present near the shoreline "are not expected to affect vegetation growing higher up on inboard levee slopes." Pickleweed may actually survive at these salinities, but this is a very small area of sparse pickleweed that will replaced in other ponds where salinities are reduced.

Comment: **4-56** Indicate source of statement beginning "It is now estimated that the river supports a moderate Chinook salmon run" on page 6-89.

Response: The reference for this statement is Habitat Restoration Group 1994. This reference, which precedes the statement in the DEIR/EIS has been moved to make clear that it refers to the statement quoted.

Change to DEIR/EIS: Chapter 6; Section 6.4.1.2, Page 6-89, 1st Paragraph:

…river within the last 10 years (Habitat Restoration Group 1994, 1995; USACE 1998). These fish may be an undocumented indigenous population or strays from wild or hatchery populations from the Sacramento-San Joaquin River system (Habitat Restoration Group 1994). A total of between 50 and 200 spawning adult fish was estimated to occur in the river in 1994 ~~**(Habitat Restoration Group 1994)**~~. It is now estimated that the river

supports a moderate Chinook salmon run of approximately several hundred fish with a smaller steelhead run (fewer than 100 fish annually) **(Habitat Restoration Group 1994)**. Plans and projects are being developed to enhance habitat conditions and fish passage within the Guadalupe River watershed.

Comment: **4-57** Revise or eliminate the statement that "Cargill still retains the salt making rights on these lands" on page 7-5.

Response: This statement in the DEIR/EIS was misleading. Some of Cargill's salt-making rights were transferred to CDFG and USFWS with the acquisition. The text has been revised accordingly.

Change to DEIR/EIS: Chapter 7; Section 7.1.3 History; Page 7-5; Paragraph 2

In 1972, Congress created the San Francisco Bay National Wildlife Refuge (renamed the Don Edwards SFBNWR in 1995 in honor of the former congressman). In 1979, SFBNWR purchased 11,430 acres from Leslie Salt (now Cargill Salt). Cargill still retains the salt making rights on approximately 8,000 acres of these lands. However, in 2000, Cargill Salt decided to consolidate its Bay Area salt operations and offered 19,000 acres of excess ponds in the North and South Bays (reduced to 16,500 acres in 2002) to the state and federal government. **In March 2003, USFWS and CDFG acquired 16,500 acres of industrial salt ponds and/or associated salt-making rights from Cargill, of which 15,100 acres are located in the South Bay.** To date, there has been no formal NRHP eligibility evaluation of the South Bay salt works.

Comment: **4-58** Lower Guadalupe River Flood Protection Project

Response: Text has been revised as requested.

Change to DEIR/EIS: Chapter 12; Section 12.1.2 Projects Addressed in the Cumulative Impacts Analysis; Page 12-5; Paragraph 1

Lower Guadalupe River Flood Protection Project—The Santa Clara Valley Water District (SCVWD) ~~**is in the process of obtaining permits**~~ **has obtained all permits necessary** to implement the Lower Guadalupe River Flood Protection Project **and construction is underway with completion scheduled for December 2004. This project, in addition to accommodating** ~~**which will accommodate**~~ the 17,000 cfs 100-year flood capacity of the Guadalupe River Flood ~~**Control**~~ **Protection** Project currently under construction, **will also accommodate up to an additional 1,350 cfs of flow from pump stations and gravity outfalls, for a projected capacity of 18,350 cfs in the Lower Guadalupe**

River. The Guadalupe River Project is located upstream of the Lower Guadalupe River Flood Protection Project and is scheduled to go on line in spring 2004.

Comment: **4-59** Clarify statement on page 12-5 to indicate that the purpose of the Lower Guadalupe River Flood Protection Project is to provide flood protection to the Alviso community.

Response: Text has been revised for clarification.

Change to DEIR/EIS: Chapter 12; Section 12.1.2 Projects Addressed in the Cumulative Impacts Analysis; Page 12-5; Paragraph 2

The purpose of the Lower Guadalupe River Flood Protection Project is to provide flood protection to the Alviso community. As currently designed, the Lower Guadalupe River Flood Protection Project would affect the magnitude and duration of flooding downstream of the project at the Cargill Salt Ponds, and in Alviso. Currently, when flood flows in the lower Guadalupe River exceed ~~**6,800**~~ **8,600** cfs, Alviso Slough downstream of the Union Pacific Railroad crossing will over-top its west bank at Pond A8W. The flood control project would increase lower Guadalupe River channel capacity at the railroad crossing to 17,000 cfs and therefore increase the potential for flooding conditions in the downstream salt ponds. During flood conditions, estimated depths in ponds A5, A7, A8D and A8W would increase by up to 1 foot compared to current conditions. Flood volumes would increase from 15 to 21% and duration of flooding would increase by 12 to 30%. Without pumping or other evacuation methods, it would take months, even years for the floodwaters to evaporate under current conditions.

Comment: **4-60** The Lower Guadalupe River Flood Protection Project is designed to affect only ponds on the west bank of Alviso Slough.

Response: Text has been revised to indicate that the Lower Guadalupe River project is designed to affect ponds on the west bank of Alviso Slough only.

Change to DEIR/EIS: Chapter 12; Section 12.1.2 Projects Addressed in the Cumulative Impacts Analysis; Page 12-5; Paragraph 2

The purpose of the Lower Guadalupe River Flood Protection Project is to provide flood protection to the Alviso community. As currently designed, the Lower Guadalupe River Flood Protection Project would affect the magnitude and duration of flooding downstream of the project at the Cargill Salt Ponds, and in Alviso. Currently, when flood flows in the lower Guadalupe River exceed ~~**6,800**~~ **8,600** cfs, Alviso Slough downstream of the Union Pacific Railroad

crossing will over-top its west bank at Pond A8W. The flood control project would increase lower Guadalupe River channel capacity at the railroad crossing to 17,000 cfs and therefore increase the potential for flooding conditions in the downstream salt ponds **on the west bank of Alviso Slough, primarily Pond A8**. During flood conditions, estimated depths in ponds A5, A7, A8D and A8W would increase by up to 1 foot compared to current conditions. Flood volumes would increase from 15 to 21% and duration of flooding would increase by 12 to 30%. Without pumping or other evacuation methods, it would take months, even years for the floodwaters to evaporate under current conditions.

Comment: **4-61** Please clarify the context of the following sentence: "Flood volumes would increase from 15 to 21% and duration of flooding would increase by 12 to 30%."

Response: The A7 pond system is estimated to be flooded during the 100-year flood event due to overflows from the Guadalupe River. The Lower Guadalupe River Flood Protection Project would increase the depth and duration of flooding in the ponds.

Comment: **4-62** Correct sentence beginning "Alviso Pond 4 will be used by the Santa Clara Valley Water District to restore wetland habitat…" on page 12-5.

Response: Text of the EIR/EIS has been revised as requested.

Change to DEIR/EIS: Chapter 12; Section 12.1.2 Projects Addressed in the Cumulative Impacts Analysis; Page 12-5; Paragraph 4

Alviso Pond A4—Alviso Pond A4 will be used by the SCVWD to restore wetland **~~and riparian~~** habitat**~~s~~** to mitigate for **~~losses~~ impacts** resulting from **the Stream Maintenance Program and** construction of the Lower Guadalupe River Flood Protection Project.

Comment: **4-63** Restoration of tidal action to the Island Ponds should result in an increase in middle to high marsh, rather than "lower marsh to middle marsh" as stated in the DEIR/EIS.

Response: This correction has been made

Change to DEIR/EIS: Chapter 12; Section 12.2.4 Biological Resources; Page 12-10; Paragraph 5

Restoration of tidal action to the 475-acre Island Pond area, following the proposed breaching of the Island Ponds, would result in a substantial long-term increase in **~~lower~~ middle** marsh and **~~middle~~ high** marsh habitats. These habitats are potentially suitable for various endangered

species and species of special concern, including the California clapper rail, California black rail, salt marsh harvest mouse, salt marsh wandering shrew, northern harrier, Alameda song sparrow and salt marsh common yellowthroat.

Comment: **4-64** Benefits to water birds of managing ponds as medium-salinity batch ponds can only be counted if this option is employed.

Response: Comment Noted.

Comment: **4-65** Correct labeling of "Coyote Creek" and "Mud Slough" on the Alviso Complex Map in Appendix A.

Response: The Alviso Complex Map is part of Appendix A – ISP which was prepared in March 2003 and can not be changed at this time.

Comment: **4-66** Will breaching the Island Ponds subject non-engineered levees/stream banks of Coyote Creek downstream of Dixon Landing Road to higher high tides and lower low tides, or higher stream flow velocities such they may erode at a higher rate?

Response: Potential scour areas are within Coyote Creek, below mean high water and away from existing levees. This would increase the existing flood capacity. The maximum change in the tidal range upstream of the Island Ponds, downstream of Dixon Landing Road, is less than 0.3 feet at high tide. This is not expected to affect existing levees or stream banks.

Comment: **Editorial Comments** (minor typo(s), corrections, etc.)

Response: We agree with the minor editorial corrections noted here. These corrections have been made to the EIR/EIS, but are not noted in detail here. However, these changes will be shown in the FEIS.

Commentor: 5 Alameda County Public Works - Flood Control District

COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
DEVELOPMENT SERVICES DEPARTMENT
951 Turner Court, Room 100
Hayward, CA 94545-2698
(510) 670-6601
FAX (510) 670-5269

February 3, 2004

Carl Wilcox, Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
Pos Office Box 47
Yountville, CA 94599

Dear Mr. Wilcox:

Subject: **Draft DEIR-EIS – South Bay Salt Pond Initial Stewardship Plan**

The Alameda County Flood Control District have performed cursory review of the above-referenced subject and offers the following general comments for consideration thus far:

1. Any planned facility construction and/or improvements that will necessitate encroachment to Alameda County Flood Control District right of way; such as culverts connecting salt ponds to the flood control creeks, etc., would require coordination in both the design and permitting stage. 5-1

2. Any work on the Alameda Creek Federal project would require coordination and approval of the Corps of Engineers. 5-2

3. In the event that Flood Control District levees will be used for public access in the future, a license agreement with other agencies such as East Bay Regional Park District or the involved City, will have to be developed in order for these other public agencies to accept the maintenance and liability responsibilities resulting from the public use of these facilities. 5-3

4. In the event that any Flood Control District levees will need to be breeched in the future, a fully funded long term plan pertaining to the exotic and hybrid Spartina species should be in placed to effectively work with the adjacent property owners. 5-4

If you have any questions or comments, contact Fernando Gonzales at (510) 670-5267.

Very truly yours,

Scott Swanson
Deputy Director
Development Services Department

/FG

TO SERVE AND PRESERVE OUR COMMUNITY

Comment: **5-1** Encroachment of Alameda County Flood Control District right of way requires coordination during design and permitting stages.

Response: We applied for an encroachment permit from the Alameda County Flood Control District (ACFCD) for geotechnical analysis for the proposed structure (Baumberg 2C-14) in the flood control levee. We forwarded preliminary structure design drawings to ACFCD engineers for their approval on February 2, 2004.

Comment: **5-2** Work on the Alameda Creek federal project requires design and permitting coordination with US Army Corps of Engineers.

Response: We contacted the US Army Corps of Engineers on February 11, 2004 regarding the proposed structure (Baumberg 2C-14) in the ACFCD levee. We will continue to work closely with the Corps to gain their approval of work within Alameda Flood Control Federal project area.

Comment: **5-3** Use of Alameda County Flood Control District levees for public access requires license agreement.

Response: If the Alameda County Flood Control levees are used for public access, a license agreement with either East Bay Regional Park District or the involved City will be developed to protect ACFCD from liability and additional maintenance costs.

Comment: **5-4** Possible breach of Alameda County Flood Control District levees requires fully funded long term plan regarding exotic and hybrid *Spartina*.

Response: The ISP does not include the breaching of any levees at the Baumberg Complex.

Commentor: 6 Hayward Shoreline Citizens Advisory Committee

HAYWARD AREA SHORELINE PLANNING AGENCY

Hayward Area Recreation and Park District
East Bay Regional Park District
San Lorenzo Unified School District
Hayward Unified School District
City of Hayward

February 3, 2004

Ms. Margaret Kolar
Refuge Manager
U.S. Fish and Wildlife Service
San Francisco Bay NWR Complex
P.O. Box 524
Newark, CA 94560

RE: Draft Environmental Impact Statement/Environmental Impact Report for the South Bay Salt Ponds Initial Stewardship Plan

Dear Ms. Kolar:

Thank you for providing the Hayward Area Shoreline Planning Agency (HASPA) with an opportunity to comment on the Draft EIS/EIR. The primary purpose of HASPA, with the support of its Citizens Advisory Committee (HASCAC), is to coordinate planning activities and carry out adopted policies for the shoreline area in order to protect and improve the shoreline for future generations. Since 1970, through the efforts of HASPA and its member agencies, over 3,150 acres have been purchased for public ownership, preserved, restored, or are in the process of being returned to wetlands, marshes and protected uplands.

Members of HASCAC reviewed the Draft EIS/EIR at a special meeting on January 29, 2004. Comments have been sent to the California Department of Fish and Game; a copy is also provided for your consideration pursuant to NEPA (please refer to attached letter). HASPA looks forward to reviewing the Final EIS/EIR when it becomes available.

If you have any questions concerning these comments, please do not hesitate to contact Gary Calame, HASPA staff liaison, at 510-583-4226 or gary.calame@hayward-ca.gov.

Sincerely,

Joseph Hilson

Joseph Hilson, Chair
HASPA Board of Trustees

Hayward Area Shoreline Planning Agency
Citizens Advisory Committee

February 2, 2004

Mr. Carl Wilcox
Habitat Conservation Manager
California Department of Fish and Game
P.O. Box 47
Yountville, California 94599

Subject: South Bay Salt Ponds Initial Stewardship Plan
Draft Environmental Impact Report/Environmental
Impact Statement. December 2003

Dear Mr. Wilcox:

The 5,500 acre Baumberg Pond Complex is within the Hayward Area Shoreline Planning Agency's (HASPA) area of planning interest. The Citizens Advisory Committee(CAC) of HASPA is pleased that the Baumberg ponds are now under public ownership through the purchase of these ponds by the California Department of Fish and Game. 6-1

The Initial Stewardship Plan (ISP) states there are 23 ponds in the Baumberg Complex. Why is POND 3C included as it was not purchased from Cargill, Inc.?

The ISP as stated in the subject document will provide restoration for the Baumberg ponds with a managed water system that allows bay water to circulate and to discharge back into San Francisco Bay. The ponds will be managed to provide suitable habitats for fish and wildlife. 6-2

The CAC believes that the Baumberg ponds provide a wide diversity for wildlife, especially for endangered species. Each pond should be looked at for its own best habitat values. The Baumberg area has a great opportunity for providing and maintaining the necessary diversity of habitats through skillful management. 6-3

Corrections: Map Pages 1-27 and 1-30, Figures 1-1 and 1-4 and Volume II, Page 1-5, Figure 1-2. The maps should be corrected to indicate a complete Eden Landing Ecological Reserve (ELER) area. The former Perry Gun Club property portion of ELER was omitted from the maps. 6-4

The CAC is aware of a plan by Alameda County Flood Control (ACFC) to use Baumberg ponds in the area north of Alameda Creek to increase the flow capacity of Alameda Creek. For two years ACFC has been studying the feasibility of widening the channel on the north side into the ponds. The final INITIAL STEWARDSHIP PLAN EIR/EIS should reflect this study. 6-5

Page 2-34: Old Alameda Creek should not be eliminated as a migration route for salmonids. Steelhead have been found in Old Alameda Creek above the 20 tide gates at the bridge on Hesperian Blvd., and in Ward Creek at Folsom Avenue in Hayward. There is concern that in other areas of the south bay, salmonids would be drawn into the intake structures into the ponds and remain trapped. The ISP states there are no salmonids migration concerns in Old Alameda Creek. The ISP should take into account that a new intake structure at POND 6 could be harmful to salmonids. Pond water discharge timing and salinity should be considered during salmonid migration in Old Alameda Creek. 6-6

Sediment sampling in the Baumberg ponds has been limited. The CAC requests additional sampling in the ponds to determine if there are concentrations of contaminants. In reviewing Page 4-46 Table 4-7, there is no explanation for the high levels of arsenic, cadmium, and lead in POND B9. Will Fish and Game be able to provide pre-project and post implementation monitoring and management for heavy metals, hydrology, and changes in hydrology that could affect foraging birds and nesting birds within the ponds. Weekly surveys are needed to manipulate water levels for certain species of waterfowl and shorebirds. 6-7a 6-7b 6-7c

The CAC is concerned that public access must not interfere with wildlife habitat values. Public access must be monitored especially during the nesting season of Snowy Plovers and other endangered species. 6-8

The Baumberg Complex perimeter contains stands of invasive non-native Spartina alterniflora and its hybrids. Are the mitigation measures listed on Page 6-44 adequate to control S. alterniflora? Can S. alterniflora be controlled near salt pond restoration sites prior to opening these sites to tidal flow? Will there be funding available to perform these control measures? (There are recent reports that herbicides that are permitted to be used to control S. alterniflora are losing their effectiveness). 6-9a 6-9b 6-9c 6-9d

CULTURAL RESOURCES Corrections: Page 7-1 The Spanish explorers arrived in the California bay area in the 18th century. 6-10a
Page 7-3 James Marshall discovered gold. 6-10b
Pages 7-4 and 7-5 The Oliver Salt Co. ceased to operate in 1982. 6-10c

In the Cultural Resources section there is no mention of the Archimedes screw remnants remaining in various salt ponds in the Baumberg Pond Complex. These historic remnants should be recorded and protected. There is no mention of the historic Rock Island Salt Works remnants which include brick work from a steam boiler, pumps, unusual poured concrete centrifugal pumps, steel tanks or vats, and building foundations and pilings. These remnants should be recorded and protected also. This area, PONDS 12 and 13 should be managed to prevent excessive sedimentation and flooding in order to protect the last of the Rock Island Salt Works. 6-10d 6-10e

AIR QUALITY: ODORS: Biomass accumulatiom and stegnant water in ponds do create unpleasant odors. The mitigation measure to increase bay water circulation in the offending ponds to reduce the odors could be harmful mitigation. One must manage these odorous ponds that could have nesting endangered species. 6-11

The CAC supports ALTERNATIVE 3 as this alternative will provide for flexibility in managing the ponds during the first 5 years of restoration. 6-12

The CAC appreciates this opportunity to respond to restoration plans that are very important to the Hayward Area Shoreline Planning Agency.

Sincerely yours,

Viola Saima-Barklow
Co-Chairperson

Janice Delfino
Co-Chairperson

cc: USFWS

Comment: **6-1** HASPA is pleased the ponds are in public ownership.

Response: Comment noted. We too are pleased that the Baumberg Complex is now under public ownership.

Comment: **6-2** Why is pond 3C included in ISP when it was not purchased from Cargill?

Response: Pond 3C is included in the ISP since it is an integral part of the Pond 2C system. Pond 3C cannot be taken out of the system without significantly altering the existing circulation pattern. If Pond 3C were removed from the system it would not have a source of water and would become a seasonal pond. Cargill retains ownership of the pond and responsibility for its operation and maintenance. No decisions have been made for its future use.

Comment: **6-3** The Baumberg ponds provide a wide diversity of habitat for wildlife and they should be looked at individually.

Response: To the greatest extent possible the ISP has addressed the habitat value of individual ponds. To circulate water through the ponds, ponds have to be grouped into systems. Physical connection of the ponds makes management of individual ponds problematic. Additionally, the high elevation of the Baumberg Complex exacerbates water management problems by making gravity-fed tidal circulation through the systems impossible at several times during the year.

Comment: **6-4** Request to add Perry Gun Club to Figures 1-1 and 1-4 in the Draft EIR/EIS.

Response: The Perry Gun Club does not exist any more. Property is identified on our maps as Pond 20B.

Comment: **6-5** Request to discuss and include Alameda Flood Control District plans to use Baumberg ponds north of Alameda Creek to widen the creek and increase its flow capacity.

Response: We agree the following text has been added to the DEIR:

Change to DEIR/EIS: Chapter 12; Section 12.1.2 Projects Addressed in the Cumulative Impacts Analysis; Page 12-5; Top of Page

The Alameda Flood Control District is currently re-evaluating the design of the lower reaches of the Alameda Flood Control Channel which border the Baumberg System to the South.

The design capacity of the lower reaches of the channel to carry flood flows has been reduced substantially by sediment deposition. The planning process is evaluating the potential for allowing flood flows to be diverted into the salt ponds as an alternative to dredging the existing channel. The project is still in the design and evaluation process. The planning process is expected to be completed by 2008 and is being coordinated with the Long-term Planning Process for the South Bay Salt Ponds which is currently under way. It is anticipated that if a flood control design is selected which would allow flooding of the Baumberg Ponds it would be designed to be compatible with the ISP management of the area or the restoration plan developed as part of the Long-term Planning process.

Comment: **6-6** Request to provide more extensive discussion of salmonids and potential impacts to salmonids in Old Alameda Creek.

Response: As part of the initial phase of the proposed project, reconnaissance-level habitat surveys would be performed within Old Alameda and Ward creeks to determine the suitability of habitat conditions to support steelhead. In the event that habitat conditions within Old Alameda Creek are determined to be suitable for the successful reproduction and juvenile rearing of steelhead, fish passage facilities and installation and operations of fish screens on pond inlets, or limited seasonal periods of pond inlet and discharge operations, would be incorporated into the project design and operations, as required, to protect steelhead. Since steelhead are listed for protection as a threatened species under the federal Endangered Species Act (ESA), the design and operations of facilities within Old Alameda Creek, if steelhead are determined to be present and/or habitat conditions are suitable, would be developed in consultation with NOAA Fisheries as required under the federal ESA.

We agree that the following text has been added to the DEIR:

Change to DEIR/EIS: Chapter 6; Section 6.4.1.2; Page 6-89; Insert after 1st paragraph

Steelhead are known to opportunistically migrate upstream into a variety of watersheds tributary to San Francisco Bay, particularly in response to high stream discharge during winter and early spring months. Modifications to many of these watersheds, including Old Alameda Creek, have resulted in barriers and impediments to the successful upstream and downstream migration of adult and juvenile steelhead (including, but not limited to tide gates and other structures), degraded stream habitat and availability of

suitable gravels for spawning and egg incubation, in addition to the occurrence of elevated and adverse summer water temperatures which contribute to unsuitable juvenile steelhead rearing conditions. As a result of these factors affecting habitat quality and availability, many of these watersheds do not provide suitable habitat conditions for successful migration, spawning and egg incubation, and juvenile rearing by steelhead required to support self-sustaining populations.

Comment: **6-7a** Sediment sampling in Baumberg ponds has been limited; request additional sampling.

Response: Sediment sampling at the Baumberg Complex has been limited. To address the lack of data we prepared the South Bay Salt Pond Additional Sampling Plan (see Appendix I to DEIR/EIS). This plan was prepared with input from the USGS, RWQCB, and US FWS and was attached as an Appendix to the Report of Waste Discharge, submitted to the RWQCB on January 20, 2004. The samples described in the plan were collected in Fall and Winter 2003 and were delivered to the lab for analysis February 12, 2004. Data generated will be taken into account prior to making any management decisions.

Comment: **6-7b** Explain high arsenic, cadmium, and lead in Pond B9 in Table 4-7.

Response: We agree, when compared to other ponds at Baumberg, Pond B9 does have higher concentrations of arsenic, cadmium, and lead. At the time these samples were collected the Pond 9 salinity was 279 g/l (high salinity pond). During salt evaporation, along with the salt all of the constituents in solution are concentrated. The high salinity of Pond 9 may explain the higher concentrations of metals in this pond. This hypothesis is supported by the fact that in general lower salinity ponds have lower metal concentrations. Prior to release, the concentrated brines will be transferred to the Cargill Newark Plant. There is no evidence that Pond B9 will exceed Basin Plan Water Quality Objectives (WQOs) for arsenic, lead, or cadmium, since the WQOs are not exceeded even with concentrated brines.

Comment: **6-7c** Question regarding monitoring and management for heavy metals and hydrology impact on foraging and nesting birds.

Response: CDFG will perform project monitoring of sediments (see 7a above) and extensive water quality monitoring both during the initial release period (IRP) and the Continuous Circulation Period (CCP).

Comment: **6-8** HASPA is concerned about public access impacts to wildlife.

Response: Public access will be limited to several lottery-based hunts per year and docent led tours. Restricted public access is expected to have beneficial impacts to nesting snowy plovers and other endangered species.

Comment: **6-9a** HASPA is concerned whether proposed mitigation is adequate to control *Spartina* at Baumberg ponds.

Response: *Spartina alterniflora* and its hybrids remain a problem in the vicinity of the Baumberg Complex. We met with Invasive Spartina Project staff to discuss project impacts. In general, the proposed management for the ISP ponds does not lead to the creation of *Spartina* habitat (pond water level does not fluctuate sufficiently for *Spartina* establishment). Note that Vegetation Mitigation Measure-2C provides that the agencies will "gain control of new establishing populations using protocols suggested by the San Francisco Estuary Invasive Spartina Project."

Comment: **6-9b** Can Spartina be controlled prior to opening the sites to tidal flow?

Response: Pond systems A2W, A3W, A7, B2, B8A, and B11 are scheduled for discharge in July 2004. *Spartina* control will not begin at Baumberg until September 2004 at the earliest. *Spartina* control should be focused on the vicinity of the July discharge ponds and the ponds scheduled for April 2005.

Comment: **6-9c** Concern about funding for *Spartina* control.

Response: USFWS and CDFG will coordinate funding through the Invasive Spartina Control Project. Funds will come from a number of different sources (USFWS and CDFG management funds, SCVWD, and Spartina Control Project).

Comment: **6-9d** Reports of Herbicide resistance.

Response: Comment noted.

Comment: **6-10a** Spanish explorers arrive in Bay Area in 18th century (date correction).

Response: This was a typo and has been corrected.

Change to DEIR/EIS: Chapter 7; Section 7.1.1 Prehistory; Page 7-1; Paragraph 2

People inhabited the project area for at least 11,000 years prior to the arrival of Spanish explorers to California in the ~~16th~~ **18th** century. Evidence suggests that Paleoindian (12,000 to 9,000 years before present

(YBP) populations throughout California and elsewhere were small and the subsistence economies emphasized the capture of big game, including now extinct megafauna, such as mammoth and mastodon. Although Paleoindian sites are rare in California, when found, they are often near areas containing pluvial lakes and marshes.

Comment: **6-10b** James Marshall incorrectly identified as James Marwill.

Response: This was a typo and has been corrected.

Change to DEIR/EIS: Chapter 7; Section 7.1.3 History; Page 7-3; Paragraph 2

Just over a week before the signing of the Treaty of Guadalupe Hidalgo, James ~~**Marwill**~~ **Marshall** discovered gold in the Sierra Nevada foothills while constructing a sawmill for John A. Sutter. ~~**Marwill's**~~ **Marshall's** discovery led to a massive incursion of miners, prospectors, and settlers into California known as the Gold Rush (1848–1852)….

Comment: **6-10c** The Oliver Salt Company ceased to operate in 1982 (date correction).

Response: Available documentation indicates the Oliver Salt Company ceased operations in the early 1980s. We have revised this text accordingly

Change to DEIR/EIS : Chapter 7; Section 7.1.3 History; Page(s) 7-4; Paragraph 3 and Page 7-5

….The Oliver Salt Company, located at the foot of the Hayward-San Mateo Bridge, ceased to operate in the ~~**1970s**~~ **early 1980's**. In 1979, Cargill bought Leslie and is now is the only solar salt producer in San Francisco Bay (San Francisco BCDC 1994, Jones & Stokes 2003).

Comment: **6-10d** Historic remnants of Archimedes screw should be recorded and protected.

Response: The Archimedes screw pumps, which were employed in the project salt ponds from the 1870s to the early 1900s, used wind power to move water between the salt ponds. Andrew Oliver, founder of the Oliver Salt Company, designed his version of the wind-driven Archimedes screw pump, adapted from the original design by Archimedes (287-212 B.C.). These pumps were an important technological innovation and a significant feature of the historic project area landscape from the late 1800s to early 1900s. In the project area, Archimedes screw pumps were replaced with electric pumps in the early 1900s and the last functional Archimedes screw pump is on display at Cargill's Newark plant. Historic remnants of these pumps do exist in the project areas. To date, no remnants have been recorded within areas that would be disturbed to construct water control features under ISP Alternatives 2 and 3. Construction workers will be informed of the possible presence of these

features and instructed to halt work in the vicinity of the feature, if any are encountered, until a qualified archaeologist inspects the finding.

Comment: **6-10e** Record and protect remains of the Rock Island Salt Works.

Response: The Rock Island Salt Works were incorporated into the Oliver Salt Company and operated in the Baumberg area. To date, no traces of this salt operation have been recorded within areas that would be disturbed to construct water control features under ISP Alternatives 2 and 3. Construction workers will be informed of the possible presence of historical salt work features, including remains of the Rock Island Salt Works, and instructed to halt work in the vicinity of the feature, if any are encountered, until a qualified archaeologist inspects the finding.

Comment: **6-11** Pond odor mitigation proposed in ISP might hurt birds.

Response: We agree with the comment that ponds supporting nesting endangered species have to be managed carefully. The mitigation measure for odor described on page 9-11 of the DEIS/EIR (Air Quality Mitigation Measure-1B) is only to be used for ponds that contain stagnant brine. Ponds would be carefully surveyed prior to changing water level during the nesting season.

Comment: **6-12** HASPA supports Alternative 3.

Response: Comment noted.

Commentor: 7 Citizens Committee to Complete the Refuge

CITIZENS COMMITTEE TO COMPLETE THE REFUGE

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February 6, 2004

Margaret Kolar
Refuge Manager
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Re: South Bay Salt Ponds Initial Stewardship Plan, Draft Environmental Impact Report/Environmental Impact Statement

Dear Mr. Wilcox and Ms. Kolar,

This responds to the South Bay Salt Ponds Initial Stewardship Plan (ISP), Draft Environmental Impact Report/Environmental Impact Statement (EIR/S), dated December 22, 2003. We thank you for the opportunity to provide comments. Due to the late receipt of the EIR/S, we are submitting initial comments for the EIR process, and may provide additional comments within the EIS comment period.

As you are aware, the members of the Citizens Committee to Complete the Refuge have endeavored for over forty years to create, protect, and expand the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge). We fully support the restoration of recently acquired salt ponds to a complex mosaic of natural bay ecosystems and realize an interim management plan is necessary to prepare for the restoration process. We have reviewed the EIR/S and have several substantive concerns.

Cumulative Impacts:

The EIR/S states (page 12-1), "Cumulative impacts are effects which result incrementally from an action or undertaking and other past, present, and reasonable

foreseeable near-term future actions, taken together (regardless of the agencies or parties involved)." Conspicuously absent from the issues addressed within this EIR/S are the impacts (negative or beneficial) that will arise from the consolidation of Cargill's salt-making process to the Newark ponds (including ponds which are already publicly owned). The interim management/long-term restoration of the recently acquired ponds and Cargill's modification of the Newark ponds are inter-related and inter-dependent projects. Environmental regulations require the impacts and mitigation of impacts of the consolidation plan be fully considered within this EIR/S. Pertinent and significant issues include (and are not limited to) changes that will occur in pond salinities (e.g. how this will impact regional bird use, etc.), changes in pond depth (e.g. how this will impact regional bird use), and impacts to future restorability of publicly owned lands (i.e. gypsum issue and Mowry ponds 1, 2, and 3 in particular).

7-1a Cont.

As an example, Siegel and Bachand (Feasibility Analysis South Bay Salt Pond Restoration, 2001, 2002) report "medium" shorebird use for Mowry ponds 1, 2, 5, 8, 10-13, and 26. The EIR/S refers to "Cargill's Newark ponds" in the discussion of the impacts of salinity changes on waterbird populations. "Cargill's Newark ponds" are included in the calculation of the acreage of medium and high-salinity ponds (reduction from 10,402 to 5,527 acres), but there is no indication of whether this figure accounts for salinity regime changes that will result from the consolidation process. Salinity changes could influence the numbers and types of waterbirds capable of utilizing the Newark ponds. In addition, the EIR/S fails to consider the impacts of changes to water depths within the Newark ponds on waterbird use. According to Siegel and Bachand, one of the objectives of Cargill's consolidation plan is that the Newark ponds will "remain full at all times." The impact of increased water depth in these ponds on waterbird use must be taken into consideration to adequately predict and mitigate regional adverse impacts to waterbird habitats (foraging, roosting, and nesting).

In the discussion of cumulative impacts to birds and other wildlife, the EIR/S states, "...Migratory shorebirds and waterfowl would likely re-distribute among available habitats in the South Bay, such as the *existing salt ponds at Don Edwards National Wildlife Refuge, the Cargill Salt Ponds*, and the open waters of the Eden Landing Ecological Reserve and Outer Bair Island. (emphasis added)" This assumption is invalid, and the significance of impacts to migratory shorebirds and waterfowl cannot be adequately determined or mitigated, without thorough documentation and assessment of the Cargill consolidation plan.

7-1b

Interim Habitat Goals:

The ISP provides a rather broad brush treatment of the conditions that will exist within the salt ponds during the interim management period. Generally speaking (according to Figures 6-4 through 6-9), the mosaic of low salinity (0 – 60 ppt) and medium (60 – 180 ppt) salinity ponds that currently exist within the Baumberg Complex will be converted to low salinity ponds; the mosaic of low to high salinity ponds (above 180 ppt) that currently exist within the Alviso Complex will be converted to low salinity ponds, medium salinity ponds, and tidal or seasonal ponds; and the medium and high

7-2a

salinity ponds that currently exist within the West Bay Complex will be converted to low salinity ponds. A certain degree of flexibility is built into the design in the form of "batch" ponds which according to the ISP could be managed as "medium" salinity ponds. Beyond these rather general descriptions, what are the targeted habitats for each pond within the system? For example, will the "low salinity" pond salinities be "low" enough to support submerged aquatic vegetation (e.g. vegetation desirable to dabbling ducks)? If so, what percentage of "low salinity" ponds would fall into this category? The EIR/S reports the number of low-salinity ponds will increase from 22 to 44 – will all of these ponds provide "high-quality" foraging habitat for dabbling ducks?

7-2a Cont.

Correlations between targeted salinities and pond depths, and existing roosting, foraging and nesting requirements of existing waterbird populations is difficult to piece together. For example, what percentage of inboard levee benches will be preserved within the system (areas used for foraging or roosting by smaller peeps)? Will existing distances between foraging, roosting, and nesting areas remain constant, or will those distances be increased due to the relocation of "medium salinity" ponds to the Alviso Complex?

What is driving the initial habitat design of the ISP? Given the importance of the South Bay salt ponds to migratory shorebirds, and the affinity of these birds to "medium salinity" ponds, the reduction of "medium salinity" ponds from 25 ponds scattered throughout the South Bay, to 3 ponds located within the Alviso Complex cannot realistically be reduced to a "potentially significant" level by the mitigation measures proposed.

7-2b

Non-native Invasive Species:

The EIR/S appropriately acknowledges the significant adverse impacts posed by non-native invasive *Spartina* species within the Alviso Complex, and lists as a mitigation measure the need to remove localized clusters of *Spartina alterniflora* hybrids prior to the implementation of the Island Pond levee breaches. While specific details regarding *Spartina* mitigation measures at the Baumberg Complex are not addressed, the EIR/S assures us implementation of levee breaches will not proceed until *Spartina* issues are resolved.

7-3a

Under the discussion of the breaching of the Island Pond levees the EIR/S states, "...conversion to lower salinity tidal ponds would provide conditions favorable for the establishment of transitional salt marsh and brackish species, including California bulrush, alkali bulrush and *perennial pepperweed.* (emphasis added)." This is identified as a beneficial impact. While we agree favorable conditions for the establishment of perennial pepperweed would exist, we do not agree this is a beneficial impact – we assume this is a typographical error. The issue of controlling the spread of *Lepidium latifolium* is inadequately addressed within the EIR/S. The ability of this species to quickly form monoculture stands to the exclusion of preferred native species requires the incorporation of mitigation measures to eradicate local populations and to prevent the spread of this invasive pest species.

7-3b

The invasiveness of the Asian clam (*Potamocorbula amurensis*) was not addressed with respect to colonization of newly opened areas. Is dominance by *Potamocorbula* within the benthic community of the Island Pond system inevitable once the levees are breached? 7-3c

Levee Maintenance:

The impacts of on-going levee maintenance under the conditions proposed by the ISP have not been adequately addressed within the EIR/S. The combined effects of lowered salinities and disturbed soils could lead to the rapid colonization levee tops by non-native invasive species such as *Lepidium latifolium* (perennial pepperweed), *Carpobrotus edulis* (iceplant), *Bassia hyssopifolia* (bassia), *Salsola soda* (saltwort), and *Tetragonia expansa* (New Zealand spinach). Mitigation measures such as salinity management of the levees or managed revegetation of the levees should be included within the EIR/S. 7-3d

Water Quality:

While it appears efforts have been made to locate intake structures closer to the Bay in the Alviso Complex, the potential impacts of introducing nutrient-enriched wastewater into low salinity ponds has not been addressed. Has the potential for nutrient loading on primary production within the low salinity ponds of the Alviso Complex been analyzed? 7-4

Conclusion:

We recognize the difficulty of resolving all the varied and often competing resource issues. We believe the Draft EIR/S represents a decent initial attempt at identifying and describing many of the important issues. However, there are additional issues that should be included in the Final EIR/S, such as those mentioned above. In particular, the scope of the cumulative impact analysis omitted the potentially significant impacts of the Cargill consolidation plan on wildlife habitat and on the restorability of 1,500 acres of land the public already owns in fee title (Mowry Ponds 1, 2, and 3). 7-5

A major goal for the members of the Citizens Committee has always been the restoration of the ponds within and surrounding the original Refuge. Of particular concern is the restoration of Mowry ponds 1, 2, and 3 to tidal marsh. As stated by Siegel and Bachand:

> These three ponds are targeted by the resource agencies as the highest restoration priority for recovery of several special status species...Pond elevations are within one foot of local mean high water, meaning they could return relatively quickly to vegetated tidal marsh after restoration of tidal action. Little additional effort would be needed for their restoration.

The impact of reduced restoration potential (*due to changes arising from the consolidation plans*) is significant because nearly every biologist in the region views these three ponds in particular as amongst the most important to restore to tidal marsh at the earliest possible opportunity. Not only that, they represent more thank have of the "easy to restore" salt ponds in the South Bay. If their restoration potential is degraded through conversion to high salinity (*triggering gypsum deposition*), then very little acreage of South Bay salt ponds could be restored with relative ease.

7-5 Cont.

The increase in the salinities of these ponds will be a direct result of the need to remove concentrated brines and bittern from the Redwood City system; therefore, the project impacts are related and must be considered within the context of this EIR/S. The Newark pond system includes ponds the public already owns in fee title. Should we ever gain the opportunity to restore the Newark ponds, we will be dealing with a situation similar to that of the Napa Pond Restoration (problem of controlling increasing salinities and habitat degradation within a closed salt pond system).

Thank you for the opportunity to participate with the agencies in attempting to re-establish as much as possible of the biodiversity that existed historically in the South Bay.

N.B. We wish to acknowledge the valuable contributions of our members and Drs. Howard Shellhammer, Peter Baye and Stuart Siegel to these comments.

Sincerely,

Florence M. LaRiviere

Florence M. LaRiviere
Chairperson

cc: EPA
SFRWQCB
Interested parties

Comment: **7-1a** Cargill's consolidation plan for Newark should be considered in the cumulative impact section.

Response: We acknowledge that while the DEIR/DEIS included consideration of the Cargill consolidation plan in the section on bird use of the ponds, we did not include it in the cumulative impact section. To the extent the changes in pond conditions can be predicted, it will be added to that section (see changes below). Based on information received from Cargill and presented in the DEIR/EIS, the relative percentage of ponds of the three salinity ranges is not anticipated to change, although their distribution may change. The water depths in salt ponds are variable depending on the circulation needs of the salt making process. Since the system is driven primarily by gravity flow, it is necessary to raise the elevation in one pond to move its contents to the next pond. This results in periodic changes in pond depths, which occur as part of the salt concentrating process. Based upon the information that is available, it is not expected that there would be significant changes in the pond depths from current conditions. The comment regarding the effect of how consolidated operation of the Newark Ponds would affect future restoration if salt production ceased is noted. Since this is an issue that is beyond the scope of the ISP, it is not addressed in the EIR/EIS.

Change to DEIR/EIS: Chapter 12; Page 12-4; Add section after "Primary Contributors to Cumulative Impacts" paragraph

Cargill Salt Consolidation of the Newark Ponds
Cargill Salt will continue to operate salt concentrating and harvesting operations on approximately 11,000 acres surrounding the Newark Plant site. These continued operations are expected to be modified to improve the efficiency of the salt concentration process on a reduced number of acres. As quoted from Siegel and Bachand 2001, 2002, improvements to the consolidated salt making system at the Newark Ponds is to "…become more flexible, cost efficient, and more effective in producing high quality brines to support a sustainable tonnage of harvest each year." Cargill began its consolidation prior to the agencies acquiring the Alviso, Baumberg and West Bay ponds, and their activities are independent of the ponds affected by the ISP.

Comment: **7-1b** Comment regarding the need to thoroughly document and assess the Cargill consolidation plan before the significance of cumulative impacts to migratory shorebirds and waterfowl can be determined.

Response: As noted above, more detailed information on future conditions in the Cargill consolidation ponds is not available. Pond salinities and depths change due to seasonal variations, climatic conditions and changing needs for salt production. What is known is that the ponds that stay in production will continue to provide salt pond habitat, as will the ponds which will be managed under the ISP and that other lands identified in the document will also provide suitable habitat. It is a reasonable assumption based upon the natural variability in the availability of salt pond habitats and seasonal wetlands and patterns of shorebird and waterfowl distribution within the bay that birds would tend to redistribute themselves among available habitat. The DEIR/DEIS identifies the loss of medium salinity ponds as a potential significant impact.

Comment: **7-2a** Discuss amount and habitat suitability of low salinity ponds under the ISP for waterfowl.

Response: Once continuous circulation is established under the ISP, the salinity of low salinity ponds is anticipated to reflect background bay salinities. Seasonally, concentrations, in parts per thousand (ppt), would range from the low 20s to late summer highs of 40 ppt. It is anticipated that most or all the low salinity ponds would provide waterfowl foraging habitat values similar to those currently found in existing intake ponds. As noted in Takakawa et al. 2000, waterfowl prefer salt ponds of lower salinity. However, the commentor's point is well taken that other conditions (e.g., base soils, pH, wind patterns) may occur in individual ponds that affect their value for waterfowl.

Comment: **7-2b** Question regarding the correlations between target salinities and pond depth and waterbird roosting, foraging and nesting requirements.

Response: It is not expected that the ISP will have any particular effect on the availability of areas available for foraging and roosting by shore birds. Table 2-1 provides a summary of how proposed management of individual ponds would change. A review of that table indicates that on the whole the water depths would generally be lower in most pond systems, meaning that more areas would be available as foraging and roosting habitat. The distance between foraging, roosting and nesting areas is expected to remain the same for many species. However, for species that focus on medium or high salinity ponds, the spatial patterns between foraging and roosting areas will change.

Comment: **7-2c** What principles are driving the habitat design of the ISP?

Response: The design was driven by the need to assure protection of water quality in the Bay and sloughs while providing habitat values. It is not possible

for wildlife agencies to maintain the same number of medium and high salinity ponds as is possible under commercial salt production, without severely impacting water quality in adjacent sloughs or greatly impacting future tidal restoration opportunities. However, a number of species will benefit from the changes made to the pond salinities, though some will be impacted.

Comment: **7-3a** Lack of specificity about *Spartina* control in the Baumberg area.

Response: No ponds are proposed to be restored to tidal influence in the Baumberg area as part of the ISP. Consequently, no suitable habitat is expected to be created for the invasive Spartina and no specific control measures are identified as part of the ISP. The Baumberg area is adjacent to a point of introduction for the species and is a center of infestation. As part of the ongoing Eden Landing Restoration Project and the Invasive Spartina Control Program, treatment programs will be initiated in the area during summer 2004.

Comment: **7-3b** Disagree with statement that pepperweed (*Lepidium)* establishment after breaching of the Island Ponds is a beneficial impact. Issue of controlling spread of *Lepidium* inadequately addressed.

Response: Establishment of *Lepidium* is not considered beneficial and page 6-41 will be modified to reflect the comment. With the exception of the Island Ponds, no ponds will be restored to tidal influence. Upon breaching, the ponds will be at mudflat or low marsh elevations. It is not expected that *Lepidium* establish under these conditions, however, it is possible it could invade the levees and areas of higher elevation. These areas will be monitored for invasive species. Beyond the Island Ponds, the ISP will not materially change the habitat suitability of the affected lands for *Lepidium* establishment

Change to DEIR/EIS: Chapter 6; Section 6.2.3.3 Alternative 2; Page 6-41; Paragraph 1

Breaching of the Island Ponds, which are currently mostly unvegetated, would result in a beneficial impact on a total of approximately 475 acres. Under this alternative, the conversion to lower salinity tidal ponds would provide conditions favorable for the establishment of transitional salt marsh and brackish marsh species, including California bulrush**,** **and** alkali bulrush ~~**and perennial pepperweed**~~. Although pickleweed may remain on levee slopes at the upper edge of the tidal marsh, it will be excluded by tidal flooding from lower elevations in the ponds.

Comment: **7-3c** Concerned about potential colonization of restored areas by Asian clam (*Potamocorbula amurensis*) not addressed.

Response: Comment noted. *Potamocorbula* is present in the benthic fauna of the South Bay, where it is characteristic of the subtidal and low mudflats. It would be expected to invade the Island Ponds upon breaching.

Comment: **7-3d** Impacts from on-going levee maintenance have not been adequately addressed.

Response: We agree that disturbed-upland sites within the marsh plain offer excellent habitat for a wide range of non-native species. Under the existing conditions non-native species are common on the levee tops (see Tables 6-5, 6-6, and 6-7). Levee maintenance is covered under the on-going levee maintenance permit. Installation of structures under the ISP would be monitored to reduce opportunities for increasing in non-native species.

Comment: **7-4** Potential impacts from introducing nutrient-enriched wastewater into the low salinity ponds not addressed.

Response: We recognize the potential for taking nutrient rich waters from the various WWTPs in some portions of the project area, particularly along Artesian Slough, Coyote Creek and Guadalupe Slough. Water quality monitoring in the ponds will be important to assess the impacts of these nutrient rich waters. The pond intakes closest to the various discharges all are capable of reversible operations, so that changes can be made at various times of the year. We did not collect site-specific nutrient loading data at Alviso Ponds. We made the assumptions that 1) nutrient levels would be similar those that have historically been found at the A9 intake and 2) if the ISP is implemented, that all of the circulation ponds would have nutrient levels similar to A9. Cargill has not noted particular problems with enriched nutrients at A9 in the past.

Comment: **7-5** Conclusion - reiteration of concerns about cumulative impacts with emphasis on the Mowry Ponds

Response: We acknowledge the concerns of the commenter regarding the Cargill consolidation plan and Mowry Ponds 1, 2, and 3. Cargill's plans and Mowry Ponds 1,2 and 3 are not part of this ISP project. However, we have included a discussion of the Cargill consolidation plan in the cumulative impact analysis. (See Response to Comment 7-1a).

Commentor: 8 Save the Bay

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February 5, 2004

Carl Wilcox, Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
Post Office Box 47
Yountville, CA 94599

RE: Draft South Bay Salt Pond Initial Stewardship Plan EIR-EIS

Save The Bay appreciates the opportunity to comment on the Draft EIR-EIS for this large and significant project that promises to bring major benefits to the environmental quality of San Francisco Bay. Our comments at this time reflect our understanding of the need to proceed in a timely manner to develop a management plan for the South Bay Salt Ponds that will retain these valuable wetlands in an optimal condition for future planned restoration.

ISP Objectives and Potential Impacts

The Initial Stewardship Plan (ISP) endeavors to create optimal conditions for future restoration by achieving specific objectives for that end, e.g. ceasing salt-concentration, allowing tidal flow to selected ponds, and maintaining important existing habitat for wildlife. These objectives are to be achieved while also meeting regulatory requirements, and working within existing funding constraints.

Save The Bay's comments at this time are directed to general aspects of the ISP and alternatives evaluated in the EIR-EIS that we believe are particularly important to achieving the stated objectives of the ISP and, ultimately, to a beneficial outcome for future restoration of the ponds. Our concerns reflect the agencies' minimal experience with managing former commercial salt ponds for future restoration and the need to rely on estimates of potential impacts of the management plan to natural systems from models currently available.

Mitigation Measures

Aspects of the plan could be highly sensitive to new information and the findings of scientific research conducted during implementation of the ISP. Alternatives described in the EIR-EIS that require continued monitoring and response to unanticipated impacts are of particular concern. Proposed mitigation measures in the EIR-EIS that call for monitoring and a response strategy if monitoring reveals unacceptable impacts are critical to the success of the ISP and will provide essential data for future restoration. **8-1a**

- Monitoring protocols, methods and time frame should be described (perhaps in an addendum or appendix to the ISP) and the data collected should be made available to all interested parties. The EIR-EIS should contain a commitment to do so. **8-1b**
- Adaptive management must be a response to both analysis and assessment of monitoring data as well as to secondary or unanticipated impacts or effects on habitat or aquatic resources. The EIR-EIS should contain a commitment to proceed in this manner. **8-1c**

SAVE THE BAY

Save San Francisco Bay Association

Costs and Benefits

Cost considerations should not preempt sound scientific evidence of benefit to San Francisco Bay, its habitat and wildlife. Important environmental benefits could be lost from alternatives the lead agency considers to be infeasible solely on the basis of cost; equivalent environmental benefits need to be identified in alternatives selected on the basis of lower cost or efficiency. 8-2

- ISP alternatives or system alternatives rejected primarily or solely on the basis of higher cost should include an explanation of cost versus environmental benefit or of similar benefits that can be achieved using a different alternative. Cost data for each alternative should be included in the EIR-EIS

Mix of Habitat

The rationale for maintaining or altering existing habitat values in the project area should be to maintain or increase net benefit to Bay wildlife; management decisions that affect the mix of wildlife habitat should be made on the basis of optimizing overall benefit to Bay wildlife. 8-3

- Table 2-1 of the ISP and Table 6-4 of the EIR-EIS show the existing acreage of each habitat type in the project area. Since the mix of habitat type will change with implementation of the ISP, a table detailing the mix of habitat type resulting from each alternative should be included in the EIR-EIS.

We appreciate the high level of research and analysis that has gone into the creation of the Initial Stewardship Plan. The detailed presentation is as testament to the involvement of a large group of scientists, regulatory and governmental agency staff, and a representative group of knowledgeable organizations and individuals throughout the Bay Area.

Thank you for your consideration of these comments.

Sincerely,

David Lewis
Executive Director

Comment: **8-1a** Monitoring and a response strategy are critical to the success of the ISP and will provide essential data for future restoration.

Response: We agree and have worked closely with researchers from the USGS, USFWS, and others to design a comprehensive monitoring plan which will provide data needed to make adaptive management decisions and provide data for design of future restoration projects

Comment: **8-1b** Monitoring protocols, methods, and time frame should be described

Response: The monitoring plan is included in the Report of Waste Discharge submitted to the RWQCB on January 20, 2004 and will be included in the CEQA Mitigation and Monitoring Requirements.

Comment: **8-1c** Adaptive management must be a response to both analysis and assessment of monitoring data and secondary or unanticipated impacts.

Response: We are fully committed to developing adaptive management strategies in response to changing environmental conditions. We agree decisions about adaptive management must be based on both analysis of project-generated monitoring data and information about unanticipated impacts which may be derived from other sources such other projects in the vicinity or new research information.

Comment: **8-2** Cost data for each of the alternatives should be included in the EIR/EIS.

Response: We agree that cost considerations should not preempt sound scientific evidence of benefit to San Francisco Bay, its habitats and wildlife. A comparison of the projected costs for 10 years of the different alternatives for the CDFG (Baumberg Complex) and USFWS (Alviso and West Bay Complexes) are shown on the tables below.

Projected costs over 10 years for the Baumberg Complex.

Type of Cost	No Project	Alternative 1	Alternative 2	Alternative 3
Management	$1,000,000	$4,000,000	$4,000,000	$4,000,000
Maintain levees	$0	$790,000	$790,000	$790,000
Install Structures	$0	$0	$3,750,000	$3,500,000
Totals	**$1,000,000**	**$4,790,000**	**$8,540,000**	**$8,290,000**

Projected costs over 10 years for the Alviso Complex .

Type of Cost	No Project	Alternative 1	Alternative 2	Alternative 3
Management	$1,000,000	$2,500,000	$10,000,000	$10,000,000
Maintain levees	$0	$1,900,000	$1, 900,000	$1,900,000
Install Structures	$0	$0	$5,700,000	$5,700,000
Totals	**$1,000,000**	**$4,400,000**	**$17,600,000**	**$17,600,000**

Projected costs over 10 years for the West Bay Complex .

Type of Cost	No Project	Alternative 1	Alternative 2	Alternative 3
Management	$75,000	$250,000	$500,000	$500,000
Maintain levees	$0	$480,000	$480,000	$480,000
Install Structures	$0	$0	$2,600,000	$2,600,000
Totals	**$75,000**	**$730,000**	**$3,580,000**	**$3,580,000**

Comment: **8-3a** Management decisions that affect the mix of wildlife habitat should be made on the basis of optimizing overall benefit to Bay wildlife.

Response: Comment noted. We agree that management decisions must consider regional impacts to Bay wildlife habitat. We addressed this issue in Chapter 12 (Cumulative Impacts; see for example page 12-11of the DEIR/EIS).

Comment: **8-3b** Include a table showing the mix of habitat types resulting from each project alternative.

Response: The habitat changes within specific ponds of the three pond complexes are shown in Figures 6-4 through 6-9 of the DEIR/EIS. As stated on page 6-70 and 12-11 of the DEIR/EIS, under Alternatives 2 and 3, the total acreage of medium- or high-salinity ponds would be reduced to 827 acres from 5,702 under existing conditions. Under alternative adaptive management strategies, detailed in Chapter 2, additional ponds could be managed for medium salinity, bringing the total area of medium- to high-salinity ponds under Alternatives 2 and 3 to 1,872. Thus, these alternatives represent a 67% to 87% reduction in medium- to high-salinity ponds in the project area. A summary of the habitat changes is provided in the table below:

Summary of Habitat Changes under the ISP Alternatives

	Low salinity ponds (0-60ppt)	Medium salinity ponds (60-180ppt)	High salinity ponds (above 180 ppt)	Seasonal ponds	Tidal
Existing	6,300	5,110	1,461	29	
No Project/ No Action				12,900*	
Alternative 1 (Seasonal Pond Management)				12,900	
Alternative 2 (Simultaneous March/April Initial Release)	8,700	827		2,827	475
Alternative 3 (Phased Release)	8,700	827		2,827	475

*Under No Project/No Action, ponds would be seasonal as long as levees remain intact.

Commentor: 9 Libby Lucas

----- Message from JLucas1099@aol.com on Thu, 5 Feb 2004 12:04:19 EST -----

To: sfbaynwrc@rl.fws.gov

cc: JLucas1099@aol.com

Subject: South Bay Salt Pond Initial Stewardship Plan

Refuge Manager, U.S. Fish & Wildlife Service February 5, 2004
San Francisco Bay NWR Complex
P.O. Box 524, Newark, CA 94560

Dear Refuge Manager,

Thank you for the opportunity to respond to this initial stewardship plan for South Bay salt pond restoration.

Just to meet the California deadline for environmental impact report comments, I would say that the fourth alternative, the phased initial discharge of ponds, seems to be most reasonable. 9-1

By the same rationale it might be best to stagger the opening up of ponds 19, 20 and 21 to tidal action in the summer months of June, July and August. By such adaptive management your staff could then gage the sediment transfer and scouring action to be anticipated by opening up the larger ponds. Tide heights might also be considered. 9-2

Thank you very much for the presentation at the Refuge Wednesday evening. It did clarify a number of aspects of this initial plan. I would like to reserve the option of submitting further comments by the Federal deadline next month.

Libby Lucas

Comment: **9-1** Statement of support for Alternative 3 (phased initial discharge).

Response: We agree, after comparing the alternatives, Alternative 3 (Phased Initial Discharge) of the ponds, best meets the projects goals and objectives and would offer the agencies the greatest flexibility in managing specific ponds and pond systems. As noted on page 2-43 the DEIR/EIS, this alternative also represents the agencies' Preferred Alternative.

Comment: **9-2** Recommends staggering breaching of the Island Ponds.

Response : We agree that staggering the breaches of the Island Ponds may allow USFWS staff to obtain information from the first breach which could be applied to subsequent breaches. Information about levee breaches will also be important to the preparation of the long-term restoration plan for the South Bay Salt Ponds. Staggering of the Island Pond Breaches has been added to the EIR/EIS as a potential adaptive management strategy.

Change to DEIR/EIS: Chapter 2; Section 2.4.3; Page 2-31; Paragraph 2 – Pond Management Alternative 2: Simultaneous March/April Initial Release

Adaptive Management Alternative - Island Ponds (A19, A20, and A21) — One adaptive management alternative would be to stagger the breaches of Ponds A19, A20, and A21 over several years. This strategy would allow the USFWS to obtain information from the first breach that could be applied to subsequent breaches. A second ~~This~~ alternative would include the potential for operating the island ponds as seasonal ponds for the Initial Stewardship period. The existing brines in the ponds would be transferred to the Cargill Plant 2 to the maximum extent possible. The residual brines in the borrow ditches and low areas would evaporate in place. As seasonal ponds, the Island Ponds would partially fill with winter rainfall. The rainwater would evaporate during the spring and summer, and the ponds would be dry until the following winter. The seasonal pond alternative would not require construction of any intake or outlet structures at the Island Ponds. There would be no discharges to the Bay or sloughs. The ponds could be breached in the future as part of the long-term restoration plan.

Commentor: 10 Frank and Janice Delfino

February 3, 2004

Marge Kolar
Refuge Manager
U.S. Fish and Wildlife Service
P.O. Box 524
Newark, CA 94560

Subject: South Bay Salt Ponds Initial Stewardship Plan
December 2003

Dear Marge Kolar:

We have reviewed the subject document and have the following comments and questions.

Page. S-2: PROJECT NEED; Deterioration of Levees. Who will be responsible for maintaining the levees during the second stage of salt pond restoration? During this period it would be wise to review Cargill's levee maintenance reports to the U.S. Army Corps of Engineers. These reports will provide information concerning the frequency and extent of levee repairs. Will there be adequate sources of funding for levee repairs? **10-1**

Throughout the Initial Stewardship PLan(ISP) the railroad that crosses the ponds should be referred to as the Union Pacific Railroad(UPRR). The Southern Pacific Railroad(SPRR) is no longer in existence, and the name of SPRR should be removed from this document. **10-2**

Page.S-13 and S-14: VEGETATION. The comments concerning invasive non-native cordgrass are contradicted by the statement on the so called beneficial effects of opening the Island Ponds. By opening the Island Ponds, non-native cordgrass could become established within these ponds unless the SPARTINA CONTROL PROJECT is succesful. **10-3**

Page. 4-46 Table 4-7. What is the significance of including Ponds I-3 and I-3B in this table? Where are these ponds located on the map provided on Page 1-27? **10-4**

On the Page 1-27 map, the notation "EDEN LANDING ECOLOGICAL RESERVE" is in the wrong location. **10-5**

PUBLIC ACCESS: There should be limited public access as these ponds were purchased to improve and increase wildlife habitat values. **10-6**

One of our main concerns is flood protection management for the areas surounding the purchased ponds. If there is a major earthquake or a storm surge that breaches the pond levees, there should be some assurance that the surrounding areas are protected. **10-7**

Marge Kolar
February 3, 2004
Page 2.

For comments on the Baumberg Pond Complex, please refer to the letter from the Citizens Advisory Committee of the Hayward Area Planning Agency, dated February 2, 2004.

Sincerely yours,

Frank and Janice Delfino

Frank and Janice Delfino
18673 Reamer Road
Castro Valley, CA 94546-1266
Phone: 510 537 2387

Comment: **10-1** Describe responsibility and funding for long-term management of salt pond levees (recommend consulting Cargill's levee maintenance reports to the Corps).

Response: CDFG and USFWS have coordinated with Cargill on levee maintenance. Both projected costs and individual projects have been identified. See response to Comment 8-2 (Save the Bay) for anticipated costs over the next 10 years. Long-term management of the salt pond levees will be the responsibility of CDFG at the Baumberg Complex and US FWS at the Alviso and West Bay Complexes.

Comment: **10-2** The railroad crossing ISP ponds is the Union Pacific Railroad, not Southern Pacific Railroad.

Response: We have made this correction, except where the reference is to the historical Southern Pacific Railroad.

Comment: **10-3** Non-native cordgrass could become established in Island Ponds following breaching. This contradicts the assertion that opening the Island Ponds would have a beneficial vegetation impact.

Response: As discussed in Section 6.2.3.3 (pages 6-40 and 6-41 of the DEIR/EIS), breaching of the Island Ponds may have both positive and negative

impacts on vegetation. On the positive side, the conversion of the ponds to lower salinity tidal ponds would provide conditions favorable for the establishment of transitional salt marsh and brackish salt marsh plant species. At the same time, CDFG and USFWS acknowledge that the tidal conversion of the Island Ponds would create conditions favorable to the establishment of non-native cordgrass (Spartina). The EIR/EIS proposes mitigation measures to remove existing populations of Spartina in the vicinity of the Island Ponds prior to breaching.

Comment: **10-4** Significance of including Ponds I-3 and I-3B.

Response: As indicated in the notes at the bottom of Table 4-7, Ponds I-3 and I-3B are located at Cargill's Newark Plant 1 site. These are higher salinity ponds. Data on inorganics from these ponds were included for comparison purposes to determine what effect higher salinity levels have on the accumulation of metals in pond water.

Comment: **10-5** The notation for the Eden Landing Ecological Reserve is incorrect on Figure 1-1 (page 1 -27).

Response: The location of Eden Landing will be corrected on Figure 1-1.

Comment: **10-6** Limit public access to ISP ponds.

Response: As discussed in Section 8.1, long-term provisions for public access will be developed in conjunction with planning for long-term restoration of the salt ponds. Few changes in public access are proposed for the ISP implementation period. Proposals for the active management alternatives include docent-led tours and limited hunting activities on specific ponds.

Comment: **10-7** Provide assurance that surrounding areas would be protected from flooding.

Response: Under Alternatives 1, 2, and 3, the existing salt pond levees would continue to be maintained (with the exception of the Island Ponds), and would continue to provide incidental flood protection. The possibility for an unplanned breach of the pond levees (e.g., in the event of a major earthquake or storm surge) is an existing condition. With continued levee maintenance under CDFG/USFWS ownership, there is no reason to believe the proposed project would render the levees more vulnerable to accidental breaches or surrounding areas more prone to flooding. Additional flood protection, beyond the incidental flood protection the pond levees have provided under Cargill ownership, is outside the scope of the ISP project.

Commentor: 11 Thomas Phillips

February 5, 2004

Margaret Kolar
Refuge Manager
U.S. Fish and Wildlife Service
San Francisco Bay NWR Complex
P.O. Box 524
Newark, California 94560
FAX: (510) 792-5828

South Bay Salt Pond Restoration Project Draft EIR/EIS Comments

Recreation:

Under the two action alternatives, ponds which were considered closed by Cargill were actually open to the public through leased hunting. Of course, a member of the public had to go through the primary lessee for access to the ponds, but there was virtually unlimited access and recreational opportunity on these lands, including access to adjacent public waters for those who did so. In addition to providing recreational and hunting opportunities, the lease of these ponds provided an income for the primary lessees of the ponds (who sublet waterfowl blinds and access) and Cargill.

These ponds should be kept open to public access throughout the year, and public hunting during open hunting seasons. There is no reason to restrict access to docent-led tours or limited hunting.

Restricting either public access or public hunting would be a departure from the past management of the ponds by Cargill, and would result in a "taking" of access and use rights that the public has enjoyed for several decades, if not longer.

At the very least, the South Bay Salt Ponds should be open to the public and maintained as a non-fee use Class "C" wildlife area with self check-in points.

11-1

There are decades of hunting history in these ponds and adjacent lands and waters. Indeed, the hunting and sustenance providing resources of these lands and water precede the establishment of these ponds, and the historical settlement and development of these areas. Undoubtedly, these areas were used in prehistoric, historic and current times for hunting and sustenance gathering activities. These are historic uses that must be maintained.

Specifically, there are several hundred blinds (I remember the number 450 related to me by Chuck Taylor of Cargill) that were hunted every year through the 2002/2003 waterfowl season, and additionally at Eden Landing Ecological Reserve in 2004.

The right of the public to access these areas for hunting should be considered just as valuable from a wildlife management and cultural heritage position as any other valuable historic use component (such as wildlife use), of these lands and waters.

Socio-Economic Resources:

Impact on the Socio-Economic Resources were reported to be less than significant in the Draft EIR.

The impact to the Socio-Economic Resources of the area and its users would in fact be quite significant if open access to the public is not allowed, or is permitted only for such constricted uses such as docent-led tours or limited hunting.

Hunters have been using these lands, ponds, and waters in these areas from the time of the earliest historic settlement of this area, and preceding these times, by prehistoric use.

11-2

Closing or restricting hunting access would have a significant negative impact on hundreds if not thousands of hunters, and their families and friends.

Closing or restricting access as would be the case with docent-led tours would result in higher operating costs, and deny reasonable access to the millions of people who live in the nearby communities and may consider using the South Bay Salt Ponds for non-hunting recreational opportunities.

I would like to be added to the communications list for all further communications on the South Bay Salt Pond Restoration.
Thank you,

Thomas W. Phillips*
1941 Briarwood Drive
Santa Clara, CA 95051-2121
(408) 246-0165
FAX 408-961-3455
ThomasWPhillips@aol.com

Comment: **11-1** Comments regarding public access to the pond system. Restricting public access or public hunting would be a departure from past Cargill management and would result in a "taking" of public access and use rights.

Response: We acknowledge historic uses of the ISP salt ponds for recreational hunting through leasing arrangements with Cargill. We disagree that the ponds were open to the public under Cargill's ownership. The only individuals allowed on Cargill's ponds, other than employees or contractors, were those authorized under special permits or leasing arrangements.

With acquisition by the state and federal governments, these lands became public property and subject to the rules and regulations of the respective state and federal agencies. The Department of Fish and Game (DFG) and U.S. Fish and Wildlife Service (FWS) manage lands for the general public benefit consistent with protecting their value as habitat for fish and wildlife. Private leases which limit opportunities for the general public access are not compatible with the agencies' management of lands in the public trust. The agencies manage hunting, along with other activities, consistent with established management plans and regulations for the subject areas. The DFG and Fish and Wildlife Service are currently developing hunting programs which will allow access to at least a portion of the ISP lands, consistent with species and habitat needs, staffing and other recreational interests

Historic uses of the project ponds for recreational hunting will not be eliminated, but the areas available for hunting will likely be more limited under CDFG and USFWS management of the ponds than under Cargill's ownership. However, hunting opportunities will be open to more members of the public under agency management. As noted above the Refuge is developing a hunting plan for lands within the refuge and the DFG is developing a controlled hunting program on lands it manages. These plans will operate during the ISP period until a long-term restoration and management plan is completed. USFWS will distribute a draft hunting plan and environmental document under a separate cover. The public will have the opportunity to comment on specific issues pertaining to public access and hunting at that time.

Generally, as noted in Section 8.1, few changes to existing public access are proposed for the ISP implementation period and the overall impact to public access for various purposes is expected to be beneficial. Text has been added to the EIR/EIS regarding restrictions to access for hunting on lands which were previously leased by Cargill for hunting.

Please note that public access involving docent-led tours and the hunting plans noted above, are only intended to be in effect during the ISP period. Long-term provisions for public access will be developed in conjunction with planning for long-term restoration of the salt ponds Additional public access opportunities are expected to be developed at that time. In the long-term, by optimizing the diversity and quality of wildlife habitat, the project is expected to result in growth in the

populations of resident and migratory populations of birds, fish and other wildlife, with concomitant beneficial impacts for hunting and fishing in the South Bay.

Change to DEIR/EIS: Chapter 8; Section 8.3.3; Page 8-10; Paragraph 1, top of page, the following text has been inserted:

After BENEFICIAL RECREATION IMPACT –1.

Historic uses of the project ponds for recreational hunting will not be eliminated, but the areal extent of lands available for hunting will likely be more restricted under CDFG and USFWS management of the ponds. Under Cargill's ownership, the ponds were not open to the public, but were available to hunters through annual leasing arrangements with Cargill. The agencies cannot authorize private leases for hunting activities on these publicly owned ponds. Therefore, access to some areas will become less restricted for the general public because it will no longer be necessary to purchase a lease for access. Other areas may be closed to hunting to reflect species and habitat needs, safety, staffing and other recreational interests. Generally, few changes to existing public access are proposed for the ISP implementation period, since with the exception of private hunting leases, all public access was restricted by Cargill. The overall impact to public access for various purposes is expected to be beneficial.

Comment: **11-2** Closing or restricting hunting access on the project lands would have a significant negative socioeconomic impact on hunters, their families, and friends and would result in higher operating costs for the agencies

Response: As noted in the response above, the hunters who were able to obtain an annual lease or sublease through Cargill, will likely have less area available for hunting on the ISP lands. However, other hunters, who were unable to obtain leases will be able to access lands that were previously unavailable to the general public. We believe the overall impacts will be beneficial. The agencies expect to continue discussions with local hunters regarding public access for hunting and other uses. To the extent feasible, the agencies will strive to accommodate the various historic uses of the salt ponds.

We do not agree with the commenter that restricting access to the ponds and providing docent-led tours would result in higher operating costs than providing access through the management of numerous individual

leases on the ponds. Careful development of hunting plans would minimize agency costs. In addition, volunteer docents would be available to offer tours at low costs to the agencies.

We have added text to Chapter 10 (Socioeconomic Resources) of the EIR/EIS acknowledging the potential socioeconomic impact of changes in access to the ponds for hunting and of loss of revenue from hunting leases.

Change to DEIR/EIS: Chapter 10; Section 10.4; Page 10-4 - The following paragraphs are inserted between Paragraphs 3 and 4:

…and a rail line.

Other potential socioeconomic impacts that have been given consideration and determined to be less than significant include socioeconomic impacts related to changes in access to the ISP project ponds for hunting and from the loss of revenue from hunting leases (all project alternatives). Historically, a number of hunters obtained annual revocable leases from Cargill. These primary lessees in turn issued subleases to additional hunters. Approximately 400 hunters held these annual revocable leases or subleases on the Cargill ponds. All Cargill leases expired in the winter of 2003, prior to acquisition of the salt ponds by the agencies.

Although some individual hunters will no longer receive revenue from issuing subleases to the salt ponds, and some hunters will no longer have private hunting access to the ponds, socioeconomic impacts to hunters as a whole are expected to be less than significant since hunters will no longer be required to pay for access to the project areas and the lands will be available to more members of the public.

There are no…

Commentor: 12 Thomas Phillips - Addendum

February 5, 2004

Carl Wilcox
Habitat Conservation Manager
California Department of Fish and Game
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P.O. Box 47
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FAX: (707) 944-5563

South Bay Salt Pond Restoration Project Draft EIR/EIS Comments

Navigable Waterways:

I see in the Draft EIR that the claim is made that the project area does not have navigable waterways present, and that it uses Coast Guard buoys to determine navigability. Navigable waterways pervade the entire project area. All the creeks and channels between the ponds are navigable and are commonly used by the public. While the salt ponds themselves may not be currently navigable because they have been diked off from the bay and creek channels, historically they were navigable. Historic and contemporary documents show these channels. It should be expected that any failure or breaching of dikes and levees would return these lands currently in salt ponds, to navigable waterways open to public access and use.

Thank you,

12-1

Thomas W. Phillips*
1941 Briarwood Drive
Santa Clara, CA 95051-2121
(408) 246-0165
FAX 408-961-3455
ThomasWPhillips@aol.com

Comment: **12-1** Creeks and channels between ponds are navigable and ponds were historically navigable. Failures or breaches of levees would return these lands to navigable waterways, open to public access and use.

Response: Comment noted. Although the creeks and channels between the ponds are navigable, they are not part of the project site. Opening the ponds and adjacent sloughs to tidewater circulation may provide additional recreational opportunities in the South Bay. In this way, the project offers beneficial impacts to regional recreation. It should be recognized that with the exception of the Island Ponds, restoration of tidal flows during the ISP period is not contemplated. The EIR has been changed to clarify the definition of navigable waters.

Change to DEIR/EIS: Chapter 1; Section 1.6.1; Page 1-8 – last paragraph on "Navigation and Navigation Safety has been rewritten as follows:

Navigation and Navigation Safety

~~**The project sites are predominantly between mud flats and dry land. As a consequence, the project sites do not have navigable waterways. In some creek areas, the levee structures provide the essential limits to navigable water and protect these waterways from the project sites. Current US Coast Guard marking buoys and channel markers are all at least 0.25-mile distant from the project sites. The closest navigation markers is the Marker 6 at Ravenswood Point, 0.3 miles distant from the project. The waterways between the pond system levees and the navigable waterways of the South San Francisco Bay typically have depths of less than one meter (NOAA, 2003).~~

The project sites are predominantly between mud flats and dry land and do not include the adjacent creeks and sloughs. On some project boundaries, the levee structures provide the essential limits to navigation and delineate these waterways from the project sites. Current US Coast Guard marking buoys and channel markers are all at least 0.25-mile distant from the project sites. The closest navigation marker is the Marker 6 at Ravenswood Point, 0.3 miles distant from the project. However, the waterways between the pond system levees and the South Bay proper which typically have depths of less than one meter (NOAA, 2003), are used by both recreational boaters and commercial shrimpers and fishermen. The salt pond areas within the levees include former slough channels that were previously navigable and, if the levees were breached, the former channels could again become navigable.

Commentor: 13 Richard Santos

Margaret Kolar,
Refuge Complex Manager,
San Francisco Bay NWR Complex
P.O. Box 524
Newark, California 94560

February 2, 2004

Re: Federal National Environmental Policy Act (NEPA)

Dear Manager Kolar:

As per my conversation with Refuge Manager, Clyde Morris, my concerns, are listed. I reviewed most of the South Bay Salt Pond EIR and I just wanted to make sure my concerns are forwarded and recorded. These are just general comments.

My first suggestion would be for this Disk to have an opening to directly reply comments to your office. The Disk could then be sent back to your office with comments/notes after the concerned subject.

Environmental restoration (ecosystems) of Alviso Slough

1. Allow salt water from both ponds 8A and 12A to flow through gates with high tide into the Alviso Slough. This would help in removing non-native vegetation and sediment that has clogged this channel for the past 25 years. Do not allow the water to flow back into the (2) salt ponds.

   This would help in establishing key habitat for endangered species, birds, fish, etc, (Salmon, stripe bass, sturgeon, shellfish, Calif Bay shrimp, sea lions, etc)

   Assist with food source for both birds and fish.

   This would also allow for more water capacity of the river in providing extra flood protection. This would support scouring of river flowing into the south bay.

   This would allow a jump start in environmental restoration of this River, instead of allowing for the next 5 years in planning.

13-1

2. Removal of homesteaders in River.

   They are docking illegal without due permit process from all state and fed agencies. No regulations of waste or chemicals from boaters docked along Alviso Slough are being adhered to.

   Causing continues presence – thus disrupting births of seals, birds, fish and other endangered animals.

   Continue foot traffic along bay trails at nite – Security and disrupt animal births

13-2

3. Fresh Water – 120 mil gals per day into the Alviso Slough from the San Jose Water Treatment Plan. 18 mil gals per day into the Gadualupe River from the Sunnyvale Muni Wastewater Plant. IN addition there is 18 fresh water pumps pouring water into the Guadalupe River from Alviso to the San Jose Airport. This needs to be monitored and reduced. **13-3**

   This has a great affect on the Alviso Slough environmental restoration. This reduces the salinity in this river.

4. When non-native vegetation is removed from the Alviso Slough how much if any flood water will enter Pond 8A. This is why it is so important to remove the non-native vegetation from the Alviso Slough to maintain the river to hold more flood capacity run-off water from upstream, thus the fresh water would be prevented from entering Ponds that assist with natural environment restoration. **13-4**

   Fresh water mercury would not enter ponds.

5. Maintain walking trails. All trails must be maintained. Who pays and where does the funds for maintenance come from. **13-5**

6. Tidal flooding – The Alviso Community must be protected from tidal flooding **13-6**

7. Recreational opportunities – New Marina, and the return of salt water can provide for tax payers having the opportunities for water recreation. **13-7**

I just wanted to make a few comments, because I can not attend the next scheduled EIR meeting. I will make an all out effort to communicate and attend any next scheduled meeting related to Environmental issues per the South Bay Salt Ponds. Thank you for providing me with these documents and communication.

Sincerely,

Richard P. Santos
Alviso resident
P.O. Box 244
Alviso, Ca 95002
(408)262-0879

Comment: **13-1** Suggests discharges from A8 and A12 to raise salinity levels in Alviso Slough.

Response: Your suggestion to allow discharge from Pond A8 and Pond A12 into Alviso Slough has been carefully considered. Modeling efforts for designs with several discharges to Alviso Slough (which was our initial plan) showed the potential for significant impacts to water quality and benthic invertebrates in the slough. In addition, during our analytical phase, we determined the greatest level of impacts caused by the ISP would be to certain species of birds that require medium to high salinity waters for their habitat needs. Because of the specific configuration and location of Ponds A12, A13 and A15, they were determined to have the highest potential for maintenance as higher salinity ponds with the least impact to adjacent waters.

Please note however that various pond intakes and discharges will be re-evaluated during the long-term restoration planning process. This issue can be re-examined at that time.

Comment: **13-2** Recommends removal of homesteaders in Alviso Slough.

Response: Comment noted. We are also concerned with this problem. However, it is beyond the scope of this particular project.

Comment: **13-3** Sources of freshwater in Alviso Slough need to be monitored and reduced.

Response: Comment noted. Our modeling efforts considered the existing conditions in Alviso Slough, The long-term restoration project should also include these inputs during planning.

Comment: **13-4** Comment regarding removal of non-native vegetation to allow Alviso Slough to hold more floodwater.

Response: We agree that maintenance of Alviso Slough is important. Proposals to remove vegetation in the Slough are not part of this project; however, we agree that inputs to Pond A8 during flood events will be important to monitor. In the Final Environmental Impact Report for the Lower Guadalupe River Flood Protection Project (Santa Clara Valley Water District, June 2002), it is predicted that Pond A8 will rarely be utilized for flood water detention. The District will closely monitor mercury levels in Pond A8 after such events.

Comment: **13-5** Request to maintain existing trails.

Response: The ISP does not propose the creation of new trails. Existing trails will continue to be funded and maintained by the agencies who own them.

Comment: **13-6** Request to protect the Alviso community from tidal flooding.

Response: Alternatives 1, 2, and 3 all provide for maintenance of the pond levees. These levees, though not originally designed for flood protection, would continue to provide incidental flood protection for the Alviso community and other nearby communities.

Comment: **13-7** Increased recreational opportunities with new marina.

Response: Comment noted. We are aware of the new boat launch proposed for Alviso Slough. We agree that it will provide important recreational opportunities in the area and will allow boaters to access the southern end of the Bay. In addition, increasing tidal circulation in the ponds may create higher flows in the adjacent sloughs that will deepen existing channels and provide additional recreational opportunities in the South Bay.

Commenter 14 U.S. Environmental Protection Agency

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

March 9, 2004

Margaret Kolar
U.S. Fish and Wildlife Service
San Francisco Bay NWR Complex
P.O. Box 524
Newark, CA 94560

Subject: Draft Environmental Impact Statement (DEIS) for the South Bay Salt Ponds Initial Stewardship Plan, Alameda, Santa Clara, and San Mateo Counties, California (CEQ #040017)

Dear Ms. Kolar:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act.

The DEIS analyzes the proposed interim management strategy for 15,100 acres of former commercial salt ponds in south San Francisco Bay which will be utilized while a long-term restoration plan is developed and implemented. EPA supports this project and the environmental benefits that will be achieved through the eventual restoration of the South Bay.

Based on our review, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). We have concerns about how conclusions were reached regarding air emissions and environmental justice impacts. We also have concerns about the hydraulic models, monitoring plan development, the alternatives analysis, and *Spartina alterniflora* eradication. Please see the enclosed Detailed Comments for a description of these concerns and our recommendations. A *Summary of EPA Rating Definitions* is also enclosed.

We appreciate the opportunity to review this DEIS. When the Final EIS is released for public review, please send two copies to the address above (mail code: CMD-2). If you have any questions, please contact me or David P. Schmidt, the lead reviewer for this project. David can be reached at 415-972-3792 or schmidt.davidp@epa.gov.

Sincerely,

Lisa B. Hanf, Manager
Federal Activities Office
Cross Media Division

Printed on Recycled Paper

Enclosures:
EPA's Detailed Comments
Summary of EPA Rating Definitions

cc: Carl Wilcox, California Department of Fish and Game

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR THE SOUTH BAY SALT PONDS INITIAL STEWARDSHIP PLAN, March 9, 2004

Air Emissions

The DEIS states that the proposed project will not exceed Clean Air Act (CAA) conformity thresholds of 50 tons of reactive organic gases (ROG) and oxides of nitrogen (NOx) (page 9-2, paragraph 5). The document also provides a list of activities that potentially would contribute to combustion emissions (based on engineering estimates for the project), and states that emissions for all project alternatives are assumed to be less than the emissions currently allowed under existing permits (p. 9-11 to 9-12).

14-1

The DEIS, however, does not state the basis for the conclusions that emissions will not exceed certain thresholds, permits or standards. There is no numeric comparison between applicable standards and the projected emissions that clearly demonstrate that those values would not be exceeded.

Recommendation:

The Final Environmental Impact Statement (FEIS) should provide a quantitative comparison between projected emissions from construction activities and applicable thresholds and standards. Even if determinations of *less than significant impact* are made based on assumptions from current practices and existing permits, the projected emissions should be quantitatively compared with appropriate standards.

Environmental Justice

The section of the DEIS on environmental justice briefly states that the Initial Stewardship Plan (ISP) would not result in environmental justice impacts (p.12-14, paragraph 5). However, there is no information or analysis provided to support this conclusion.

It would be useful to explain how the determination regarding environmental justice impacts was made, even if it is simply to document that there are no inhabited areas anticipated to be impacted by implementation of the plan. The DEIS indicates there is private property adjacent to some of the salt ponds. For example, p 3-4, paragraph 5, states, "Previous studies (USACE 1988) identified approximately 80 miles of salt pond levees that are boundaries to other private and public properties." If there is the potential for these areas to be impacted by implementation of the ISP, a more thorough environmental justice analysis should be performed.

14-2

Recommendation:

Pursuant to Executive Order 12898, the FEIS should provide relevant information to demonstrate whether this project, as proposed, will have a disproportionate or adverse impact on minority or low-income populations.

Hydrologic Models

Hydraulic models are used to predict levee breaching of the Island Ponds and channel scouring (p. 3-7). These predictions provide important information on sediment erosion and deposition at the breaches and in the ponds, as well as channel scour in Coyote Creek at the Union Pacific railroad bridge.

The DEIS and Technical Appendix K indicate that to predict the erosion that would occur due to net transport of sediment into the ponds, it would be appropriate to use a sediment transport model, and possibly a morphology model. However, these models were beyond the scope of the analysis that was performed. We note that the DEIS references uncertainties of the hydraulic models that were used. If sediment transport is essential to a reasoned choice among alternatives, and the costs of obtaining it are not exorbitant, this information should be provided (40 CFR 1502.22(a)).

14-3

Recommendations:

The FEIS should address whether a sediment transport model and a morphology model should be used to predict erosion into the Island Ponds, and explain how the accuracy and reliability of those results would compare to the results obtained from the hydrologic model that was used.

EPA also recommends that channel cross-sectional geometry (bathymetry) data be collected to ground truth the hydrologic model and, due to the uncertainty of the model used, that a more rigorous monitoring plan be developed to monitor the erosion at the Island Pond breaches and the scouring at the Union Pacific railroad bridge.

Monitoring Plans

The ISP is a large project and the time line for management under the plan may range from 5 to 15 years. Within that time, the DEIS indicates that monitoring will be performed to determine impacts and adaptively manage the salt ponds. However, with the exception of the *Additional Sediment Sampling and Analysis Plan (Appendix I)*, there is little information provided on the monitoring plans.

Many of the models used and projections made to assess environmental impacts were done using available and somewhat limited data. In order to verify these projections and adaptively manage implementation of the ISP, it is very important that monitoring plans be well designed and administered.

14-4

Recommendation:

It would be helpful to develop descriptive monitoring plans for each component of the ISP. The plans should address monitoring time frames, locations, sample collection and

analytical costs, data management, and coordination with on-going monitoring efforts in the Bay Area. If this level of detail seems premature for the FEIS, producing a complete list of anticipated monitoring plans that need to be developed, along with their general scope, would provide useful information to compare and evaluate alternatives. 14-4 Cont.

Alternatives Analysis

The DEIS eliminates several alternatives based solely on the cost of those alternatives. This appears to be the case for the *Pump all the Baumberg Ponds Alternative*, the *Culvert Structures for Island Ponds Alternative*, and the *Baumberg 2, Baumberg 2C and Baumberg 8A System Alternatives*, all described in section 2.3 of the DEIS.

We note that the DEIS states that one of the specific objectives of the ISP is to work within existing funding constraints for the project (p. 2-2, paragraph 1). Providing additional information on the project funding and budget would give the public a better understanding of why certain alternatives were eliminated from further consideration. 14-5

Recommendation:

It would also be helpful for the FEIS to provide actual estimates for anticipated project funding and costs of the alternatives in order to allow readers to objectively compare those alternatives, or provide a more quantitative explanation for their elimination.

Table S-3 of the DEIS (pp. S-9 - S-20) compares the impacts of the project alternatives. The table uses the following designations to denote impacts: B (Beneficial), S (Significant), PS (Potentially Significant), LTS (Less Than Significant), NS (Non Significant) and NA (Not Applicable). However, using the table is somewhat confusing as there appears to be discrepancies between the table and text in the document. For example, row H-2 of the table indicates that the re-suspension of sediments due to increased tidal prism within the ponds would have a non-significant impact under the No Action Alternative, yet the text on page 3-6 indicates the impact is potentially significant. This lack of correlation between the table and the text appears throughout the table.

In addition, the designation of Non Significant is used in the table, but is not used in the text of the DEIS that describes the impacts (either pre- or post-mitigation). This makes the basis of the impacts in the table difficult to understand. 14-6

Recommendation:

The FEIS should contain a revised Table S-3 that more closely tracks the descriptive text of the document and makes it easier for the public to compare the impacts of the different alternatives.

Exceedances of the *Water Quality Objective* for Mercury

A recent study by David Krabbenhoft of the U.S. Geological Survey indicates that wetting and drying of sediments (i.e., rasing and lowering pond levels) has been shown to increase methylmercury conversions. Recent work by Lester McKee at the San Francisco Estuary Institute (SFEI) indicates that large "slugs" of mercury are being transported down the Guadalupe watershed system associated with reservoir releases.

14-7

This data could affect estimations of mercury loading to the Bay from the Guadalupe watershed during storm events. It may also be relevant to the *fate and transport* discussion (p.5-11) that correlates mercury concentrations and suspended sediment.

Recommendation:

EPA recommends that the studies cited above be reviewed to determine if they provide additional information that may enhance the estimates and projections that are made in the DEIS.

Status of Permits and Consultations

The DEIS does a good job of describing the types of permits and consultations required to move forward with the proposed project. These include a U.S. Army Corps of Engineers Clean Water Act (CWA) Section 404 permit, San Francisco Bay Regional Water Quality Control Board Section 401 water quality certification, Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries, and compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA). The DEIS indicates that appropriate permits, consultations and designations will need to be in place before construction begins, or will be performed as new sites are discovered.

14-8

Recommendation:

The FEIS should include an update on the status of all required CWA permits, consultation with USFWS and NOAA Fisheries, and Section 106 NHPA consultations. An estimated timeline for completing these processes, to the extent it is known, should also be included in the FEIS.

Invasive Plant Species

The DEIS states that the Invasive *Spartina* Project predicts that *S. alterniflora* and hybrids will be effectively eradicated from most of the Central and South Bays by 2009 (p. 6-37, paragraph 5). An eradication goal of 2009 may be overly optimistic. We note that the recent FEIS for the *San Francisco Estuary Invasive Spartina Program: Spartina Control Program* was

14-9

much more conservative and did not provide a firm estimate as to when the eradication (or even control) of *Spartina* might be achieved.

Regarding *Spartina* eradication, the California clapper rail, a Federal Endangered Species, has been reported to nest in stands of *S. alterniflora* and its hybrids, and at relatively high nest densities in some areas (*Spartina Control Program* FEIS). 14-9 Cont.

Recommendations:

The FEIS should clarify the basis for *S. alterniflora* and hybrids eradication by 2009. In addition, the document should discuss the impacts of *Spartina* eradication on the conservation efforts for the California clapper rail and the status of Section 7 consultation.

Identification of Ponds

The numbering of the salt ponds has been organized by pond system (e.g., Baumberg Ponds, West Bay Ponds, etc.). Within each system, ponds are identified by number, or sometimes a letter and number combination. This is a likely carryover of the Cargill identification system. When looking at more than one pond system, there may be overlapping numbers (e.g., Baumberg Ponds and West Bay Ponds both have ponds designated as 1, 2, and 4). This becomes confusing when trying to sort through pond information when presented all together, such as in Table 2-1 (pp.2-13 - 2-23).

In addition, numerous ponds are referenced in the DEIS that do not appear on any of the maps. Pond A4, owned by the Santa Clara Valley Water District, is mentioned numerous times but is not shown on any map. Other ponds (e.g., A6, A8D, A8W on p. 2-27) are also not displayed. 14-10

Recommendations:

To better communicate the complex network of ponds, it is recommended that the FEIS use a unique alpha and numeric identifier for each pond within the entire project. This will provide clarity for all interested parties and help them to track progress of the Salt Pond Restoration Program. If this is not feasible for the ISP, then such a system should be considered for the long-term restoration plan.

In addition, the maps of the DEIS should be revised to display all ponds that are referenced in the text.

SUMMARY OF EPA RATING DEFINITIONS

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

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

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

"EC" (Environmental Concerns)

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

"EO" (Environmental Objections)

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

"EU" (Environmentally Unsatisfactory)

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

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

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

"Category 2" (Insufficient Information)

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

"Category 3" (Inadequate)

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

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

***Comment* 14-1** Air Emissions: The DEIS does not include numeric comparisons between applicable standards and projected emissions.

Response: The Impacts and Mitigation Measures section in Chapter 9 Air Quality (Section 9.3) of the DEIR/EIS has been rewritten and the new section included in the FEIS. This includes a qualitative comparison to numeric air emissions criteria.

Comment 14-2 Environmental Justice: The DEIS does not include information to support the conclusion that the project would not result in environmental justice impacts.

Response: The following text has been added to Chapter 12, Section 12-6, page 12-15, last paragraph of the EIR:

Changes to the DEIR/EIS:
Implementation of the ISP would not result in any unmitigated off-site environmental, economic, social, or health impacts that would affect inhabited areas. Therefore, implementation of the ISP will…

***Comment* 14-3** Hydraulic Models: EPA recommends that information about the use of sediment transport models be included in the FEIS.

Response: The need for additional sediment transport or geomorphic modeling was reviewed during the preparation of the EIR/EIS. Detailed sediment modeling was not included for several reasons, as listed below.

The Island Pond hydrodynamic analysis has identified and quantified potential scour areas based on conservative assumptions regarding the size and of the proposed levee breach conditions. No significant erosion has been identified based on slough velocity conditions and empirical relationships correlating tidal prism and channel size. Potential scour at the railroad crossing will be monitored for potential erosion conditions.

Detailed sediment modeling would require additional field information regarding slough bathymetry, tidal monitoring and sediment sampling. Sediment modeling is being evaluated for the long-term restoration project. The restoration project science team is evaluating hydrodynamic and sediment modeling procedures and data needs. Any initial sediment modeling would be in advance of the long-term project modeling and may not be useful for the overall project. The Island Pond breach process is being considered a pilot case to provide ground truth data for the long-term restoration project studies.

Due to the limited access to the Island Ponds, the only project alternatives that were considered feasible included seasonal ponds or the levee breaches. Seasonal ponds would leave the ponds dry for most of the year and not preserve the existing open water habitat within the ponds. Seasonal ponds would also require ongoing maintenance of the existing levees, which would be more difficult without water in the ponds.

Based on the discussion above, additional information regarding sediment transport, specific location of sedimentation and erosion areas, and estimates of the rates of sedimentation and erosion from more detailed sediment models was not considered essential to a reasoned choice between project alternatives.

***Comment* 14-4** Monitoring Plans: The EPA recommends the preparation of descriptive monitoring plans for each component of the ISP.

Response: A comprehensive water and sediment monitoring plan was submitted to RQWCB in the Report of Waste Discharge. This monitoring plan was included in the Tentative Order Self Monitoring Program. The Self Monitoring Program is shown on the RWQCB web site (http://www.swrcb.ca.gov/rwqcb2/agenda_mar_04.htm).

The CDFG and USFWS are in the process of developing monitoring plans for biological and Mitigation Monitoring and Reporting Program.

***Comment* 14-5** Funding: EPA recommends the FEIS include cost estimates and funding options for the different alternatives.

Response: Please see response to Save the Bay's comment 8-2 which includes cost estimates for each of the alternatives. It is now included in Section 2.5 of the FEIS.

***Comment* 14-6** EPA recommends the FEIS contain a revised Table S-3.

Response: Table S-3 DEIR/EIS has been revised and included in the FEIS.

***Comment* 14-7** EPA recommends that two mercury studies be reviewed to determine if they provide additional information.

Response: Concerns about the effects of wetting and drying of sediments on methylmercury conversions were identified in the DEIR/EIS. However, we will review these studies for use with our adaptive management of the ponds. Monitoring of mercury is a component of the Self Monitoring Program required by the RWQCB. Findings will incorporated in the annual report required by the Self Monitoring Program. The data from

these studies will be especially helpful in interpreting potential additions of mercury to the ISP ponds from flooding events on the Guadalupe watershed.

***Comment* 14-8** EPA recommends the FEIS include an update on the status of required permits and consultations.

Response: To date, we have received a Waste Discharge Permit from the RWQCB. A Nationwide 27 permit application has been submitted to the USACE, and both a permit application and Federal Coastal Consistency Determination were submitted to BCDC. Consultation with USFWS and NOAA Fisheries is ongoing. USFWS completed the Biological Opinion on endangered species in mid-March 2004. A copy of the Biological Opinion is attached following the response to EPA comments. USACE initiated consultation with NOAA but the final opinion has not been received.

***Comment* 14-9** EPA recommends the FEIS clarify the basis for the statement regarding timing *S. alterniflora* eradication, and discuss impact of *Spartina* eradication on California clapper rail.

Response: The timing of complete eradication may be overly optimistic. This statement has been removed from the FEIS.

Changes to the DEIR/EIS: Chapter 6, Section 6.2.1, page 6-37

In 1999, the State Coastal Conservancy and USFWS initiated the Invasive *Spartina* Project, a region-wide program to control non-native *Spartina* in the San Francisco Estuary. ~~The Invasive *Spartina* Project currently predicts that *S. alterniflora* and hybrids will be effectively eradicated from most of the Central and South Bays by 2009 (P. Olofson, pers. comm.).~~

The USFWS Biological Opinion for the ISP (see Biological Opinion attached following response to EPA comments in Chapter 13) does not specifically discuss impacts from *Spartina* eradication to California clapper rail. The FEIS for the *San Francisco Estuary Invasive Spartina Program: Spartina Control Program* (California Coastal Conservancy 2003) does find that some project impacts on clapper rails associated with *Spartina* eradication cannot be reduced to less than significant levels; measures are outlined to reduce project impacts as much as possible. CDFG and USFWS will work closely with the Invasive *Spartina* Project on eradication within the project area and will implement impact reduction measures outlined in the *Spartina* Control Program's Biological Opinion.

***Comment* 14-10** EPA recommends the ponds be re-numbered and that all ponds discussed in the FEIS be included on maps.

Response: A new pond numbering system will be developed in the long-term restoration planning process. Labels have been added to the figures to show the location of Pond A4, and A6,.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

IN REPLY REFER TO:
1-1-03-F-0359

MAR 16 2004

Mr. Calvin C. Fong
Chief, Regulatory Branch
(Attn: Bob Quebedeaux)
U.S. Army Corps of Engineers
San Francisco District
333 Market Street
San Francisco, California 94105-2197

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL # of pages ▶ 16

To Lisa Hollings	From Bob Quebedeaux
Dept./Agency	Phone # 415-977-8446
Fax # 530-668-5675	Fax #

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

Subject: Formal Consultation on the Initial Stewardship Project for Salt Ponds in South San Francisco Bay, Alameda, Santa Clara and San Mateo Counties, California (Corps File No. 27701S)

Dear Mr. Fong:

This is in response to your June 6, 2003, letter requesting informal consultation pursuant to 50 CFR § 402.12(a) with the U.S. Fish and Wildlife Service (Service) regarding the Service's San Francisco Bay National Wildlife Refuge's (Refuge) and California Department of Fish and Game's (Department) proposed Initial Stewardship Project (ISP) for interim maintenance of salt ponds in South San Francisco Bay, California. The Refuge and Department have applied for a section 404 permit from the U.S. Army Corps of Engineers (Corps) to implement the proposed action. Your request for informal consultation was received in our office on June 9, 2003.

Your letter requested our concurrence with your determination that the proposed action in not likely to adversely affect the threatened Western snowy plover (*Charadrius alexandrius nivosus*), endangered California clapper rail (*Rallus longirostris obsoletus*), and endangered salt marsh harvest mouse (*Reithrodontomys raviventris*). Upon review of material provided with your letter, we concur with your determination that the proposed action is not likely to adversely affect the Western snowy plover and California clapper rail because any potential adverse effects are likely to be discountable or insignificant based on the design and location of elements of the project and the implementation of proposed conservation measures. However, we cannot concur

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with your determination that the proposed action is not likely to adversely affect the salt marsh harvest mouse or the endangered California least tern (*Sterna antillarum browni*). Therefore, this document represents the Service's biological opinion on the effects of the proposed action on the salt marsh harvest mouse and California least tern in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act).

This biological opinion is based on information provided in the following documents: (1) the *Department of the Army Permit Application for the Initial Stewardship Project* prepared by the Refuge and Department and dated March 27, 2003; (2); the *South Bay Salt Ponds Initial Stewardship Plan Draft Environmental Impact Report/Environmental Impact Statement* prepared by Life Sciences!, Inc. and dated December 2003; (3) the *South Bay Salt Ponds Initial Stewardship Plan* prepared by Life Sciences!, Inc. and dated June 2003; and (4) miscellaneous correspondence and electronic mail concerning the proposed project. This opinion also is based on other relevant published and unpublished studies, and communications on the distribution and abundance of the salt marsh harvest mouse and California least tern, and information available to the Service.

Consultation History

June 9, 2003: The Service received the Corps letter dated June 6, 2003, requesting initiation of informal consultation.

June 24, 2003: The Service notified the Corps, Refuge and Department in a meeting and via email that the Service may not be able to concur with the Corps' determination of "not likely to adverse affect" and requested additional information.

September 17, 2003: The Service notified the Corps, Refuge and Department via email that the Service had determined that the proposed action was likely to adversely affect the salt marsh harvest mouse and California least tern and that formal consultation was necessary.

BIOLOGICAL OPINION

Description of Proposed Action

In March 2003, the U.S. Government and the State of California acquired 16,500 acres of industrial solar salt ponds and/or associated salt-making rights in San Francisco Bay Estuary from Cargill, Inc. This acquisition set the stage for the development of the largest tidal wetland restoration project on the West Coast. Specifically, the purpose of this acquisition is to protect, restore, and enhance the property for fish and wildlife, as well as to provide opportunities for wildlife-oriented recreation and education. Of the acquired lands, 15,100 acres are located in South San Francisco Bay and the remaining 1,400 acres are in San Pablo Bay. The proposed ISP only pertains to the 15,100 acres acquired in South San Francisco Bay. Within this area, the

Service will own and manage 8,000 acres of the Alviso Complex and 1,600 acres of the West Bay Complex. The Department will own and manage 5,500 aces of the Baumberg Complex.

The Alviso Complex consists of 25 salt ponds situated along the shoreline of South San Francisco Bay in Santa Clara and Alameda counties. The Alviso Complex is bordered on the west by the Palo Alto Baylands Nature Preserve and Charleston Slough, on the south By Moffett Naval Air Station, and on the east by Coyote Creek and Cushing Parkway in the City of Fremont. Major drainages within the Alviso Complex which discharge into South San Francisco Bay include Charleston Slough, Mountain View Slough, Stevens Creek, Guadalupe Slough, Alviso Slough (Guadalupe River), Artesian Slough, Mud Slough, and Coyote Creek.

The West Bay Complex consists of 7 salt ponds on the bay side of the San Francisco Bay Peninsula, on both sides of Highway 84 west of the Dumbarton Bridge, and bayward of the developed areas of the City of Menlo Park in San Mateo County. The West Bay Complex is bordered by Bayfront Park to the west, and the Dumbarton Bridge approach and the Union Pacific Railroad line are located at the complex's southern border. Ravenswood Slough bisects the complex and discharges into South San Francisco Bay.

The Baumberg Complex consists of 23 salt ponds on the eastern shores of South San Francisco Bay that are west of the cities of Hayward and Union City in Alameda County. The approach to the San Mateo Bridge and the Department's Eden Landing Ecological Reserve form the northern boundary of the Baumberg Complex. The Alameda Creek Flood Control Channel and Coyote Hills form the southern boundary. Old Alameda Creek and the Alameda Creek Flood Control Channel are major drainages through the Baumberg Complex that discharge into South San Francisco Bay.

The ISP has been developed by the Department and Refuge to maintain and enhance, to the extent possible, the biological and physical conditions of the salt ponds within the three complexes in the intervening period between cessation of salt-making activities and the implementation of long-term wetland restoration plan. Currently, the salt ponds support populations of fish and wildlife, including federally and/or State listed species, migratory waterfowl, shorebirds, other water-associated birds, resident fish, and invertebrates.

The long term goal of the Department and Refuge is to restore the ponds within the complexes into a mosaic of habitats, including tidal wetlands, saline ponds, and seasonal ponds to benefit federally and/or State listed species, migratory birds, and other native wildlife and plant species, as well as to provide wildlife-oriented public access and recreation.

Implementation of the long-term wetlands restoration plan is anticipated to be conducted in phases beginning in 2008 with subsequent phases extending 20+ years from initial implementation of the plan. Therefore, some ponds may be managed under the ISP for as few as five years, while other ponds may require such management for 20+ years.

The objectives of the ISP are the following:

1. Cease salt production activities;
2. Circulate bay water through the ponds and introduce tidal hydrology to ponds where feasible;
3. Maintain existing open water and wetland habitat for the benefit of wildlife, including habitat for migratory shorebirds and waterfowl and resident breeding species;
4. Maintain ponds in a restorable condition to facilitate future long-tern restoration; and
5. Meet all regulatory requirements, including discharge requirements to maintain water quality standards in South San Francisco Bay.

To implement the ISP, certain physical and operational changes must occur in selected ponds. Changes to existing operations include the following:

1. Circulate bay waters through reconfigured pond systems and release pond contents into South San Francisco Bay. The ISP requires installation of 58 new water control features such as intake structures, outlet structures, and additional pumps to maintain existing shallow open water habitat and reduce salinity. Construction activities include clearing and grubbing, removal of debris and vegetation, excavation of sub-grade, backfill and pile installation, trash rack and weir construction, and final grading and compaction.
2. Manage a limited number of ponds as seasonal wetlands to reduce management costs and optimize habitat for migratory shorebirds, waterfowl, and certain federally and/or state listed species.
3. Manage different summer and winter water levels in a limited number of ponds to reduce management costs and optimize habitat for migratory shorebirds, waterfowl, and certain federally and/or state listed species.
4. Restore three ponds to tidal circulation.
5. Manage several ponds in the Alviso Complex as "batch ponds" where salinity levels would be allowed to rise to support specific wildlife species.

Installation of proposed water control structures is anticipated to require several years to complete. Several structures would be installed in the spring and early summer of 2004. These structures would be installed at B8A-12 and B2-1 in the Baumberg Complex and at all of the ponds between A1 and A7 in the Alviso Complex. After water control structures are installed for individual ponds systems, intake of bay water into ponds and initial release of pond contents into South San Francisco Bay will begin during the following March-July time period when salinities within the ponds and in South San Francisco Bay are at their lowest levels. The initial release of brines is anticipated to be completed within an approximately two-month period. This would be followed by the continuous circulation of bay waters through the pond system.

Intake and outlet structures under the ISP are sized to maintain discharge salinity levels during the continuous circulation period at below 40 parts per thousand (ppt) during a summer period following a low rainfall winter period. The Department and Refuge have requested the State's Regional Water Quality Control Board to allow a discharge salinity limit of 44 ppt to provide some flexibility in the operation of the individual pond systems during the ISP period. Most intake and outlet structures are designed with operable gates and flapgates to control water flow as required and described in detail in the ISP.

Some control structures are designed to allow the ability to close off all flow, allow flow only, or allow outflow only, thus offering the management ability to reverse direction of inflow and outflow when necessary to control salinity and/or water levels. Under flood conditions, it may be necessary to use the intake as an outlet to drain excess water from the system to prevent wave wash from damaging levees within pond A3W in the Alviso Complex and ponds B2 and 8A in the Baumberg Complex. The ability to reverse flows in pond A16 in the Alviso Complex will be maintained to avoid inflows from the San Jose Waste Water Treatment Facility. The ability to block or reverse intake flows into ponds A9 and A16 of the Alviso Complex also will be maintained during the winter to prevent entrainment of migrating salmonids. The flapgates and relative elevations of the tides and pond water levels would cause all intake flow to occur at high tide and all outflows to occur at low tide.

Conservation Measures

The following measures are proposed as part of the ISP to avoid and/or minimize adverse effects federally and/or State listed species within the proposed project area.

1. A pre-construction meeting would be held prior to commencement of construction for all persons directly involved with project implementation. Any terms and conditions required in the Service's Biological Opinion and any other conditions of other regulatory agencies would be reviewed and discussed. In addition, the sensitivity of the project area, penalties for unauthorized take of listed species, and other aspects of the project implementation would be addressed with project personnel.

2. Construction for implementation of the ISP would be timed to avoid impact to critical biological resources.

    a. Construction activities in Western snowy plover nesting areas would occur between September 20 and February 1 within any given year to avoid the nesting season. Earlier start dates would only be allowed if surveying and monitoring demonstrate that active nest sites are located more than 200 feet from the construction site or that nesting is completed and young are fledged.

b. With the possible exception of two sites in the Baumberg Complex, construction activities in potential California clapper rail breeding habitat would occur between August 31 and February 1. Earlier start dates at these or other sites with potential breeding habitat would only be allowed if surveying and monitoring using Service-approved survey guidance demonstrate that no nesting is occurring within 700 feet of the construction site in areas of contiguous marsh and that no nesting is occurring closer than 200 feet across a major slough channel from the construction site. At the B8A-12 discharge and B2-1 intake sites in the Baumberg Complex near the mouth of Old Alameda Creek, work would occur in the spring of 2004 provided that surveys confirmed that California clapper rail breeding activity was confined to the island marshes in the middle of Old Alameda Creek or along the opposite levee. If surveys in these areas indicated breeding activity within 700 feet of the work site in the marshes bordering the levees where the work is proposed and or within 200 feet across an intervening channel, then construction would not take place until August 31.

3. To discourage salt marsh harvest mice from remaining in construction areas, pickleweed within the fenced construction areas would be cleared using hand tools prior to the initiation of construction.

4. Qualified biologists knowledgeable about the ISP and the biology/ecology and habitats of federally and/or listed species would monitor construction activities. The biological monitors would be responsible for the following:

   a. Remain at the work site during all excavation and other earth-moving construction activities in or adjacent to habitats occupied by listed species;
   b. Stake or fence areas to be avoided by construction equipment and verify the limits of authorized work areas prior to the initiation of any construction;
   c. Retain authority to control or halt any construction activity determined to be inconsistent with the approved construction plans or any amendments; and
   d. Notify the Service, Department, Corps, and RWQCB of any unanticipated damage to protected habitat areas, erosion or water quality problems which exceed any permit requirements, or the detection of any dead or injured listed species.

5. Structures would be constructed at the locations identified in the ISP to avoid or minimize impacts to listed species habitats. Any adjustments at a work site during installation would be approved by the qualified biologist onsite.

6. Existing vegetated habitats would be identified, maintained, and protected by marking limits of construction for all equipment use. Silt fencing would be installed to delineate construction area boundaries in wetland areas. Construction access into marsh areas, staging and temporary soil stockpile areas would be contained within delineated construction areas.

Action Area

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the proposed project, the action area includes the 8,000-acre Alviso Complex, 1,600-acre West Bay Complex, and the 5,500-acre Baumberg Complex.

Status of the Species/Environmental Baseline

Salt Marsh Harvest Mouse

The salt marsh harvest mouse was federally listed as endangered in 1970 (35 **FR** 16047). Critical habitat has not been proposed or designated. A detailed account of the taxonomy, ecology, and biology of the salt marsh harvest mouse is presented in the *Salt Marsh Harvest Mouse & California Clapper Rail Recovery Plan* (Service 1984) (Recovery Plan) and the references cited therein. The salt marsh harvest mouse is a fully protected species under California law (See California Fish and Game Code Section 4700).

The salt marsh harvest mouse is a rodent endemic to the salt and brackish marshes of the San Francisco Estuary and adjacent tidally influenced areas. The salt marsh harvest mouse closely resembles the western harvest mouse (*R. megalotis*). The salt marsh harvest mouse typically weighs about 10 grams, has a head and body length ranging from 69-74 mm, a tail length ranging from 65-82 mm, and a hind foot length of 17-18 mm (Fisler 1965). As stated in the recovery plan, the salt marsh harvest mouse, when compared to the western harvest mouse, have darker ears, belly and back, and a slightly thicker, less pointed and unicolored tail. The salt marsh harvest mouse is further distinguished taxonomically into the northern and southern subspecies, *R. raviventris halicoetes* and *R. raviventris raviventris*, respectively. Of the two subspecies, *R. r. halicoetes* more closely resembles *R. megalotis*, and can be difficult to differentiate in the field; body color and color of ventral hairs as well as the thickness and shape of the tail have been used to distinguish the two.

The salt marsh harvest mouse has evolved to a life in tidal marshes. Specifically, they have evolved to depend mainly on dense pickle weed (*Salicornia virginica*) as their primary cover and food source. However, salt marsh harvest mice may utilize a broader source of food and cover which includes salt grass (*Distichlis spicata*) and other vegetation typically found in the salt and brackish marshes of this region. In natural systems, salt marsh harvest mice can be found in the middle tidal marsh and upland transition zones. Upland refugia is an essential habitat component during high tide events. Salt marsh harvest mice are highly dependent on cover, and open areas as small as 10 meters wide may act as barriers to movement (Shellhammer 1978, as cited in Service 1984). The salt marsh harvest mouse does not burrow. It has been noted that the northern subspecies may build nests of loose grasses.

As described by Fisler (1965), male salt marsh harvest mice are reproductively active from April through September, but may appear active throughout the year. Females are reproductively active from March to November, and have a mean litter size of approximately four offspring.

The historic range of the species included tidal marshes within the San Francisco and San Pablo bays, east to the Collinsville-Antioch areas. Agriculture and urbanization has claimed much of the former historic tidal marshes, resulting in a 79 percent reduction in the amount of tidal marshes in these areas (Goals Project 1999). At present, the distribution of the northern subspecies occurs along Suisun and San Pablo Bays north of Point Pinole in Contra Costa County and Point Pedro in Marin County. The southern subspecies is found in marshes in Corte Madera, Richmond, and South San Francisco Bay mostly south of the San Mateo Bridge (Highway 92).

To our knowledge, no specific surveys for salt marsh harvest mice have been conducted within the project area as part of the proposed project. However, salt marsh harvest mice have been detected during other surveys conducted within tidal marsh habitat areas within the boundary of the project area. In tidal marsh areas where salt marsh harvest mice have not been surveyed for or observed, they are likely to occur in fringing or large stands of pickle weed within these areas. Therefore, given the biology and ecology of this animal, the presence of suitable habitat within the project area, and recent records, the salt marsh harvest mouse is highly likely to inhabit the parts of action area.

The preservation and growth of existing populations of the salt marsh harvest mouse is considered important to assuring the survival of this species. The Recovery Plan identifies essential habitat areas to be preserved or restored throughout the Estuary to meet the recovery objectives for this species. Within the project area, a large majority of the Baumberg Complex is identified as essential habitat for the salt marsh harvest mouse. Within the Alviso Complex, salt ponds A5, A7, and A8 also are identified as essential habitat for this species. These areas within the two complexes are identified in the Recovery Plan for acquisition, restoration and management as tidal marsh habitat (Recovery Plan Tasks 1221 and 1223).

California Least Tern

The least tern was federally protected as endangered on October 13, 1970 (35 **FR** 16047). A detailed account of the taxonomy, ecology, and biology of the least tern is presented in the approved Recovery Plan for this species (Service 1980). Supplemental or updated information is provided in the Service's July 16, 1993, biological opinion on the Federal Aviation Administration's authorization for proposed facilities improvements at San Diego International Airport, California, which is hereby incorporated by reference.

The former Naval Air Station Alameda, now the Alameda National Wildlife Refuge (NWR), is the largest breeding site in San Francisco Bay. Least terns typically arrive at the Alameda NWR in mid- to late-April, but have arrived as early as April 6, and depart in mid- to late-August each year. During this time period, least tern adults mate and select nest sites; lay, incubate, and hatch eggs; and raise young to fledging prior to migrating south for the rest of the year. Since 1977, the majority of nesting activities have occurred in the 4-acre, fenced "traditional" colony site on the western end of the Alameda NWR. Furthermore, least terns have moved their young to various locations within the buffer zone surrounding the main colony site during several breeding seasons (and on one occasion as far as about 4,000 feet northwest of the main colony site), apparently to avoid predator pressure at the main colony site. Besides areas within the proposed

Refuge, least terns have roosted in areas in the Marina and Inner Harbor areas in the past. While at the Alameda NWR during the breeding season, least terns forage for fish in the open water offshore of the western end of the Alameda NWR which contains extensive, generally productive foraging habitat areas. Foraging intensity has varied between different offshore areas, but has occurred in the (1) Oakland Inner Harbor, (2) Seaplane Lagoon, (3) area between the Long Breakwater and Marina and Inner Harbor areas, (4) and areas south and west of the Alameda NWR.

The major cause of breeding failure at many least tern colony sites in California has been documented as predation on eggs, chicks, fledglings, and adults (Caffrey 1995). A wide variety of predators have been documented to prey upon least terns, including most gull species and 22 other avian species, 14 mammalian species, and some species of snakes, crabs, ants, and spiders (Caffrey 1995). In addition to direct loss or mortality of eggs and individuals, avian and mammalian predators can cause least tern adults to abandon breeding sites prior to completion of nesting activities. While many least tern breeding colony sites have been plagued by high predation pressure, the Alameda NWR generally has been less affected by predation threats than many other sites throughout California. For example, Caffrey (1995) states that according to predator management data from 1990 through 1994, a total of two burrowing owls, nine kestrels, one raccoon, and seven northern harriers were removed from the vicinity of the colony site at the Alameda NWR. By comparison, during the same timeframe, a total of 38 kestrels, 87 cats, 49 ground squirrels, 31 ravens, and 13 owls, in addition to a combined total of 80 individual gulls, skunks, starlings, gray foxes, and jackrabbits were removed at NAS North Island in San Diego, California.

The least tern breeding site at the Alameda NWR has played a significant role in recent increases in the number of least terns throughout California (Caffrey 1995). The Alameda NWR site is consistently one of the most successful sites in California. Between 1987 and 1994, the Alameda NWR site supported 5 to 6 percent of the statewide breeding population out of 35 to 40 sites each year, but produced an average of 10.6 percent of the total number of fledglings produced statewide in each of those years. In 1996, 58 percent of all least tern breeding pairs in California occurred at seven sites, of which the Alameda NWR was one of the sites. Because of heavy predation at many San Diego sites and a food shortage at the Venice Beach site, 45 percent of all fledglings produced in 1996 came from only four sites, of which the Alameda NWR was one of the sites. In 1997, an estimated 244 pairs of least terns nested at the colony out of a total population of more than 4,000 nesting pairs at 37 breeding sites along the California coast. In 1997, an estimated 316 young fledged successfully at the Alameda NWR; this represented 10.1 percent of the total number of fledglings produced throughout California that year. The average fledgling-to-pair ratio (*i.e.*, the ratio of total number of chicks successfully fledged per total number of breeding pairs) at the Alameda NWR during the 10-year timespan from 1988 through 1997 has been 1.2, with a high of 1.8 in 1992 and a low of 0.5 in 1995. Except for 1995, the fledgling-to-pair ratio each year at Alameda NWR has been substantially higher than the fledgling-to-pair ratio of 0.7 believed necessary to maintain a stable least tern population (Fancher 1992). By consistently producing large numbers of fledglings each year, the colony has added large numbers of potential new breeding birds to the statewide population. Therefore, this site is considered to be one of the most important "source" populations in California serving to balance out losses at many "sink" locations throughout the state.

There are two other minor least tern breeding sites in the San Francisco Bay Estuary. The Oakland Airport site has not been used in years, except in 1995 when one to six pairs nested there and produced no fledglings, and the Pacific Gas and Electric Pittsburg site supports only one to four pairs each year. Therefore, the Alameda NWR site currently represents the entire San Francisco Bay area population, and is the most northern of least tern breeding colonies by about 178 miles. Because of its northern location, the Alameda NWR site has been relatively unaffected during El Nino years when many southern California sites experience pronounced breeding failure resulting from limited food availability. In the most recent El Nino year, 1992, the NAS/FISC site supported 6 percent of the statewide number of breeding pairs, but produced 16 percent of the total state.

California least terns use salt ponds in South San Francisco Bay as post fledging foraging areas. It is believed that they use shallow low- to mid-salinity ponds as training areas for fledglings before beginning their southern migration in the late summer. California least terns are found in the salt ponds from late July to mid-September. California least terns are known to currently nest in salt ponds in South San Francisco Bay, but a few historic nesting records exist. Foraging typically is concentrated in lower salinity ponds, particularly intake ponds, which support fish. California least terns have been documented to use, at various times in the past, ponds 1, 2, 4, 7, 9, 10, 11, and 12 in the Baumberg Complex (2,231 acres) and ponds A1, B1, A2E, B2, A3W, A3N, A9, A11, and A14 in the Alviso Complex (2,677 acres). Only limited observations of California least terns have been made in the West Bay Complex which typically has been managed as high salinity ponds.

Effects of the Proposed Action

Salt Marsh Harvest Mouse

The proposed project is likely to result in injury or death, and harm to individual salt marsh harvest mouse through the permanent loss of their habitat. Construction of the proposed project may result in salt marsh harvest mouse mortality through crushing by equipment and machinery. Implementation of the proposed project would result in the loss of 1.99 acres of habitat for this species. This habitat loss would occur from the construction and installation of control structures at 28 different sites. The habitat loss at each site would be minimal and mostly confined to areas of low to medium habitat value. No habitat compensation is currently being proposed by the Department and Refuge to offset this habitat loss. However, it is anticipated that the eventual creation of thousands of acres of habitat from implementation of the ultimate tidal marsh restoration plan for the salt ponds would greatly benefit the salt marsh harvest mouse and contribute greatly to meeting the recovery objectives for this species.

The proposed project could impact salt marsh harvest mice through increased disturbance. Increased levels of disturbance of salt marsh harvest mice could result from noise and vibrations from equipment and construction activities. Operation of construction equipment may result in displacement of salt marsh harvest mice from protective cover and their territories/home ranges (through noise and vibrations) and/or direct mortality (through crushing). These disturbances may disrupt normal behavior patterns of breeding, foraging, sheltering, and dispersal, and may result in the displacement of salt marsh harvest mice from their territory/home range. Displaced

salt marsh harvest mice have to compete for resources in occupied habitat, and be more vulnerable to predators. Female salt marsh harvest mice are reproductively active from March through November (Fisler 1965), so disturbance during this period may mean abandonment or failure of the current litter. Thus, displaced salt marsh harvest mice may suffer from increased predation, competition, mortality, and reduced reproductive success.

California Least Tern

The proposed project would alter management of certain salt ponds used by California least terns for foraging during their post-breeding period prior to migration south. All of the ponds in the Baumberg Complex currently known to support foraging by California least terns would continue to support suitable foraging conditions except for 501 acres within pond 11, and portions of ponds 4 and 7. Ponds 11, 4, and 7 would be drawn down in the summer to minimize salt accumulation. Although salinity levels within these ponds would remain below 40 parts per thousand (ppt), the area of ponding would be limited. Under the proposed project, it is anticipated that about 828 acres within ponds 8X, 5, 6C, 4C, and 5C in the Baumberg Complex would become potentially suitable foraging habitat for California least terns.

In the Alviso Complex, all ponds currently used by California least terns, except for 163 acres within pond A3N, would be managed in a manner which would still provide suitable foraging conditions for California least terns. Pond A3N would be managed as a seasonal pond to minimize salt accumulation. It is anticipated that about 870 acres within ponds A5 and A7 in the Alviso Complex would become suitable foraging habitat for California least terns.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local or private actions affecting listed species and their critical habitat that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Numerous activities continue to eliminate habitats of salt marsh harvest mice. Habitat loss and degradation affecting this species continues as a result of freshwater urban run-off, and contaminant inputs. Salt marsh harvest mice are also affected by increased predation associated with human development, and disturbance of breeding and foraging behavior. All of these non-Federal activities are expected to continue to adversely affect listed species considered in this opinion within the action area.

The Service is not aware of any cumulative effects on the California least tern in the action area.

Conclusion

After reviewing the current status of the salt marsh harvest mouse and California least tern, the environmental baseline for the action area, the effects of the proposed action and cumulative effects, it is the Service's biological opinion that the Initial Stewardship Project, as proposed, is

not likely to jeopardize the continued existence of the salt marsh harvest mouse or California least tern. No critical habitat has been designated for either species, therefore none will be affected.

Regulations implementing the Act define "jeopardize the continued existence of" as "to engage in an action that reasonably would be expected, directly, or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." (50 CFR § 402.02). We reached the above conclusions that the proposed is not likely to jeopardize the continued existence of the salt marsh harvest mouse or California least tern for the following reasons.

Salt Marsh Harvest Mouse

The proposed project would result in the elimination of about 1.99 acres of suitable habitat for salt marsh harvest mouse. Because a minimal amount of low to medium quality habitat would be lost and few individuals are likely to be affected, we conclude the proposed project, coupled with the current status/environmental baseline of this species and cumulative effects, would not constitute an appreciable reduction of the salt marsh harvest mouse's ability to survive and recover in the wild. Further, the proposed project would set the stage for the future restoration of large tracts of suitable salt marsh harvest mouse habitat, which is consistent with the recovery objectives identified for this species.

California Least Tern

The proposed project would eliminate or reduce the quality of about 664 acres of currently-available foraging habitat for California least terns. However, this loss or reduction should be offset by 1,698 acres of foraging habitat that is likely to be available under the ISP in other ponds that currently do not provide foraging habitat for California least terns. Because it is likely that there would be a substantial net increase in available foraging habitat for California least terns under the ISP, we conclude the proposed project, coupled with the current status/environmental baseline of this species and cumulative effects, is not likely to jeopardize the continued existence of the California least tern.

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The incidental take statement accompanying this biological opinion exempts take of California clapper rails and salt marsh harvest mice carried out in accordance with the reasonable and prudent measures and terms and conditions from the prohibitions contained in section 9 of the Act. It does not address the restrictions or requirements of other applicable laws.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

The Service anticipates incidental take of individual salt marsh harvest mice will be difficult to detect or quantify because of the variable, unknown size of any resident population over time, and the difficulty of finding killed or injured small mammals. The Service is quantifying take incidental for the project as the number of acres of habitat available for breeding, foraging, or sheltering where killing, harm, or harassment of salt mash harvest mice is expected to occur. Upon implementation of the reasonable and prudent measures listed below, 1.99 acres of habitat available for this species will become exempt from the prohibitions described under section 9 of the Act for direct and indirect impacts associated with the proposed project.

For the California least tern, we anticipate that incidental take of this species will include potential mortality or harm associated with the reduction in quality or loss of foraging habitat currently available for this species. Upon implementation of the reasonable and prudent measures listed below, 663 acres of foraging habitat available for this species will become exempt from the prohibitions described under section 9 of the Act for direct and indirect impacts associated with the proposed project.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to jeopardize the continued existence of the California clapper rail or salt marsh harvest mouse, or result in destruction or adverse modification of critical habitat for these species.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the impact of take on the salt marsh harvest mouse and California clapper rail:

1. Minimize the potential for harm, harassment, or killing of salt marsh harvest mice, and harm or mortality of California least terns.

2. Minimize the impacts of permanent loss or degradation of habitat on salt marsh harvest mice and California least terns.

Terms and Conditions

To be exempt from the prohibitions of section 9 of Act, the Corps must comply with the following term and condition, which implements the reasonable prudent measures described above. This term and condition is nondiscretionary.

Implement the project as proposed along with the proposed conservation measures as described.

Reporting Requirements

The Service must be notified within 24 hours of the finding of any injured or dead salt marsh harvest mouse or California clapper rail, or any unanticipated damage to salt marsh harvest mouse or California clapper rail habitat associated with project construction. Notification must include the date, time, and precise location of the specimen/incident, and any other pertinent information. The Service contact person is Michael G. Nepstad, Acting Deputy Assistant Field Supervisor, Endangered Species Division in the Sacramento Fish and Wildlife Office, at (916) 414-6700. Any dead or injured specimens will be reposited with the Service's Division of Law Enforcement, 2800 Cottage Way, Room W-2928, Sacramento, California 95825, telephone (916) 414-6660.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Endangered Species Act directs Federal agencies to utilize their authorities to further the purpose of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and databases.

For the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation

of any conservation recommendations. We propose the following conservation recommendations:

1. Assist the Service in implementing recovery actions identified within most current recovery plans for the California least tern and salt marsh harvest mouse.

2. Encourage or require the use of appropriate California native species in revegetation and habitat enhancement efforts associated with projects authorized by the Corps.

3. Encourage participation of prospective permittees in a program being developed by Federal and State resource agencies to limit and reverse the spread on non-native *Spartina* within the San Francisco Bay Estuary.

REINITIATION STATEMENT

This concludes formal consultation on the proposed action. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the Corps shall not issue authorizations under this biological opinion.

If you have any questions regarding this opinion, please contact Dan Buford or Jim Browning in this office at (916) 414-6625.

Sincerely,

Cay C. Goude
Acting Field Supervisor

cc:
ARD-ES, Portland, OR

LITERATURE CITED

Caffrey, C. 1995. California least tern monitoring packet. California Department of Fish and Game, Nongame Bird and Mammal Section Report.

Fancher, J.M. 1992. Population status and trends of the California least tern. Transactions of the Western Section of the Wildlife Society, 28: 59-66.

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U.S. Fish and Wildlife Service. 1980. California least tern recovery plan dated April 2, 1980. Prepared by the U.S. Fish and Wildlife Service, Region 1, Portland, Oregon, in cooperation with the recovery team. 56 pp.

U.S. Fish and Wildlife Service. 1984. Salt Marsh Harvest Mouse and California Clapper Rail Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 141 pp.

Commenter: 15 U.S. Geological Survey

Reply Refer To: March 8, 2004
Mail Stop 423

MEMORANDUM

To: Margaret Kolar, Refuge Manager
United States Fish and Wildlife Service
Newark, California

From: James F. Devine *(SIGNED)*
Senior Advisor for Science Applications

Subject: Review of Draft Environmental Impact Statement for the South Bay Salt Pond Initial Stewardship Project

As requested by the U.S. Department of the Interior, Office of the U.S. Geological Survey (USGS) has reviewed the subject Draft Environmental Impact Statement (DEIS) and offers the following comments.

SPECIFIC COMMENTS:

Page 3-2, Chapter 3.0, Hydrologic and Hydraulic Conditions, Section 3.1, Affected Environment, Section 3.1.2, Freshwater Inflows to SSFB, first paragraph:

The paragraph presents streamflow data in centimeters per second (length per time) for the USGS station 11179000. The USGS measures streamflow in units of volume per time, generally cubic feet per second or sometimes cubic meters per second. The USGS recommends that the data be reexamined to assure that the units are correct. Monthly mean streamflow at this site, in cubic feet per second, can be found at the following web address: 15-1

http://nwis.waterdata.usgs.gov/ca/nwis/monthly?search_site_no=11179000&search_site_no_match_type=exact&sort_key=site_no&group_key=NONE&sitefile_output_format=html_table&column_name=agency_cd&column_name=site_no&column_name=station_nm&column_name=lat_va&column_name=long_va&column_name=state_cd&column_name=county_cd&column_name=alt_va&column_name=huc_cd&format=html_table&date_format=YYYY-MM-DD&rdb_compression=file&list_of_search_criteria=search_site_no

Page 4-8, Chapter 4.0, Water Quality, Section 4.3, Impacts and Mitigation, Section 4.3.1, Salinity, Section 4.3.1.1 Regional Water Quality Setting Salinity, second full paragraph:	15-2
The USGS surface water station numbers contain eight digits; 162700 and 162765 are not valid USGS numbers. Possibly what is meant is station 11162700, San Francisco Bay at Pier 24 at San Francisco CA; and 11162765, South SF Bay at San Mateo Bridge near Foster City CA.	15-2

Thank you for the opportunity to review and comment on this DEIS.

***Comment:* 15-1** USGS recommends that data be reexamined to assure that units are correct.

Response: The reviewer notes that on page 3-2 flow is reported in centimeters per second. The text is incorrect. "centimeters per second" and has been changed to "cubic meters per second." The numbers were correctly reported in cubic meters per second.

Change to the DEIR/EIS: Chapter 3 Section 3.3.3 page 3-2 top of page:

As an example of variability within a given year at a single station, the average gauged flow at USGS station #11179000 (Alameda Creek near Niles) during February is 12.5 ~~centimeters~~ **cubic meters** per second (cms), while the average gauged flow during October is 0.4 cms.

***Comment:* 15-2** USGS recommends that water station numbers be checked.

Response: The reviewer notes that on page 4-8 the relevant salinity station numbers are listed in the text as 162700 and 162765 instead of 11162700 and 11162765. We agree that the correct station numbers are 11162700 (also known as "Pier 21" and "P21"and 11162765 (also known as San Mateo Bridge or "SMB"). We also state the exact location of the stations in the text of the DEIR/EIS.

Commenter: **16 Alameda County Mosquito Abatement District**

"William Hamersky" To: "Marge Kolar"
<sfbaynwrc@r1.fws.gov>
<enspec@mosquito cc:

es.org> Subject: DEIS/EIR comment

03/08/2004 12:42 PM

Dear Ms. Kolar,

We have read the draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Initial Stewardship Project for the South Bay Salt Ponds and would like to take this opportunity to comment on it. We are pleased to see that mosquito abatement concerns are addressed from the very beginning because inadequate or unsuitable restorations of such magnitude could produce incredible numbers of mosquitoes. With the inevitable arrival of West Nile Virus to the Bay Area, we must be vigilant in not only reducing potential mosquito breeding habitat, but also not creating new ones! 16-1

It was good to discover that, even though Public Health was listed last in the chapter title, (Chapter 8.0 Recreation, Public Access, Visual Resources and Public Health) almost 40% of the chapter was devoted to discussing human health and mosquito related concerns. With new introductions of mosquito borne diseases we must be ever vigilant in the prevention of creating new habitat for these disease transmitters. Effective coordination of the many agencies involved in such an undertaking is essential for the suitable restoration of these salt ponds. 16-2

Our aim, as a mosquito abatement district, is to maximize the control of mosquitoes with the minimum amount of applied pesticides. Using physical control (manipulation of the environment) to prevent mosquitoes from breeding is the ideal because of its long-term effectiveness and also because of the minimal use of pesticides. The prevention of mosquito breeding habitat creation must always be addressed in any marsh/salt pond restoration and we are ready to help as needed. 16-3

Our only (minor) change to the document is that the genus name of our local Aedes mosquitoes has been changed by taxonomists to Ochlerotatus. 16-4

Sincerely,

William Hamersky
Environmental <?xml:namespace prefix = st1 ns
= "urn:schemas-microsoft-com:office:smarttags" />Specialist
Alameda County Mosquito Abatement District
23187 Connecticut St.
Hayward, CA 94545

1. 510. 783. 7744

enspec@mosquitoes.org
www.mosquitoes.org

***Comment:* 16-1** ACMAD is pleased that mosquito abatement concerns are addressed.

Response: We are very concerned about mosquito abatement issues both from a human health and safety perspective and the need to reduce the threat of West Nile virus impacts to wildlife.

***Comment:* 16-2** Effective coordination between agencies is needed on mosquito issues..

Response: The agencies intend to fully coordinate with all affected mosquito control districts.

***Comment:* 16-3** ACMAD seeks to prevent creating mosquito habitat with the minimal use of pesticides and offers its assistance to the project.

Response: See response to 16-2

***Comment:* 16-4** ACMAD notes the genus name of local *Aedes* mosquito has been changed.

Response: Comment noted and changes made to DEIR/EIS..

Commenter: 17 City of Mountain View

February 26, 2004

Ms. Margaret Kolar, Refuge Manager
U.S. Fish and Wildlife Service
San Francisco Bay NWR Complex
P.O. Box 524
Newark, CA 94560

Mr. Carl Wilcox, Habitat Conservation Manager
California Department of Fish and Game
Region 3 Headquarters
P.O. Box 47
Yountville, CA 94599

Dear Ms. Kolar and Mr. Wilcox:

On behalf of the Mountain View City Council, I am submitting this letter of comment on the Draft South Bay Salt Pond Initial Stewardship Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The City of Mountain View is vitally interested in the Initial Stewardship Project and is continuing its involvement in the long-term restoration project planning process. Ponds A1 and A2W in the Alviso Pond Complex are vital neighbors to Shoreline at Mountain View and the citizens of Mountain View and surrounding communities that take advantage of the environmental, educational and recreational opportunities presented by this park. Successful restoration of these ponds holds the possibility of increasing these opportunities manifold. 17-1

After reviewing the Draft EIR/EIS, City staff understands that the success of many of the mitigation measures is largely dependent on successful and regular monitoring, maintenance, surveying and testing of the levees, water control structures, water and sediment quality, and wildlife populations. As some of the specific comments below suggest, the City is interested in ensuring that there is effective communication between City staff and the USFWS or the CDFG in regard to the ongoing monitoring of Ponds A1 and A2W and any issues that arise which might affect Shoreline at Mountain View and its users. The City's specific comments are as follows: 17-2

1. Figure 1-1, Pages 1 through 27, labels Moffett Naval Air Station incorrectly. 17-3

OFFICE OF THE MAYOR AND CITY COUNCIL
500 CASTRO STREET, P.O. BOX 7540 • MOUNTAIN VIEW, CA 94039-7540 • 650-903-6305 • FAX 650-903-6499

2. The correct name for Shoreline Park is "Shoreline at Mountain View" and should be used consistently throughout the document. 17-4

3. Many important mitigations identified in the document are predicated on regular inspections of conditions and maintenance of control structures. The City would like to request that the details (such as, but not limited to, frequency, access points and notification) of such inspections and maintenance be included in the Mitigation Monitoring and Reporting Program (MMRP) and that City staff has a chance to review and comment on those details in the MMRP which relate to Ponds A1 and A2W. 17-5

4. The City would like to request that it be kept notified and informed, with sufficient advance notice, about implementation of actions in the ISP that affect Ponds A1 and A2W. Due to the proximity of Shoreline at Mountain View and its many users, construction equipment on or around the levees could generate a significant amount of inquiries to the City from the public. 17-6

5. The City would like to request that information signs with appropriate project and contact information be attached to the fences at each of the four access points between Shoreline at Mountain View and the salt pond levees. 17-7

6. The City operates and maintains the Charleston Slough tidal gates between inner and outer Charleston Slough, which is in proximity to the A1 intake gate. It is unclear to staff from review of the EIR/EIS whether changes to the A1/A2W system could potentially impact the flow or quality of Bay water from lower (outer) Charleston Slough to inner Charleston Slough. This discussion should be clarified. 17-8

7. Due to the proximity to Shoreline at Mountain View, the City is interested in hearing more about how docent-led tours might be organized and conducted at Ponds A1 and A2W during the ISP period. When and how will these program details be developed? The City would like to request that it be kept sufficiently notified and informed about the development of these program details. 17-9

In addition to these comments, I would like to take this opportunity to inform the USFWS and the CDFG that the City Council has taken the position that hunting should be prohibited in Ponds A1 and A2W. While hunting may be a safe and appropriate recreational use for ponds elsewhere in the Alviso Pond Complex, hunting in Ponds A1 and A2W could pose a public use conflict and raise public safety concerns with the many trail users at Shoreline at Mountain View because these ponds are immediately adjacent to and completely visible from Shoreline at Mountain View. 17-10

2. The correct name for Shoreline Park is "Shoreline at Mountain View" and should be used consistently throughout the document. 17-4

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***Comment:* 17-1** Restoration of Ponds A1 and A2W has the potential to enhance environmental, educational, and recreational opportunities presented by adjacent parks and open space.

Response: Comment noted. We are fully committed to working with CMV to ensure that this potential is realized.

***Comment:* 17-2** CMV requests effective communication regarding monitoring Ponds A1 and A2W.

Response: We will work closely with CMV in regards to both implementation and monitoring Ponds A1 and A2W.

***Comment:* 17-3** Figure 1-1 labels Moffet Naval Air Station incorrectly.

Response: The figure has been changed in the FEIS.

***Comment:* 17-4** Shoreline Park should be changed to Shoreline at Mountain View.

Response: Reference to Shoreline Park appears throughout the EIR-EIS. We have attempted to make all changes.

***Comment:* 17-5** CMV requests review of Mitigation Monitoring and Reporting Program for ponds A1 and A2W.

Response: See response to EPA comment 14-4..

***Comment:* 17-6** CMV requests notification of implementation plans for A1 and A2W.

Response: The Fish and Wildlife Service will notify CMV regarding plans for implementation at ponds A1 and A2W.

***Comment:* 17-7** CMV requests signage at the four access points between Shoreline at Mountain View and the pond levees.

Response: USFWS will post signs with project and contact information at access points.

***Comment:* 17-8** CMV requests additional information about ISP impacts to flow or water quality from outer Charleston Slough to inner Charleston Slough.

Response: The only ISP water control structure in the vicinity of Charleston Slough is the intake into Pond A1. This structure has been the intake for the Cargill Salt operations for many years and will continue to be used in the same manner during the ISP. Note that Cargill recently replaced the failing intake structure at A1 with one of the same size. We do not foresee an impact from implementation of the ISP to water quality or quantity on Charleston Slough.

***Comment:* 17-9** CMV requests notification about docent-led tours to Ponds A1 and A2W.

Response: The tour programs are now being developed. The CMV will be consulted and notified about docent led tours to Ponds A1 and A2W, as plans are developed.

***Comment:* 17-10** City Council has taken the position that hunting should be prohibited in ponds A1 and A2W.

Response: The USFWS will consider the City Council's position during the preparation of the Hunt Plan for the Alviso Complex.

Commenter: 18 San Francisco Bay Bird Observatory

Comments on the Draft EIR/EIS South Bay Salt Pond Initial Stewardship Project

12 February 2004

Cheryl Strong
San Francisco Bay Bird Observatory
P.O. Box 247
1290 Hope Street
Alviso CA 95002

Overall this is a very exciting opportunity for managers and planners to create a more suitable environment for wildlife. While everyone would like to see action, we need to carefully evaluate pros and cons of each decision with the health of the Bay flora and fauna first in mind. Many more surveys and monitoring should be added into the ISP to understand processes and functions in the ponds, and in order to implement adaptive management as quickly and efficiently as possible. Increased communication with all agencies and other parties is essential. This is our learning experience. 18-1

Note that I am commenting only on the Wildlife section of the report, with a focus on the avian.

6.1.3.1

Page 6-13. Although not mentioned in the wildlife section, the potential interruption of the reproductive cycles of benthic organisms could have impacts on birds species feeding on these organisms in the following seasons or years. 18-2

Page 6-14. Ponds 2a and 3 in Napa did have some monitoring after the unplanned breaches as noted in the report. This data should be looked at closely, as it may offer a prediction for south bay ponds. In addition USGS has pre- and post-breach information on birds, water quality, and maybe vegetation, for at least pond 3 that could be extrapolated to south bay conditions. This pond has silted in quickly, information that may be important for predicted siltation rates in the south. 18-3

6.1.3.4

Page 6-23. If temperatures are elevated during the initial release and DO is decreased, how would this affect benthic organisms, especially if the temperature thresholds and other parameters of these local organisms are largely unknown? Again, this could have consequences to current and future bird populations. 18-4

6.3.1

Page 6-45. Habitat types should read five, not four. Also, depth varies within ponds as well as between ponds, sometimes significantly (USGS data). 18-5

Page 6-46. Other studies have calculated how much area may be needed to support

migrating shorebirds in managed shallow water habitats that could be used in addition to the modeling currently being done for the Bay. For example, see Development of Management Objectives for Waterfowl and Shorebirds in the Mississippi Alluvial Valley, Loesch et al. http://birds.cornell.edu/pifcapemay/loesch.htm	18-6
Page 6-48. The numbers of plant-eating dabbling ducks cannot be explained by the availability of invertebrates in the ponds. Paragraph should be reworded adding in the invertebrate-eating ducks.	18-7
Page 6-49. The Mallard Slough colony was largely abandoned a few years ago by the majority of the herons nesting there. There is still a potentially substantial number of Black-crowned Night Herons nesting there, as well as some Snowy Egrets. In addition, a new colony has been established along Guadalupe Slough, along the margins of ponds A7 and A8. This colony has not been thoroughly surveyed, thus potential for impacts from new structures is not know.	18-8
6-49. Other mammals in the area that prey on nesting birds include the long-tailed weasel (*Mustela frenata*), seen at Baumberg/Eden Landing along levees.	18-9
Another reptile I have seen in/near the project area (at least at the SFBBO office in Alviso) is the southern alligator lizard (*Elgaria multicarinata*). Dave Johnston at HT Harvey and Associates also indicated that they are likely in the area.	18-10
Page 6-51. Special status species on nesting sites: Double-crested cormorants do indeed nest in the project area: a colony has been present along the levee between A9 and A10 for at least 5 years. It is located within the California Gull colony.	18-11
Should table 6.3-1 read table 6-8?	18-12
Page 6-52. Great Egrets, Great Blue Heron, Snowy Egret, Black-crowned Night Heron: could be nesting at Guadalupe Slough, surveys needed at Guadalupe and at the old Mallard colony to be sure.	18-13
Page 6-53. California Gulls: a number of colonies nest within the project area, including A9-A10, Knapp or A6, B2 and A1. (This is stated later in Table 6-8.)	18-14
Page 6-57. Snowy Plovers used different ponds for nesting and foraging in 2003, and appear to be quite opportunistic in finding newly dried/drying ponds (SFBBO data). They prefer mostly-dried ponds with some high salinity water that ensures high brine fly numbers. Also, the peninsulas and island within the ponds gives nests some protection from mammal predators. Ponds used in 2003 include:	18-15

Alviso	A12	
	A8	
	A6	
Baumberg	6B	
	6B crystallizers	
	B12	
	B13B	
	B16B	
	B4B	
	B6	**18-15 Continued**
	B6A	
	B6B	
	B8	
	B8A	
Ravenswood	B9	
	R1	
	R2	
	R3	
	R4	
	RSF2	
	Slough	
Warm Springs	A22	

Page 6-58. In addition to the ponds listed, Forster's Terns currently nest in the following ponds: Baumberg ponds 1, 4, 7, 9, 10, 11; also West Bay pond 1 when water is present. Caspian Terns nest at Baumberg pond 10, and Alvsio A7 but no longer at A3. 18-16

6.3.3.3

Page 6-70. A single window survey is obviously not enough to determine waterbird distribution and abundance in all ponds, but does allow for a snapshot, or idea of how the birds are distributed in the landscape that day. When will this be done? Spring surveys could miss many of the over-wintering species as well as the bulk of migration if not timed exactly right. This timing is going to vary depending on the year, weather, and other factors. Accessibility of all the ponds should be addressed well in advance of this survey. In addition, a small army of biologists/birders will be needed to cover the entire area in a short amount of time. Training will be required in order to make this survey comparable to the surveys being done by USGS. 18-17

Page 6-71. Black-necked Stilts (not a listed species) could also be adversely impacted by Wildlife Imapct-2. While primarily a marsh nester, they nest alongside avocets and terns in some areas (for example A16). 18-18

SFBBO does not currently conduct weekly surveys in most of the ponds for nesting waterbirds, but only a small portion occupied for terns. Survey efforts will need to be ramped up to monitor water level fluctuations. In addition, increased communication 18-19

between the agencies, SFBBO (if the ones doing the surveys), and the construction team will need to be facilitated to act immediately on water level changes.	
See list of ponds where terns, gulls, and cormorants nest, above. Avocets and stilts to a lesser degree nest in much if not most of the available area.	18-20
Page 6-72. Avian botulism has been documented in saline or at least brackish water in the south Bay. In some highly saline areas, including the Salton Sea, California, botulism outbreaks can be extremely severe given the right conditions. Outbreaks in the south bay have included Coyote Creek Lagoon, Mallard Slough, and Guadalupe Slough.	18-21
Note that botulism affects more ducks than any other group of birds, although Canvasback is the only special status species that could fit this category in the south Bay.	18-22
Because SFBBO currently surveys only Guadalupe and Mallard Sloughs for evidence of botulism, it is likely that more surveys will be needed to adequately cover the project area. SFBBO removes all dead invertebrates (where feasible) to prevent the spread of the disease. This would be a major undertaking, if not impossible in many areas of the project. Any significant numbers of dead birds or fish should be reported as soon as possible to whoever is the lead on this, and further investigations be made immediately. Surveys should be done June-November, or during any periods of warm weather.	18-23
Page 6-76. Wildlife Mitigation Measure 9C- Construction buffers of 50 feet are inadequate and will likely cause the birds to abandon their nests. A minimum of a 100m construction buffer should be established. The timing of construction could also be important if it must happen during the nesting season. The birds are less likely to abandon after they have laid eggs and are at least at the incubating stage. In addition, if the birds are even temporarily flushed off their nests, this allows access for opportunistic predators to come in and take eggs and chicks.	18-24

***Comment:* 18-1** SFBBO suggests that many more surveys and monitoring should be added to the ISP.

Response: We agree, the ISP will require a substantial number of surveys and monitoring and we are in the process of preparing the Mitigation Monitoring Reporting Plan for the ISP. We count upon SFBBO's input on the plan; which will provide data needed to best manage the ponds today and enhance our understanding for the long-term restoration planning effort currently underway.

***Comment:* 18-2** SFBBO is concerned that potential interruption of reproductive cycles of benthic organisms could have impacts on birds feeding on the benthos.

Response: Implementation of the ISP may cause limited (both in terms of temporal and aerial extent) disruptions to the benthic communities. These impacts will only occur in a small portion of the habitat available throughout the South Bay. Since benthic communities are normally patchy and changeable in distribution, most birds have generally adapted to this change in distribution. This has been noted by changes in bird distribution with changes in Cargill's salinity management in the ponds. Birds feeding on benthic organisms can move to un-impacted slough habitat during the short duration of potential impacts to benthic communities.

***Comment:* 18-3** Data collected after the breaches of ponds 2a and 3 in Napa should be evaluated for relevancy in the South Bay.

Response: These data were reviewed and considered during this evaluation. We will continue to review ongoing data collection and incorporate results into adaptive management planning.

***Comment:* 18-4** Concern about impacts from elevated temperature and decreased DO on benthic organisms with secondary impacts on birds.

Response: See response to Comment 18-2 above.

***Comment:* 18-5** Page 6-45 should include five not four habitat types.

Response: Comment noted and change has been made.

***Comment:* 18-6** SFBBO requests that other studies be reviewed for calculation of area required by migrating shorebirds.

Response: We agree the identified study provides a good method for evaluating acreage needed for migratory shorebirds. We believe a detailed analysis will be useful for the long-term restoration planning. A cursory comparison of that study with with ISP indicates the ISP should provide sufficient habitat to accommodate existing shorebird populations..

***Comment:* 18-7** Page 6-48 needs to be re-worded to explain numbers of ducks.

Response: In Chapter 6, the last paragraph of the waterfowl section on page 6-49 of DEIR/EIS has been changed to clarify the paragraph.

Changes to DEIR/EIS:

Waterfowl use of South Bay salt ponds is at least partially associated with pond salinity. Accurso (1992) found that waterfowl, especially plant-eating dabbling ducks, were concentrated in lower-salinity (20-63 ppt) ponds, with few waterfowl present in ponds above 154 ppt. The majority of waterfowl **(both plant-eating and invertebrate-eating)** were observed in ponds with salinities between 35-64 ppt. This indirect

relationship is likely a result of food (*i.e.*, salt-tolerant **aquatic plants and** invertebrates) availability and abundance, which is directly influenced by pond salinity.

***Comment:* 18-8** SFBBO provides information about the presence and location of breeding colonies of black-crowned night herons and snowy egrets and suggests that there is not enough information to determine if installation of water control structures on ponds A7 and A8 may impact the colonies.

Response: To determine if breeding colonies will be impacted, the pond A7 and A8 levees adjacent to Guadalupe slough will be surveyed for breeding colonies prior to initiation of construction.

***Comment:* 18-9** SFBBO provides information about the presence of long-tailed weasels at the Baumberg complex.

Response: This information has been included in Chapter 6, page 6-50, third paragraph of the DEIR/EIS.

Changes to DEIR/EIS:

Other common mammal species that may occur along the pond levees include **long-tailed weasel (Mustela frenata)**, Virginia opossum (*Didelphis virgiana*), racoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), feral house cat (*Felis catus*), Townsend's vole (*Microtus townsendii*), and black-tailed jackrabbit (*Lepus californicus*).

***Comment:* 18-10** SFBBO provides information about the presence of southern alligator lizards.

Response: This information has been included in Chapter 6, page 6-50, fourth paragraph of the DEIR/EIS.

Changes to DEIR/EIS:

Amphibians probably do not occur within the salt ponds or in the adjacent sloughs and channels, due to high salinity. Western fence lizards (*Sceloporus occidentalis*) **and southern alligator lizard *(Elgaria multicarinata*)** occur on salt pond dikes and outfall structures (Eric Lichtwardt, LSA Associates**, Cheryl Strong, SFBBO**, pers. obs.), but are probably the only reptilian species to occur within the project area.

***Comment:* 18-11** SFBBO provides information about the presence of special status species nesting sites (Double-crested cormorants nesting along levee between A9 and A10 within gull colony).

Response: This information has been included in Chapter 6, at the top of page 6-52, fourth paragraph and additional text has been added after the section on California Gulls on page 6-59 of the DEIR/EIS.

Changes to DEIR/EIS:

but are not known or expected to nest within the project area, due to the lack of suitable nesting habitat. These species include: common loon *(Gavia immer)*, American white pelican *(Pelecanus erythrorhynchos)*, ~~double-crested cormorant *(Phalacrocorax auritus)*~~, canvasback *(Aythya valisineria)*,

Double Crested Cormorant. The double-crested cormorant *(Phalacrocorax auritus)*, is a California species of special concern at its nesting sites. This is the only species of cormorant associated within inland bodies of fresh, brackish, and saline water. In the early part of the 20th century, almost all of the double-crested cormorants that occurred in the San Francisco Bay likely nested on the offshore Farallon Islands. Since the late 1970's, they began to nest in small numbers around the Bay, especially on power transmission towers and bridges. The primary nesting sites within the project area are in the Alviso complex, at Ponds A9/A10 levee. The double-crested cormorant is most prevalent in and around the San Francisco Estuary during the winter.

***Comment:* 18-12** SFBBO notes inconsistencies in table numbering.

Response: Comment noted and changes made.

***Comment:* 18-13** SFBBO recommends surveys on Guadalupe Slough and Mallard colony.

Response: See response to Comment 18-8.

***Comment:* 18-14** SFBBO notes a number of gull nesting colonies.

Response: Comment noted.

***Comment:* 18-15** SFBBO provides 2003 snowy plover nesting locations.

Response: We appreciate the additional information about 2003 snowy plover nesting locations and will include it in pre-implementation monitoring.

***Comment:* 18-16** SFBBO provides additional information about Caspian and Forster's terns nesting locations.

Response: This information has been incorporated into the DEIR/EIS.

Changes to DEIR/EIS: Chapter 6; Section 6.3.1, at the bottom of page 6-58 under heading Forster's and Caspian Terns, text has been changed as follows:

Forster's and Caspian Terns. The Forster's tern *(Sterna forsteri)* and the Caspian tern *(S. caspia)* nest on levees and dredge spoil islands within the project area. Both of these species are designated by the CNDDB as Special Animals at their nesting sites. Both Forster's and Caspian terns occur widely in North America (AOU 1998) and forage over saltwater and freshwater habitats. Within the project area, Forster's terns nest in the Baumberg complex at Ponds 1, 4, 6, 7, 9, 10, 11, and 12 and the Alviso complex at Ponds A1, A7, A8, A16, and B2 (Ryan 2000c and C. Strong pers. Comm.). ~~**Within the project area, Forster's terns nest in the Baumberg complex at Ponds P6, P12, and P11, and the Alviso complex at Ponds A1, A7, A8, A16, and B2 (Ryan 2000c). Capsian terns nest within the Alviso complex at Pond A3 and A7 (Ryan 2000d).**~~

Caspian terns nest within the Baumberg Complex at Pond B10 and the Alviso complex at Pond A7 (Ryan 2000d and C. Strong pers. Comm.).

***Comment:* 18-17**	SFBBO notes that window surveys have to be timed carefully to include over wintering species. Training of monitors will be crucial.
Response:	We agree the planning, training, and timing of window surveys will be crucial.
***Comment:* 18-18**	Black-necked stilts could be impacted by Wildlife Impact-2.
Response:	Comment noted and changes have been made.
***Comment:* 18-19**	Coordination between the USFWS, biological monitors, and construction crews will be critical.
Response:	We agree that for both implementation and subsequent adaptive management coordination between the biological monitors collecting data and managers making decisions will be crucial.
***Comment:* 18-20**	SFBBO provides information about avocet and black-necked stilt nesting locations.
Response:	Comment noted**.**
***Comment:* 18-21**	Statement about location of avian botulism outbreaks.
Response:	Comment noted.
***Comment:* 18-22**	Botulism affects more ducks than any other birds.
Response:	Comment noted and statement has been added to the DEIS.
***Comment:* 18-23**	SFBBO notes avian botulism surveys will need to be increased.
Response:	We agree that surveys will need to be increased. All staff working in the project area will be trained to recognize the symptoms of avian botulism. If evidence is found that an outbreak is occurring, monitoring efforts will be increased.
***Comment:* 18-24**	SFBBO suggests that the proposed 50-foot buffer should be increased to 100 feet.
Response:	***Comment noted.***

Commenter: 19 Save the Bay

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March 5, 2004

Margaret Kolar
San Francisco Bay National Wildlife Refuge Complex
P.O. Box 524
Newark, California 94560

RE: Draft EIR-EIS for the Initial Stewardship Project for the South Bay Salt Ponds, San Francisco Bay, California

Dear Marge:

Save The Bay appreciates the opportunity to comment on the Initial Stewardship Project Draft EIR-EIS for the South Bay Salt Ponds, on behalf of our 10,000 members in the greater San Francisco Bay Area. We have previously submitted comments to the California Department of Fish and Game and have received the Final EIR incorporating comments, responses, and changes. We have also reviewed and commented on the draft waste discharge requirements for this project to the California Regional Water Quality Control Board, San Francisco Bay Region. We find the responses to our previously submitted comments to be satisfactory, reflecting due consideration of Save The Bay's concerns for the initial management and maintenance of the salt ponds in an optimal condition for future planned restoration. 19-1

The combined EIR/EIS for the Initial Stewardship Plan (ISP) focuses on the initial steps that must be taken to allow a transition from use of the South Bay salt ponds for commercial salt making to wildlife habitat and restoration to ecological functions. Save The Bay recognizes that the transition plan is unique and that no previous restoration project anywhere has attempted to return salt production ponds to tidal habitat on this scale. 19-2

As the EIS/EIR states, "The South Bay hydrology and habitats comprise a complex interrelated system. Partly due to a lack of existing data from related projects, it cannot be known what effect the project will have on fish and wildlife and their habitats." For this reason, it is imperative that the ISP incorporate monitoring of the ponds during the transition process and flexibility in the management of individual ponds and systems. Of the four alternatives proposed, the No project/No Action Alternative and Alternative 2 of the EIS/EIR do not meet essential objectives of the ISP; only Alternatives 2 and 3 meet all the Stewardship Plan objectives and also provide maximum flexibility with alternative "individual pond management strategies." 19-3

SAVE THE BAY

Save San Francisco Bay Association

2

The stated Preferred Alternative is Alternative 3, which differs from Alternative 2 only in the timing of initial pond discharges and a modification in the operation of one of the pond systems (Baumberg System 11). However, the introduction of the Preferred Alternative on page 2-8 does not include mention of the pond system modification. Additionally, the description of Alternative 3 on pages 2-41 and 2-42 is confusing and statements about Alternative 2 appear to refer to Alternative 3. **The description of the Preferred Alternative needs to state clearly the reason(s) it is preferred, and descriptions of Alternative 3 should be corrected, if necessary, to be consistent with the description of the Preferred Alternative.** 19-4

The EIS/EIR includes extensive research and modeling on specific potential impacts to water quality from the ISP, and this provides a reasonable basis to conclude that the Preferred Alternative can achieve the goals of the ISP. Save The Bay supports the objectives of the ISP and agrees that the Preferred Alternative pond management strategy will provide the most benefit and least harm to Bay water quality and wildlife habitat. 19-5

Sincerely,

David Lewis
Executive Director

***Comment:* 19-1** STB commented on DEIR/EIS and draft waste discharge requirements.

Response: We note and appreciate Save the Bay's previous and continuing interest and input in development of the ISP.

***Comment:* 19-2** STB recognizes the transition plan is unique.

Response: Comment noted. Restoration of salt ponds has not been done on this scale before, which presents planning challenges.

***Comment:* 19-3** The ISP should incorporate monitoring of ponds and management flexibility. Only Alternatives 2 and 3 meet all the Initial Stewardship Plan objectives and provide maximum flexibility.

Response: We agree, Alternatives 2 and 3 best meet the IPS objectives. Alternative 3 is the agencies' preferred alternative.

***Comment:* 19-4** The description of the preferred alternative should state why it is preferred. The description of the preferred alternative (Alternative 3) should be corrected.

Response: The modification in the operation of Baumberg System 11 has been added to the discussion of similarities and differences between Alternatives 2 and 3 on page 2-8 (see below). Other changes and corrections to the description of the Alternative 3 later in Chapter 2 (i.e., on page 2-41) were made previously in response to comments on the DEIR-EIS and are incorporated in the FEIS.

We believe we have adequately described the Preferred Alternative (Alternative 3) and provided a clear explanation of why it is preferred. As stated on page 2-43, Alternative 3 is the agencies' preferred alternative because it meets the agencies' declared project objectives and provides maximum flexibility and adaptive management options.

Change to DEIS: Chapter 2; Section 2.4 Alternatives Considered in Detail; text inserted to 5th sentence of paragraph beginning at the bottom of Page 2-41:

…Alternatives 2 and 3 both incorporate flexibility for pond management by proposing a number of alternative management strategies for individual ponds and pond systems, including the Island Ponds. **In addition, Alternative 3 includes a modification in the operation of Baumberg System 11 (see description in Section 2.4.4), which is not included in Alternative 2.** Alternative 3 represents the agencies' Preferred Alternative **(see additional discussion in Section 2.4.4)**.

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***Comment:* 19-5** STB agrees the preferred alternative will provide the most benefit and least harm to the Bay.

Response: Comment noted.

Person: 20 Libby Lucas

JLucas1099@aol.com To: sfbaynwrc@r1.fws.gov

03/08/2004 01:11 Subject: South Bay Salt Ponds
- Initial Stewardship
PM Project - Draft EIS/EIR -
Mar.8,04

Refuge Manager, U.S. Fish & Wildlife Service March 8, 2004
San Francisco Bay NWR Complex
P.O. Bpox 524, Newark, CA 94560

Dear Margaret Kolar,

As a follow-up to my earlier coments on the Initial Stewardship Project for the South Bay Salt Ponds DEIS/EIR I would like to refer staff to a study and unpublished map of Sedimentation in the south San Francisco Bay, 1858-1983 by Amy Foxglover and Richard Smith of USGS in Menlo Park.

I have not been able to reach the authors but think it is reference data that should be considerd along with the South San Francisco Bay sediment transfer studies by Professor Krone of U.C. Davis. 20-1

In the adaptive management plan for the island ponds A19, A20 and A21, might it be possible to install a tide gate on at least one pond so that intake water levels can be screened and even modified for creation of marsh without the concern for invasives, either clams or spartina? 20-2

Also, the proximity of the outfall for the San Jose-Santa Clara Water Treatment Plant is certainly a complicating factor in the restoration of high calibre salt marsh in this particular area of South Bay. Could the City of San Jose be encouraged to try a pilot project to have the outfall for these high nutrient treatment plant flows routed through special marsh vegetation created in Pond A18. There have been innovative wetlands projects that have successfully provided such filtering, I believe, in other states. 20-3

Another consideration would be to breach the island ponds from Mud Slough for a buffer to the Mallard Slough treatment plant water quality. This would result in some scouring of Mud Slough but that might not be all bad. This would need study. 20-4

It is probably not necessary to mention that the initial introduction of Spartina foliosa and Salicornia pacifica in a dredge-spoil rehabilitation project for the U.S. Army Corps of Engineers was done to establish intertidal marsh on Alameda Creek in 1974 and that is where your best efforts need to be 20-5

concentrated to control the invasive Spartina.. Would it be possible to urge all concerned parties to work towards this control before these island ponds are opened to south bay tidal action?

The water circulation through all the ponds during this initial stewardship project is critical and it is hoped that you have retained at least one Cargill specialist to consult in this matter.

20-6

In the past I have suggested that a flood control horseshoe of buffer retention basins be set aside inboard of your Wildlife Refuge restored salt ponds.(This could include the Sunnyvale treatment pond and the Moffett Channel and stormwater retention basin). This concept still appeals to me and it might serve to funnel the high nutrient treatment plant water and urban contaminated stormwaters around your sensitive wildlife marshes and ponds, and out to deeper south bay waters.

It would postpone the natural process of dissolution of contaminants by bay saltwaters but might provide a beneficial buffer for sediments of the extreme south bay marshes.

20-7

This does not address the importance of uplands interface but that might still evolve on wide 100-year flood levees that would be high ground, inboard of refuge marshes. This is not part of your initial stewardship scope but it could be thought about now.

Thank you again for the opportunity to comment on this initial restoration plan.

Sincerely,

Libby Lucas
174 Yerba Santa Ave.
Los Altos, CA 94022

***Comment:* 20-1** Ms. Lucas provides information about an unpublished map and study of sedimentation in the South Bay and sediment transfer studies by Dr. Krone.

Response: We will review the information for use in adaptive management plans and further studies.

***Comment:* 20-2** Consider installing tide gates on the Island Ponds to screen out invasive *Spartina* and Asian clams.

Response: The installation of water control structures at the Island Ponds was analyzed. This was determined to be infeasible due to the high cost of mobilizing equipment to an island surrounded by mudflats and the difficulty of managing the structures once they were installed.. In addition, screen size to prevent introduction of seeds and juvenile clams would be too fine to allow adequate water intake**.**

***Comment:* 20-3** Consider creating a water treatment marsh in Pond A18.

Response: The design of a project on Pond A18 (recently purchased by the City of San Jose) is beyond the scope of the ISP. This suggestion may be considered by the City of San Jose.

***Comment:* 20-4** Consider breaching the Island Ponds to Mud Slough to reduce the uptake of nutrient laden waters in Coyote Creek.

Response: This breach location was considered. Modeling determined that, due to the relatively small flows in Mud Slough, the increase in tidal prism caused by a breach in the Island Pond levees at this location would have a significant impact on Mud Slough.

***Comment:* 20-5** Information is provided about the introduction of *Spartina* to the Bay. Ms. Lucas suggests waiting to breach the Island Ponds until *Spartina* is eradicated.

Response: The Island Ponds are not scheduled to be breached for several years (2006). *Spartina* eradication in the vicinity should be well underway by that time.

***Comment:* 20-6** Consider coordinating closely with Cargill watermen.

Response: We agree that the institutional knowledge of the Cargill watermen will be an invaluable asset in implementing adaptive management strategies during the ISP. We have utilized their experience in designing the ISP and will continue to collaborate with them in the future.

***Comment:* 20-7** Consider creating a flood control horseshoe of buffer retention basins.

Response: This suggestion is beyond the scope of the ISP, but should be explored during the long-term restoration planning process.

Commenter: 21 Santa Clara Valley Water District

March 8, 2004

Margaret Kolar
Refuge Manager
U.S. Fish and Wildlife Service
San Francisco Bay NWR Refuge Complex
P.O. Box 524
Newark, CA 94560

Subject: Comments on South Bay Salt Pond - Initial Stewardship Plan Draft Environmental Impact Statement

Dear Ms. Kolar:

On behalf of the Santa Clara Valley Water District (District), I would like to express our appreciation for the opportunity to review the South Bay Salt Pond Initial Stewardship Plan (ISP) Environmental Impact Statement (EIS). The District is pleased to contribute technical expertise on this matter to the South Bay Salt Pond Restoration Project, which promises to be the premier multiple-objective habitat restoration, flood protection and recreational access project on the West Coast.

Our internal team of reviewers has a wide range of technical backgrounds and the District's review focused primarily on the Alviso Ponds. Our comments include those provided for the Environmental Impact Report (EIR; see Attachment 1). I would also like to emphasize two comments here:

- First, the District is concerned the potential water quality impacts that will result when water inflows to Pond A4 are shut off. The District is appreciative that the Final EIR recognizes this issue. The District's main interest in this matter is to work with the U.S. Fish and Wildlife Service (USFWS) to ensure that the salinity at Pond A4 is normalized. We look forward to addressing this issue cooperatively with USFWS to find a mutually beneficial solution. 21-1

- Second, the Draft EIR contained a sentence fragment that has been completed in the Final EIR. This new sentence indicates that the breaches at two of the Island Ponds, A19 and A21, are likely to erode. In light of this information, the District suggests that the quality of these sediments be evaluated so as to identify and address any potential environmental impacts of breaching the levees in advance of the action. This information will help to provide a more solid scientific basis for evaluation of restoration options in the long term. 21-2

Thank you again for the opportunity to comment on the EIS. If you have any questions regarding this letter or District comments, please contact Beth Dyer at (408) 265-2607 x3125.

Sincerely,

James M. Fiedler
Chief Operating Officer
Watersheds

Bd
W:/WPU/SF Bay Shoreline/Salt Pond Restoration Integration/Initial Stewardship Program/ISP EIS Comment ltr 3-8-04_final

cc: Nadine Hitchcock, California Coastal Conservancy
Amy Hutzel, California Coastal Conservancy
Steve Richie, California Coastal Conservancy
Carl Wilcox, California Department of Fish and Game

***Comment:* 21-1** The SCVWD is concerned about potential water quality impacts that will result when water inflows to Pond A4 are shut off.

Response: As noted in the response to Comment 4-2 (SCVWD's comment on the DEIR), Cargill will shut off the brine flows from Pond A3W to Pond A4 (owned by SCVWD) and from Pond A17 to Pond A18 (owned by the City of San Jose) prior to the implemention of the ISP at these sites. These disconnections are part of the various acquisition agreements and are not part of the ISP. Although the shutoff could be considered an indirect effect of the federal and state agencies' acquisition of the ISP salt ponds, this shutoff of brine flows could also have occurred at any time under Cargill's ownership, based on its salt-making needs. Nonetheless, we have added information about this shutoff in Chapter 3, Hydrology. The response to Comment 4-2 contains the text of the change to Section 3.1.5 of the DEIR. This text appears in Section 3.1.5 of the FEIS.

***Comment:* 21-2** The FEIR indicates that the breaches at two of the Island Ponds, A19 and A21, are likely to erode. In light of this information, the District suggests that the quality of these sediments be evaluated so as to identify and address any potential environmental impacts of breaching the levees in advance of the action.

Response: Additional sampling and analysis of sediments in the channel where scour may occur is warranted.

Person: 22 Staff Edits and Format Corrections

Comment: **22-1** Add the following Abbreviations and Acronyms to Chapter 16.

Response:

ACPWFCD	**Alameda County Public Works – Flood Control District**
CCCR	**Citizens Committee to Complete the Refuge**
CSV	**City of Sunnyvale**
CSJ	**City of San Jose**
HASPA	**Hayward Shoreline Citizens Advisory Committee**
SJ/SC WPCP	**San Jose/Santa Clara Water Pollution Control Plant**
STB	**Save the Bay**

Comment: **22-2** Correct the Table of Contents

The Table of Contents was corrected in Section Numbers, Chapter Numbers, and Page Numbers, and reformatted.

Comment: **22-3** Correct the section numbers of Chapter 6.

Chapter 6 section numbers were corrected.

To have consistency with conservation measures (best management practices) described on project permits and authorizations, Staff has made the following changes to the DEIR:

Chapter 3 Page 9

Appendix K was correctly identified.

Chapter 6 Page 6-76

WILDLIFE MITIGATION MEASURE-8B: If an active harrier nest is found at or adjacent to a site, construction activities will be rescheduled until after the nesting season. If this is not feasible, construction buffers will be established around each nest, at a minimum radius of ~~300~~**200** feet from the nest.

Chapter 6 Page 6-78

WILDLIFE MITIGATION MEASURE-10A: Construction associated with implementation of the ISP will be located and timed to avoid impacts to potential nesting sites of these species, to the extent feasible. This construction timing restriction will be implemented from ~~February~~ **March** through ~~August~~ **September 15** for western snowy plover and from April through August for the other waterbird species.

WILDLIFE MITIGATION MEASURE-10B: If avoidance of construction during the nesting season is not feasible, pre-construction surveys will be completed, prior to the initiation of project construction, at construction sites that are located within, or adjacent to, suitable nesting habitat for these species (e.g., seasonal ponds, islands, and levees).

WILDLIFE MITIGATION MEASURE-10C: If active nests are present, construction buffers will be established at a minimum radius of ~~300~~**200** feet from the nesting site or nesting colony periphery. Active nest sites will be monitored by a qualified biologist periodically during the nesting season ~~to verify that the protection measures are effective and to implement additional measures, if necessary~~**. unless monitoring demonstrates that nesting is complete and the young are capable of flight.**

To clarify the areas of different components of the project, Staff has made the following changes to the DEIR:

Executive Summary page 1:

This Environmental Impact Report/Environmental Impact Statement (EIR/EIS) only addresses the 15,100 acres acquired in South San Francisco Bay **(12,900 acres salt production ponds, 1,300 acres of associated levees and uplands, 700 acres of marsh and tidal wetlands, 200 acres of seasonal ponds).**

Chapter 2 page 2-45

Table 2-3 Summary of Habitat Changes under the ISP Alternatives

	Low salinity ponds (0-60ppt)	Medium salinity ponds (60-180ppt)	High salinity ponds (above 180 ppt)	Seasonal ponds	Tidal
Existing	6,300	5,110	1,460	29	
No Project/ No Action				12,900*	
Alternative 1 (Seasonal Pond Management)				12,900	
Alternative 2 (Simultaneous March/April Initial Release)	8,700	827		2,827	475
Alternative 3 (Phased Release)	8,700	827		2,827	475

*Under No Project/No Action, ponds would be seasonal as long as levees remain intact.

Total acreage of land acquired is approximately 12,900 acres salt production ponds, 1,300 acres of associated levees and uplands, 700 acres of marsh and tidal wetlands, 200 acres of seasonal ponds

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USGS: http://waterdata.usgs.gov/ca/nwis/monthly/

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16.0 LIST OF RECIPIENTS OF DEIR/EIS

Agencies/Organizations/Individuals	Public Notice	CD ROM	Hardcopy
Alameda County Flood Control		X	
Alameda County Mosquito Abatement District		X	
Alameda County Public Works	X		
Alameda County Water District		X	
Alameda Creek Alliance	X		
Alviso Library			X
Aquatic Outreach Institute	X		
Association of Bay Area Governments			X
Audubon San Francisco Bay Restoration Program	X		
Bay Area Audubon Council	X		
Bay Area Open Space Council	X		
Bay Planning Coalition	X		
Bay Trail (c/o Association of Bay Area Goverments		X	
Bell, Joseph	X		
California Coastal Conservancy			X
California Department of Fish and Game			X
California State Lands Commission			X
California State Parks Commission	X		
California State Water Resources Control Board			X
California Waterfowl Association	X		
Caltrans		X	
Cargill Salt			X
Citizens Committee to Complete the Refuge			X
City of Hayward			X
City of Menlo Park			X
City of Mountain View			X
City of Palo Alto			X
City of Palo Alto, Palo Alto Baylands			X
City of San Jose			X
City of Sunnyvale			X
City of Union City			X
Communities for a Better Environment		X	
Congressman Mike Honda	X		
Congressman Pete Stark	X		
Congresswoman Anna Eschoo	X		
Council of Bay Area RCDs	X		

County of Alameda			**X**
County of San Mateo			**X**
County of Santa Clara			**X**
Coupert, Mark	**X**		
Defenders of Wildlife	**X**		
DeJager, Bill	**X**		
Ducks Unlimited	**X**		
Earth Justice		**X**	
East Bay Regional Park District			**X**
Golden Gate Audubon	**X**		
Hayward Public Library			**X**
Hayward Shoreline Planning Agency		**X**	
Lee, Thomas	**X**		
Lucas, Libby		**X**	
LSA-Associates		**X**	
McGowan, Mike		**X**	
Mid Peninsula Open Space District	**X**		
Menlo Park Public Library			**X**
NASA – Moffett Field		**X**	
Mountain View Public Library			**X**
National Audubon – Bay Area	**X**		
National Fish and Wildlife Foundation	**X**		
Ohlone Audubon Society	**X**		
PG&E Corporation		**X**	
Point Reyes Bird Observatory		**X**	
Port of Oakland	**X**		
Regional Water Quality Control Board, SF Bay Region		**X**	**X**
Romberg Tiburon Center of Env. Science	**X**		
San Francisco Bay Joint Venture (Beth Huning)	**X**		
San Francisco Baykeeper		**X**	
San Francisco Estuary Institute		**X**	
San Francisco Estuary Project	**X**		
San Jose/Santa Clara Water Pollution Control Plant and Environmental Services Dept.			**X**
San Jose Main Library			**X**
San Mateo County Mosquito Abatement District		**X**	
San Mateo County Parks	**X**		
Santa Clara County Open Space Authority	**X**		
Santa Clara County Vector Control Agency		**X**	

Santa Clara Valley Audubon Society	**X**		
Santa Clara Valley Water District			**X**
Save San Francisco Bay Association		**X**	
Senator Barbara Boxer	**X**		
Senator Diane Feinstein	**X**		
Sequoia Audubon Society	**X**		
SF Bay Bird Observatory			**X**
SF Bay Conservation & Development Commission			**X**
SF Bay Don Edwards NWR		**X**	**X**
SF Public Utilities Commission		**X**	
Shoreline at Mountain View	**X**		
Siegel, Siegel	**X**		
Sierra Club	**X**		
Silicon Valley Manufacturing Group	**X**		
Silicon Valley Toxics Coalition		**X**	
Spartina Control Project		**X**	
Stevens Creek Watershed Group	**X**		
The Bay Institute	**X**		
Truillio, Lynn (Science Team)			**X**
Trust for Public Land	**X**		
Union City Library			**X**
U.S. Army, Corps of Engineers, San Francisco District			**X**
U.S. Department of Agriculture – Natural Resources Conservation Service		**X**	
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Fisheries Service			**X**
U.S. Department of Interior, Bureau of Indian Affairs	**X**		
U.S. Department of Interior, Bureau of Land Management	**X**		
U.S. Department of Interior, Bureau of Reclamation	**X**		
U.S. Department of Interior, Fish and Wildlife service			**X**
U.S. Department of Interior, Geological Survey, Biological Resources Division		**X**	
U.S. Department of Interior, Minerals Management Service	**X**		
U.S. Department of Interior, National Park Service	**X**		
U.S. Department of Interior, Office of Environmental Policy and Compliance			**X**
U.S. Department of Interior, Office of Surface Mining	**X**		
U.S. Department of Transportation, Coast Guard			**X**
U.S. Environmental Protection Agency			**X**

U.S. Navy, BRAC - Moffett Field		**X**	
Union Pacific Railroad			**X**
Wildlife Conservation Board	**X**		
Wildlands, Inc.	**X**		

17.0 ABBREVIATIONS AND ACRONYMS

ACPWFCD	Alameda County Public Works – Flood Control District
AAQS	Ambient Air Quality Standards
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
Action Plan	Revised South Bay Action Plan
ADWEF	Average Dry Weather Effluent Flow
AFCC	Alameda Flood Control Channel
BAAQMD	Bay Area Air Quality Management District
BACWA	Bay Area Clean Water Agency
BAPPG	Bay Area Pollution Prevention Group
Basin Plan	Water Quality Control Plan, San Francisco Bay Region
BASMAA	Bay Area Stormwater Management Agencies Association
Bay	San Francisco Bay
Bay Trail	San Francisco Bay Trail
Bay Trail Plan	San Francisco Bay Trail Plan
BCDC	San Francisco Bay Conservation and Development Commission
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
California ESA	California Endangered Species Act
CAP	Clean Air Plan
CAR	Coordination Act Report
CARB	California Air Resources Board
CBS	Clean Bay Strategy
CCCR	Citizens Committee to Complete the Refuge
CCMP	Comprehensive Conservation Management Plan
CCP	Continuous Circulation Phase
CDFG	California Department of Fish and Game
CEP	Clean Estuary Partnership

CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
COC	Constituents of Concern
Corps	United States Army Corps of Engineers
CRHR	California Register of Historic Resources
CSJ	City of San Jose
CTR	California Toxins Rule
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DFG	California Department of Fish and Game
DO	Dissolved Oxygen
DWR	Department of Water Resources
EBRPD	East Bay Regional Parks District
EFH	Essential Fish Habitat
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
ER-L	Effects Range-Low
ER-M	Effects Range-Median
ESA	Endangered Species Act
ESD	Environmental Services Department
FAS	Flow Audit Study
FWCA	Fish and Wildlife Coordination Act
FY	Fiscal Year
GWI	Groundwater Infiltration
HASPA	Hayward Shoreline Citizens Advisory Committee
IBA	Important Bird Area
IPM	Integrated Pest Management
IRP	Initial Release Phase

ISP	Initial Stewardship Project for the South Bay Salt Ponds in South San Francisco Bay, California.
IU	Industrial User
IWRP	Integrated Water Resources Plan
JPA	Joint Powers Authority
LSI	Life Science!, Inc.
LTMS	Long-term Management Strategy
MAD	Mosquito Abatement Districts
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MBTA	Migratory Bird Treaty Act
MHHW	Mean Higher High Water
MLLW	Mean Lower Low Water
MMP	Mitigation and Monitoring Plan
MMRP	Mitigation Monitoring and Reporting Program
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NSMWA	Napa-Sonoma Marshes Wildlife Area
NTU	Nephelometric Turbidity Units
NWIC	Northwest Information Center
P2	Pollution Prevention
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenols
PMP	Pollutant Prevention and Minimization Program

POTW	Publicly Owned Treatment Works
RAQCB	Regional Air Quality Control Board
Refuge	Don Edwards San Francisco Bay National Wildlife Refuge
Regional Board	California Regional Water Quality Control Board, San Francisco Bay Region
RMP	Regional Monitoring Program
RMS	Root Mean Square
ROD	Record of Decision
ROG	Reactive Organic Gases
ROI	Region of Influence
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
S&W	Schaaf and Wheeler
SAP	Sampling and Analysis Plan
SBWR	South Bay Water Recycling
SCVRR	Santa Clara Valley Railroad
SCVWD	Santa Clara Valley Water District
SFBAAB	San Francisco Bay Area Air Basin
SFBJV	San Francisco Bay Joint Venture
SFBNWR	San Francisco Bay National Wildlife Refuge
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Project
SFSU	San Francisco State University
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJ/SC WPCP	San Jose/Santa Clara Water Pollution Control Plant
SMHM	Salt Marsh Harvest Mouse
SMWS	Salt Marsh Wandering Shrew
SOP	Standard Operating Procedure
South Bay	San Francisco Bay, South of Dumbarton Bridge
SPCRR	South Pacific Coast Railroad

SPRR	Southern Pacific Railroad
SSFB	South San Francisco Bay
SSO	Site Specific Objective
State Board	California State Water Resources Control Board
STB	Save the Bay
SVOC	Semi-Volatile Organic Compounds
SWANCC	Solid Waste Agency of Northern Cook County
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
Tributary Agencies	Cities and Agencies Tributary to the Plant: San José; Santa Clara; Milpitas; Cupertino Sanitary District; West Valley Sanitary District – Campbell, Los Gatos, Monte Sereno, and Saratoga; County Sanitation Districts 2 and 3, and Sunol and Burbank Sanitary Districts
TSS	Total Suspended Solids
U.S. EPA	United States Environmental Protection Agency
ULFT	Ultra-Low Flush Toilet
UPRR	Union Pacific Railroad line
Urban Runoff Program	Santa Clara Valley Urban Runoff Pollution Prevention Program
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WDR	Waste Discharge Requirements
WEP	Water Efficiency Program
WET	Water Efficient Technologies
WNV	West Nile Virus
WQO	Water Quality Objective
WTP	Waste Treatment Plant
YBP	Years Before Present