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Response to Tom Orgain
Mike Russell
Response to Mike Russell
John Santin
Response to John Santin
Bart W. Willis
Response to Bart W. Willis
Roy Belletto
Response to Roy Belletto
Larry Cates
Response to Larry Cates
Doug Croll
Response to Doug Croll
Douglas Fernandez
Response to Douglas Fernandez
Gabe Garbarino
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Jeremy Gibbons
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Steve Marvier
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Response to Brahman Conci
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Response to Darcia Eding
Philip Lantsberger
Response to Philip Lantsberger
Candy Murphy
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Mark Bell
Response to Mark Bell
Jim McGrath
Response to Jim McGrath
Anonymous
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Response to Ross Heitkamp
Ruth Gravanis
Response to Ruth Gravanis
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1. INTRODUCTION

1.1 Purpose of the Response to Comments Document

This Response to Comments document responds to comments received on the South Bay Salt Pond (SBSP) Restoration Project Draft Environmental Impact Statement/Report (EIS/R). The Draft EIS/R identified the environmental consequences associated with the implementation of the SBSP Restoration Project long-term program alternatives and project-level Phase 1 actions, as well as mitigation measures to reduce significant and potentially significant impacts. As a result of these comments, the Draft EIS/R has been revised. The revised Draft EIS/R, together with this Response to Comments document, constitute the Final EIS/R for the proposed SBSP Restoration Project.

The Final EIS/R is an informational document prepared by the lead agencies that must be considered by decision-makers before approving or denying a proposed project.

Sec. 1502.9(b) of the CEQ Regulations for Implementing NEPA states:

Final environmental impact statements shall respond to comments as required in Part 1503 of this chapter. The agency shall discuss at appropriate points in the final statement any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised.

CEQA Guidelines (Section 15132) specify that a Final EIR shall consist of:

- (a) The Draft Program EIR or a revision of the draft.
- (b) Comments and recommendation received on the Draft Program EIR, either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the Draft Program EIR.
- (d) The response of the lead agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the lead agency.

1.2 Environmental Review Process

On March 9, 2007, the lead agencies (US Fish and Wildlife Service and California Department of Fish and Game) released the SBSP Restoration Project Draft EIS/R for public review (State Clearinghouse No. 2004114003). The public review and comment period on the Draft EIS/R began on March 9, 2007 and closed on May 3, 2007.

The lead agencies provided a Notice of Availability notifying the public of the publication of the Draft EIS/R. This notice was mailed to the individuals and organizations that have been involved in the SBSP Restoration Project planning effort as well as those who previously requested such notice in writing. The notice and the Draft EIS/R were also posted on the Project website (www.southbayrestoration.org).

The 45-day public comment period was extended to a total of 55 days. During that time, two public meetings were held to discuss the proposed Project and receive comments on the Draft EIS/R. The first meeting was held on March 28, 2007 at the NASA Research Center, Moffett Federal Airfield, and the second meeting was held on March 29, 2007 at Centennial Hall in Hayward. The dates, time, and place of these meetings were identified in the publicly-circulated Notice of Availability of the Draft EIS/R.

1.3 Report Organization

Chapter 2 of this Response to Comments document contains copies of comments received during the comment period followed by the lead agencies' responses to those comments. Master responses that address multiple comments with similar concerns are also provided. Each comment is alphanumerically coded in the margin of the comment letter, based on the initials assigned for each letter and the order of the comments (see Table 1). For example, the first comment in the letter from the NOAA National Marine Fisheries Service and Ocean Service National Geodetic Survey is NOAA-1.

A number of comments that were received addressed similar concerns. Responses to these comments were consolidated into master responses. Eleven master responses were prepared in response to issues that elicited numerous comments. These master responses include:

- Relationship to the South San Francisco Bay Shoreline Study;
- Scope of the EIS/R;
- Preferred Alternative;
- Adaptive Management Plan Funding;
- Aircraft Bird Strikes;
- Public Access and Impacts to Wildlife;
- Wildlife Impact Significance Thresholds;
- Flooding;
- Impacts of Sea Level Rise;
- Hunting; and
- Invasive *Spartina* and Other Invasive Species.

Where a response includes a change to the text of the Draft EIS/R, the text has been revised in the Final EIS/R. Minor text revisions are presented in the responses to comments; where substantial revisions are made, the responses include a reference to the revised text in the Final EIS/R. Text changes in this Response to Comments document are indented and shown in <u>underline</u> and strikeout format. Text shown

in underline format is new text added to the EIS/R. Text shown in strikeout format is text deleted from the EIS/R. Indented text that is presented in normal format (no underline or strikeout) is original text excerpted from the Draft EIS/R that will remain in the Final EIS/R and is shown to provide context for the revisions.

Table 1 lists all persons and organizations that submitted comments on the Draft EIS/R during the comment period, the date of the letters, and the initials used to identify each letter. It should be noted that one individual and one organization submitted comments after the close of the comment period. However, the comment letters are included in this document and responses were prepared.

FEDERAL AND STATE AGENCIES					
COMMENTER	CODE	AFFILIATION	DATE		
Rodney F. Weiher, Ph.D.	NOAA	NOAA National Marine Fisheries Service and Ocean Service National Geodetic Survey	4/23/07		
Jeffrey Waldman	CANG	Department of the Air Force, 129 th Rescue Wing, California Air National Guard	4/23/07		
David C. Van Gasbeck	ANG	Department of the Air Force, Air National Guard	4/26/07		
Sandy Olliges	NASA	NASA Ames Research Center	5/3/07		
Jeff Amaral	USDA	US Department of Agriculture, Wildlife Services	5/3/07		
Nova Blazej	USEPA	US Environmental Protection Agency	5/3/07		
Marina R. Brand	SLC	California State Lands Commission	4/12/07		
Terry Roberts	SCH	State Clearinghouse	4/24/07		
Timothy C. Sable	CALTRANS	Caltrans	5/3/07		

Table 1 Persons and Organizations that Submitted Comments on the Draft EIS/R

REGIONAL AND LOCAL AGENCIES					
COMMENTER	CODE	AFFILIATION	DATE		
Roy Molseed	SCVTA	Santa Clara Valley Transportation Authority	3/26/07		
Marie Pang	СТ	Caltrain	4/10/07		
Laura Thompson	SFBT	San Francisco Bay Trail	4/17/07		
Art Morimoto (1)	MP1	City of Menlo Park	4/18/07		

COMMENTER	CODE	AFFILIATION	DATE
Art Morimoto (2)	MP2	City of Menlo Park	5/1/07
Marvin A. Rose	SUN	City of Sunnyvale	4/23/07
Yves Zsutty	SJPARKS	City of San Jose Department of Parks	4/24/07
Janis Moore	SJPLAN	City of San Jose Department of Planning, Building and Code Enforcement	5/1/07
Joan Malloy	UC	City of Union City	4/24/07
Laura Macias	MV1	City of Mountain View	4/25/07
Barbara Pierce	RWC	City of Redwood City	4/27/07
Michael J. Giari	PRWC	Port of Redwood City	4/27/07
Carol Severin	HASPA	Hayward Area Shoreline Protection Agency	4/30/07
Robert Shaver	ACWD	Alameda County Water District	5/1/07
Daniel Woldesenbet, Ph.D., P.E.	ACFCD	Alameda County Flood Control District	5/3/07
Jane F. Mark, AICP	SCCPR	County of Santa Clara Parks and Recreation Department	5/1/07
Chindi Peavey, Ph.D.	SMCMAD	San Mateo County Mosquito Abatement District	5/2/07
L. Craig Britton	MROSD	Midpeninsula Regional Open Space District	5/2/07
Kevin Murray	SFCJPA	San Francisquito Creek Joint Powers Authority	5/2/07
Pat O'Brien	EBRPD	East Bay Regional Park District	5/3/07
Michael P. Carlin	SFPUC	San Francisco Public Utilities Commission	5/3/07
Ann Draper	SCVWD	Santa Clara Valley Water District	5/3/07
Jenn Feinberg	BCDC	BCDC	5/3/07

ORGANIZATIONS			
COMMENTER	CODE	AFFILIATION	DATE
Russ Robinson	RBC	Recreational Boaters of California	3/26/07
Marc Ebbin	PGE1	PG&E	4/11/07
Diane Ross-Leech	PGE2	PG&E	5/3/07
Joshua Moore	ROMP	Responsible Organized Mountain Pedalers (ROMP)	4/13/07
Eileen McLaughlin	WS1	Wildlife Stewards	5/2/07
David Lewis	STB	Save The Bay	5/3/07
Graham Chisholm	AUDCA	Audubon California	5/3/07
Stephan C. Volker	VOLK	Citizens Committee to Complete the Refuge and Marin Audubon Society	5/3/07
Arthur Feinstein	CCCR	Citizens Committee to Complete the Refuge	5/3/07
Peter R. Baye, Ph.D.	РВ	Citizens Committee to Complete the Refuge	5/3/07
Patrick D. Mapelli	CARG	Cargill	5/3/07
Andreas Schmidt	SFBB	San Francisco Bay Brand	5/3/07
Charles Taylor	AWTF	Alviso Water Task Force	5/3/07
Donald Mayall	CNPS	California Native Plant Society	5/3/07
Nadav Nur	PRBO	PRBO Conservation Science	5/3/07
Danielle Le Fer	SFBBO	San Francisco Bay Bird Observatory	5/3/07
Mark Hennelly	СОНА	California Outdoor Heritage Alliance	5/3/07
Barbara Salzman	MAS	Marin Audubon Society	5/4/07*

INDIVIDUALS			
COMMENTER	CODE	AFFILIATION	DATE
Michael Case (1)	MC1		3/14/07
Mike Case (2)	MC2		4/19/07
Jim Woodworth	JW		3/15/07
William Symons	WS2		3/15/07
Tom Bishop	ТВ		3/22/07

COMMENTER	CODE	AFFILIATION	DATE
Robert Andrade	RA		3/25/07
Douglas Thompson	DT	Atlantic Professional Development	3/27/07
Richard Schussel	RSC		3/28/07
William Lev	WL		3/29/07
Tyler Gullick	TG1	CSU Chico student	3/29/07
Erik Zinn	EZ		3/29/07
Scott Anderson	SA		3/30/07
Jay Gertridge	JG1		3/31/07
Xavier Melanson-Fernandez	XMF		4/9/07
Richard P. Santos	RS		4/11/07
Michael J. Vandeman, Ph.D.	MV2		4/14/07
Susan Penner	SP		4/15/07
Ed Feinberg	EF	ROMP	4/18/07
Henry Pastorelli	HP	ROMP and SVBC member	4/18/07
Frank and Janice Delfino (1)	FJD1		4/18/07
Frank and Janice Delfino (2)	FJD2		5/1/07
Tom Orgain	ТО		4/19/07
Mike Russell	MR		4/19/07
John Santin	JS1		4/19/07
Bart W. Willis	BW		4/19/07
Roy Belletto	RB		4/19/07
Larry Cates	LC		4/19/07
Doug Croll	DC		4/19/07
Douglas Fernandez	DF	CWA/DU member	4/19/07
Gabe Garbarino	GG		4/19/07
Jeremy Gibbons	JG2		4/19/07
Steve Marvier	SM		4/19/07
Michael McGuire	MMC		4/19/07
Erik Nelson	EN		4/19/07
Anthony Naples	AN		4/20/07
David Newsom	DN		4/20/07
Thomas A. Laine	TL		4/20/07
Geoff Belyea	GB		4/23/07

INDIVIDUALS			
COMMENTER	CODE	AFFILIATION	DATE
Kevin Burroughs	KB		4/23/07
Stephanie Case	SC		4/23/07
Brahman Conci	BC		4/23/07
Gregory Damitz	GD		4/23/07
Darcia Eding	DE		4/23/07
Philip Lantsberger	PL		4/23/07
Candy Murphy	СМ		4/23/07
Mark Bell	MBB		4/26/07
Jim McGrath	JM		4/27/07
Anonymous	ANON1		4/28/07
Ross Heitkamp	RHE	Friends of Stevens Creek Trail	5/2/07
Ruth Grevanis	RG		5/3/07
Libby Lucas (1)	LL1		5/3/07
Libby Lucas (2)	LL2		5/3/07
Scott Demers	SD	Humboldt State University	5/3/07
Susan Roselli	SR		No date
Archana Sudame	AS	Santa Clara University	5/11/07*

COMMENTS FROM PUBLIC MEETINGS			
COMMENTER	CODE	AFFILIATION	DATE
Mike Meyers	MM		3/28/07
John Roselli	JR		3/28/07
Jeff Sicklesteel	JS2		3/28/07
Libby Lucas	LL3		3/28/07
Ted Gross	TG2		3/28/07
Ricardo Huerta	RH		3/28/07
Don Alvarado	DA		3/28/07
Anonymous	ANON2		3/28/07
Maria L. Adas	MA		3/29/07
Notes: * denotes letter was submitted after the close of the public comment period.			

2. COMMENTS AND RESPONSES

2.1 Master Responses

Relationship to the South San Francisco Bay Shoreline Study

This master response addresses the following comments: NASA-12, USEPA-2, USEPA-4, USEPA-8, AUDCA-4, VOLK-1, VOLK-3, VOLK-5, VOLK-6, VOLK-9, PB-2, PB-19, and LL1-4.

Several commenters requested clarification of the relationship between the SBSP Restoration Project and the South San Francisco Bay Shoreline Study (Shoreline Study) and the coverage of these two projects in the EIS/R.

Section S.1.2 of the EIS/R Executive Summary states that "the SBSP Restoration Project was planned in close coordination with a related but separate project, the South San Francisco Bay Shoreline Study... Because they have similar objectives and geographic scope and include restoration and flood management components, the planning and management of these two projects will be closely integrated." The Shoreline Study is still in the early planning stages, and separate environmental documentation will be prepared once the Shoreline Study objectives and alternatives are defined. The limited information that is currently available regarding the Shoreline Study is presented in the EIS/R to provide full public disclosure of the relationship and close integration between the two projects.

As discussed in more detail in the responses below, the Draft EIS/R did not provide compliance under NEPA and CEQA for the Shoreline Study. After reviewing the comments, however, we acknowledge that the Draft EIS/R caused confusion as to the exact nature of the relationship of the Shoreline Study to the EIS/R and to the SBSP Restoration Project itself. To eliminate this confusion, we have taken the following measures. First, the US Army Corps of Engineers (Corps) will no longer be a co-lead agency on the SBSP Restoration Project EIS/R. The Corps will remain a cooperating agency because it will use the Final EIS/R to issue Clean Water Act (CWA) 404 permits for the SBSP Restoration Project. Second, we have reiterated that the EIS/R provides no NEPA or CEQA compliance for the Shoreline Study (see discussion below). We have also deleted or re-drafted language in the EIS/R that may have caused confusions on this issue. Finally, we have deleted the use of the terms "tier" or "tiering" to describe how the Shoreline Study will use this Final EIS/R in the future (see discussion below).

Coverage of the SBSP Restoration Project and the Shoreline Study in the EIS/R

The EIS/R's program- and project-level components are set forth in the Executive Summary and Chapter 1, Introduction of the EIS/R. Section S.3, Type of EIS/R, in the Executive Summary states the following:

"This document is both a programmatic EIS/R covering the 50-year long-range *SBSP Restoration Project* as well as a project-level EIS/R addressing the specific components and implementation of *Phase 1 of the SBSP Restoration Project*." [emphasis added]

The fourth paragraph in Chapter 1, Introduction, states the following:

"This EIS/R includes program-level evaluation of the *SBSP Restoration Project longterm alternatives* as well as project-level analysis of the *first phase of restoration (the Phase 1 actions*)." [emphasis added]

Furthermore, Section 1.2.1 of the EIS/R states that the purpose of the EIS/R is:

"to provide the public and responsible and trustee agencies with information about the potential environmental effects of the *SBSP Restoration Project*. It will be used by the lead agencies when considering approval of the *Project*. While the Shoreline Study potential actions are generally evaluated in this EIS/R, *Shoreline Study alternatives are not yet developed sufficiently to allow for their detailed analysis at this time*." [emphasis added]

The EIS/R is not intended to provide the public with sufficient information about the potential effects of the Shoreline Study pursuant to National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements and does not provide program-level coverage of the Shoreline Study pursuant to NEPA and CEQA. The EIS/R *does not* provide adequate program-level coverage of the Shoreline Study and it *cannot* do so, because the Shoreline Study planning is still in the early stages and both the Shoreline Study objectives and alternatives still need to be defined. Without this basic information about the Shoreline Study, it is not possible to conduct a full evaluation of the potential impacts of the Shoreline Study. Section 3.2.2 of the EIS/R elaborates on this point:

"Because alternatives have not yet been developed for the South San Francisco Bay Shoreline Study, *a full impact assessment pursuant to NEPA and CEQA requirements is not included in this EIS/R*....separate project-level EIS/Rs will be prepared for each of the Shoreline Study Interim Feasibility Studies as the Corps completes its alternatives formulation process. Consequently, *the Shoreline Study potential impacts presented in this section are not meant to be conclusive, nor are they meant to provide adequate coverage pursuant to NEPA and CEQA*, because such determinations would be speculative without additional information concerning the potential actions. *The potential impacts are presented here to inform the reader of the possible outcomes of the Shoreline Study based on current information*, since the Shoreline Study will be closely coordinated with the SBSP Restoration Project." [emphasis added]

A full impact analysis cannot be completed at the program- or project-level until alternatives for the Shoreline study are defined, since it is currently not known what actions would be proposed under the Shoreline Study and where they would occur. Because these alternatives have not been formulated, a thorough, meaningful impact analysis cannot be conducted. The intent of Section 3.2 is to provide full public disclosure regarding a separate but closely related project that will undergo its own separate environmental review. As noted in Section 3.2, it is likely that the Shoreline Study potential actions may result in impacts that are similar to those identified for the SBSP Restoration Project in the EIS/R. The presentation of the Shoreline Study potential impacts in Section 3.2, which is very brief, is deliberate.

Since discussion of potential Shoreline Study impacts is speculative given the limited information that is available, potential impacts are presented in a list format and essentially point out expected similarities between the potential Shoreline Study actions and the SBSP Restoration Project components. The Shoreline Study potential impacts are addressed separately in Section 3.2 and not in the issue-specific sections of Chapter 3 to further highlight that the Shoreline Study is not fully evaluated in the EIS/R.

To make the Final EIS/R as clear as possible, we have deleted or re-drafted the following sections to eliminate any confusing language as to NEPA or CEQA compliance for the Shoreline Study as well as to the relationship of the Shoreline Study to the SBSP Restoration Project: Chapter 1, Introduction; Section 1.1, Project Location; Section 1.3.1, Purpose and Objectives; Section 1.3.2, Need for Action and Section 3.2, South San Francisco Bay Shoreline Study.

Tiering

Several commenters took exception to the use of the term "tiering" in the EIS/R with regard to the Shoreline Study. Section 3.2.1 of the EIS/R states "the Shoreline Study alternatives are currently being developed and will be addressed in separate project-level EIS/Rs for each Interim Feasibility Study, which will tier from this SBSP Restoration Project EIS/R."

Several commenters stated that the term "tier" should not be used in this case because the SBSP Restoration Project EIS/R does not provide programmatic coverage of the Shoreline Study, and therefore, subsequent project-level EIS/Rs for the Interim Feasibility Studies cannot "tier" from the SBSP Restoration Project EIS/R. Section 15385 of the CEQA Guidelines provides the following definition for tiering:

"Tiering" refers to the coverage of general matters in broader EIRs ... with subsequent narrower EIRs or ultimately site-specific EIRs incorporating by reference the general discussions and concentrating solely on the issues specific to the EIR subsequently prepared.

Section 1508.28 of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA states:

"Tiering" refers to the coverage of general matters in broader environmental impact statements ... with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

NEPA regulations encourage the elimination of repetition in environmental impact statements.

Sec. 1502.28 of the CEQ Regulations for Implementing NEPA states:

Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.

Sec. 1502.21 of the CEQ Regulations for Implementing NEPA states:

Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action.

As discussed above in the Master Response for the Relationship to the South Bay Shoreline Study, the EIS/R does not provide program-level coverage of the Shoreline Study.

To clarify the relationship between the SBSP Restoration Project EIS/R and future project-level EIS/Rs that will be prepared for Shoreline Study Interim Feasibility Studies, the text of the EIS/R has been revised to indicate that the SBSP Restoration Project EIS/R would be "incorporated by reference" to the extent practicable or allowed by law in those future project-level EIS/Rs. The term "tiering" is no longer used in the EIS/R to describe the relationship between the SBSP Restoration Project EIS/R and future project-level EIS/Rs that will be prepared for Shoreline Study Interim Feasibility Studies. The term "tiering" will be retained for describing the relationship between the SBSP Restoration Project programmatic EIS/R and future project-level SBSP Restoration Project environmental review documents. We have deleted the use of the terms "tier" or "tiering" in the following sections to describe how the Shoreline Study will use this Final EIS/R in the future: Chapter 1, Introduction; Section 1.6.1, Shoreline Study, Section 1.7, Intended Uses of the EIS/R and Required Approvals Project Location; and Section 3.2, South San Francisco Bay Shoreline Study.

Scope of the EIS/R

This master response addresses the following comments: VOLK-1, VOLK-4, VOLK-5, VOLK-6, VOLK-7, VOLK-9, PB-2, PB-19, FJD2-3, and RG-1.

Some commenters assert that the geographic scope of the EIS/R is not broad enough and therefore fails to include a reasonable range of alternatives for restoration in South San Francisco Bay. They assert that the SBSP Restoration Project (and thus, the EIS/R) should be expanded to consider land outside of the Project Area, such as ponds used by Cargill Salt Company (Cargill) for salt production as well as other privately or publicly owned land within the authorized boundary of the Refuge or Reserve. These comments do not object to the alternatives in the EIS/R per se, but rather that the analysis of the alternatives should be extended to a larger area. One commenter suggested that the EIS/R must provide an evaluation of the entire South Bay, the purpose being "to alert Congress and other decision-makers to modify their authorizations or funding to improve environmental results when it is in the public interest to do so."

The Project Area encompasses three former salt-pond complexes: the Eden Landing pond complex, which is owned by CDFG, and the Alviso and Ravenswood pond complexes, which are owned by USFWS. The

SBSP Restoration Project is a direct outgrowth of the acquisition of these three pond complexes (either in fee ownership or the salt making rights) from Cargill in 2003. Although USFWS and CDFG have planned discrete restoration projects on certain areas within the Refuge or the Reserve (such as Bair Island and the Eden Landing Ecological Reserve (ELER) Restoration Project, respectively), the acquisition of the Cargill ponds provided the first opportunity for large-scale restoration planning for both the Refuge and the Reserve. The Initial Stewardship Plan (ISP) was the first management plan for the newly acquired salt ponds and is intended to cover the time from the approval of the ISP until restoration activities are undertaken for specific ponds. The geographic scope of both the ISP and the SBSP Restoration Project are the same – the approximately 15,100 acres of former Cargill salt ponds.

Some of the impetus for the comments derives from a misunderstanding of the relationship between the SBSP Restoration Project and the Shoreline Study, perhaps because of some confusing language in the Draft EIS/R (see the Master Response above regarding the Project's relationship to the Shoreline Study). Several comments, for example, state that the EIS/R should extend the analysis of the alternatives in the EIS/R to cover areas within the boundary of the Shoreline Study but outside the SBSP Restoration Project Area. As discussed below, including these additional areas is not practical or feasible. Moreover, the geographic scope of the Project has always been the same – the approximately 15,100 acres of former Cargill salt ponds. (See for example "Notice of Intent to Prepare an Environmental Impact Statement/ Environmental Impact Report for the South Bay Salt Pond Restoration Project and the South San Francisco Bay Shoreline Study", 69 Federal Register 64965, at 64966 (November 9, 2004).) As described in more detail in Section 2.2 of the EIS/R, an extensive alternatives development process involving public participation and lasting for over a year was conducted for the SBSP Restoration Project. Public meetings were held and comments solicited to inform decision-making on the scope of the Project and alternatives to be considered. (Comments received during the scoping period are presented in Appendix A of the EIS/R.) None of the scoping comments called for modifying the scope of the SBSP Restoration Project to address restoration of land outside of the SBSP Restoration Project Area.

Another impetus for these comments seems to be the desire by the commenters to restore as much as possible of South San Francisco Bay to natural ecosystems and habitats. The Project proponents and USFWS in particular share the vision motivating these commenters in terms of restoring historic losses of tidal marsh ecosystems and habitats in San Francisco Bay and hope that more lands will be acquired to augment the restoration contemplated in the EIS/R. The Project proponents also agree with the commenters that some of the areas they discuss may provide opportunities for restoration in the future. The following discussion of restoration possibilities in South San Francisco Bay has been added to the EIS/R as new Section 1.4.6:

1.4.6 Restoration in South San Francisco Bay

The SBSP Restoration Project is a direct outgrowth of the acquisition of the Alviso, Ravenswood and Eden Landing pond complexes (either in fee ownership or the saltmaking rights) from Cargill in 2003. The Project, therefore, has focused on how best to manage and restore these lands, either through the ISP or this Restoration Plan. The 1990 Environmental Assessment for potential additions to the refuge makes it clear that due to a variety of reasons such as the lawful development of privately owned lands, lack of willing sellers or prohibitive cost, some lands within the boundary will not be able to be acquired. However, despite this, there are areas outside the Project Area but within the Authorized Expansion Boundary that offer additional restoration and conservation opportunities. The Authorized Expansion Boundary was established through a process that carefully evaluated existing South Bay habitats important for the protection of fish and wildlife (especially threatened and endangered species and migratory birds) and for wildlife-oriented recreation. The land within the Authorized Expansion Boundary reflects the diversity of wildlife habitats that could be restored to tidal wetlands, brackish marsh, managed ponds, seasonal wetlands, vernal pools, grasslands, riparian, freshwater marshes and adjacent uplands. Figure 1-4 shows all publicly owned open space within the Authorized Expansion Boundary. The unshaded areas in Figure 1-4 are either built out or are open lands still owned by private parties which represent future opportunities for acquisition by USFWS or CDFG.

Some lands outside the SBSP Restoration Project Area are more suitable for certain types of restoration than lands within the Project Area. It is true that because of certain challenges with particular Alviso Ponds (*e.g.*, mercury, subsidence), some of the Mowry Ponds currently owned by the Refuge and operated by Cargill for salt production would be more suitable for tidal marsh restoration when and if they become available because they have fewer challenges. Another reason for the acquisition and restoration of the remaining privately owned lands within the Authorized Expansion Boundary is to spread the restoration risks over a larger geographic area making the likelihood of failure due to uncontrollable events (*e.g.*, oil spill) less likely. Some of these privately owned lands also provide opportunities to restore locally rare habitats (*e.g.*, riparian, seasonal wetlands, former duck clubs) that are limited when considering only the lands within the Project Area.

Areas outside the SBSP Restoration Project Area, however, are not currently available for restoration because the Project proponents either do not own the land or they do not possess the right to restore the land. Therefore, it is considered not practical or feasible to include any additional lands within the alternatives for evaluation as part of the SBSP Restoration Project in this EIS/R. Nonetheless, the Project proponents, and USFWS in particular, share the vision of many stakeholders to restore as much of South San Francisco Bay as possible to natural ecosystems and habitats. USFWS has a demonstrated history of acquiring and restoring land as it becomes available. Since the Refuge was established, and in particular since Congress directed the Refuge be expanded, USFWS has worked to acquire and restore many of these identified lands. For example:

 In 1992, the Refuge acquired the Carruf parcel in southern Fremont to restore the vernal pool/grasslands complex and former duck hunting club that provides habitat for three endangered species in addition to a variety of migratory birds.

- In 1995, the Refuge acquired the former Silver Pines Golf Course in Newark, to establish the Mayhews Landing Tract being managed to provide habitat for waterfowl, shorebirds and the endangered salt marsh harvest mouse.
- In 1999, the Refuge and CDFG obtained the majority of the remaining private land on Bair Island in Redwood City. Since then, the Refuge and CDFG have developed and are now implementing a plan to restore 1,400 acres of these former commercial salt ponds to tidal wetlands for threatened and endangered species, migratory species and enhanced wildlife-oriented public access. These ponds represented the largest wetland restoration opportunity in South San Francisco Bay until the 2003 acquisition from Cargill specific to this EIS/R.
- <u>The Refuge has leased a number of tidal sloughs, marshes and mudflats within the</u> expansion boundary from the California State Lands Commission to manage as part of the Refuge for wildlife and public education and nature study.
- <u>The Refuge has an agreement with the City of Palo Alto to manage the City's</u> <u>Faber/Laumister parcels in San Mateo County for endangered species, migratory species,</u> <u>wildlife oriented public access and environmental education.</u>
- In the 1990s the levees separating the former commercial salt crystallizer beds near the Refuge headquarters in Fremont from the waters of the Bay were intentionally breached. This action by Refuge staff, combined with the long period of non-use that preceded it, facilitated the return to salt marsh which now provides habitat for the endangered California clapper rail and the salt marsh harvest mouse. The resulting habitat, later named La Riviere Marsh, to honor two of the citizens that helped establish and later expand the Refuge, is illustrative of the success that can occur over time with reintroduction of tidal action to former salt ponds.
- <u>Coyote Creek Lagoon, also known as Warm Springs Lagoon, is a former borrow pit</u> (owned by the State Lands Commission and leased to USFWS) that is now tidal, brackish marsh heavily used by migratory species. Accessed by a popular Refuge trail, this area provides habitat while providing excellent wildlife-oriented recreational opportunities for the public.
- <u>The Refuge's Warm Springs Vernal Pool Complex in Fremont, formerly known as the</u> <u>Carruf property, has been managed through a highly controlled grazing program to</u> <u>enhance the existing habitat for three endangered species that use the vernal pools along</u> <u>with grassland dependent species such as burrowing owls.</u>
- <u>USFWS is also working with ProLogis</u>, a private development company, to expand these vernal pools/grasslands on adjacent private lands that will be donated to the Refuge.

These and other examples illustrate USFWS's ongoing actions to achieve Congressional intent in establishing and expanding the Refuge.

Expanding the area where the SBSP Restoration Project occurs could in turn improve the efficiency and success of the restoration. The adaptive management aspect of the Project anticipates the future opportunity of expanding the Project Area to include other lands identified in the Authorized Expansion Boundary. These additional lands, if or when

they become available would not only increase the number of acres available for restoration and other conservation measures but would also increase the type and the mix of habitats that could be restored. Additional land and habitats, for example, would allow the Project proponents to spread their efforts to enhance sensitive species across the landscape, supporting more viable and resilient populations. Expanding the number and mix of habitats could also offer the Project more chances to connect a range of habitats to restore ecosystems as a whole. Expanding the Project Area could also help the Project meet its flood control objectives by improving both the cost efficiency and the effectiveness of flood control levees.

USFWS reiterates that it would like to acquire and where appropriate restore all lands within the Authorized Expansion Boundary when these areas become available. To that end, USFWS will continue to work with willing landowners of the privately owned parcels within the Refuge's Authorized Expansion Boundary to acquire, protect and when appropriate, restore them to further meet the Refuge's congressionally mandated purposes. At the beginning of each phase of the Project, the status of lands outside of the Project Area will be assessed. Although it is not feasible now, when there is a realistic and feasible opportunity to restore land outside the Project Area but within the Authorized Expansion Boundary, the Project will be redefined to consider them. This is consistent with the Project's adaptive management approach, which allows the Project proponents to stop and consider new information and changing conditions at each phase, and adjust the Project accordingly.

As noted by the commenters, the CEQ Regulations for Implementing NEPA state that agencies must "rigorously explore and objectively evaluate all reasonable alternatives", including "reasonable alternatives not within the jurisdiction of the lead agency." (CEQ Section 1502.14) Guidance issued by the CEQ states that "in determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. *Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense*, rather than simply desirable from the standpoint of the applicant." (CEQ Forty Most Asked Questions concerning CEQ Regulations for Implementing NEPA, Question 2a (46 Fed Reg. 18026 [March 23, 1981] as amended 51 Fed. Reg 15618 [April 25, 1986] [emphasis added])

Similarly, CEQA Guidelines state that "an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible....Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable

alternatives." (CEQA Guidelines Sections 15126.6[a] and 15126.6[f][1] [emphasis added]) CEQA Guidelines also state that "an EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (Section 15126.6[f][1])

Adding the additional land mentioned by the commenters to the scope of the SBSP Restoration Project is not currently practical or feasible. None of the other land beyond the Project Area is currently available for restoration as part of the SBSP Restoration Project. The Project proponents either do not own the land or they do not possess the right to restore the land – and there are no proposals to give the agencies the ability to restore these areas. While the Project proponents seek to maximize restoration in the South Bay, and welcome opportunities to expand the Project to restore additional land, it would be speculative to assume that the Project would be able to acquire any of this land in the near future. Moreover, adding additional lands would divert money from and delay restoration within the current Project Area but would not alter the current priorities of what ponds should be restored first since none of the additional ponds are currently available for restoration.

Given that the SBSP Restoration Project was always designed to be a project for the former Cargill salt ponds acquired in 2003 and given the comments received during the scoping and alternative development process, the Project proponents believed that it was at least implicit that to expand the geographic scope of the Project Area to land that is not available for restoration is not practical or feasible. In response to the comments, however, and to make that analysis explicit, the following new discussion has been added to Section 2.2.3 of the EIS/R that explains why expanding the scope of the Project is not currently practical or feasible:

Expanded Geographic Area Alternative

This alternative would expand the Project Area to include other land within the Authorized Expansion Boundary of the Refuge. Although analyzed in this section with other alternatives, this "alternative" is in essence a re-definition of the geographic scope of the Project by extending the analysis of the existing alternatives to land outside the current Project Area.

The SBSP Restoration Project is a direct outgrowth of the acquisition of the salt pond complexes (either in fee ownership or the salt-making rights) from Cargill in 2003. As discussed in more detail in Section 1.4.6, there are areas outside the Project Area that present opportunities for restoration and other conservation action. It would not, however, be practical or feasible to include these other lands within the SBSP Restoration Project now. None of the other land beyond the SBSP Restoration Project Area is currently available for restoration as part of the SBSP Restoration Project. The Project proponents either do not own the land or they do not possess the right to restore the land – and there are no proposals to give the agencies the ability to restore these areas. It would not be reasonable nor would it be practical to develop expensive restoration plans and studies now for these lands when they may never be available or not available for restoration for many years, when circumstances may have changed considerably. Such plans are likely to be outdated or even rendered useless, depending on how and when the land becomes available. While the Project proponents seek to maximize restoration in the South Bay, and welcome opportunities to expand the Project to restore additional land, it would be speculative to assume that the Project would be able to acquire any of this land in the near future. Moreover, adding additional ponds into the analysis of the alternatives would not alter the current priorities of what ponds should be restored first since none of the additional lands would be available for restoration. Further, those studies would divert money from and delay restoration of the current Project Area.

<u>USFWS reiterates that it would like to restore all potentially restorable areas within the</u> <u>Authorized Expansion Boundary when these areas become available. (See the discussion</u> <u>in Section 1.4.6). Circumstances may change in the future and nothing precludes the</u> <u>Project from expanding the geographic scope of the Project in the future.</u>

Preferred Alternative

This master response addresses the following comments: STB-3, SUN-16, AWTF-2, AUDCA-1, COHA-1, and EF-1.

Some commenters expressed a preference for a single alternative, Alternative B or Alternative C, to be the Preferred Alternative, depending on the commenter.

NEPA requires the selection of a preferred alternative. Although the ultimate configuration would be somewhere between Alternative B and C, to satisfy NEPA requirements Alternative C has been identified as the preferred alternative at this time. Alternative C is the preferred alternative because its habitat mosaic most closely represents the historic pre-salt-pond landscape (*i.e.*, greatest area of tidal marsh). However, pursuant to the Project's Adaptive Management approach, Alternative B would equally achieve the Project Objectives, and would be achieved first. There is not enough knowledge and insight about the processes at work or the cause-and-effect relationships to determine the optimal mix of tidal habitat and managed ponds at this time. The Project's approach to the selection of an ultimate configuration of the ponds in the Project Area is to take the lessons learned from each phase of the SBSP Restoration Project. These lessons would inform future phases and determine the ultimate outcome. That outcome (which would fall between the 50:50 and 90:10 tidal habitat : managed ponds scenarios) would be the endpoint which achieves the maximum amount of tidal restoration possible without causing significant adverse effects on environmental resources. As such, the Adaptive Management Plan would guide the Project to the ultimate outcome that is the Environmentally Superior Alternative.

As described above, the Project's approach is to take the lessons learned from each phase of the SBSP Restoration Project and inform future phases and determine the ultimate outcome. That outcome (which would fall between the 50:50 and 90:10 tidal habitat : managed ponds scenarios) would be the endpoint which achieves the maximum amount of tidal restoration possible without causing significant adverse effects on environmental resources. The Adaptive Management Plan would guide the Project to an outcome that is the ultimate configuration of the ponds in the Project.

Similarly, regarding public access and recreation, even though Alternative C is designated as the preferred alternative, the ultimate configuration of public access features in the Project Area would be determined through adaptive management. The ultimate configuration would likely be some combination of the features included in Alternatives B and C that represents the appropriate degree of public access compatible with the habitat configuration. Again, the Adaptive Management Plan would allow the SBSP Restoration Project to move forward and respond to this uncertainty.

Adaptive Management Plan Funding

This master response addresses the following comments: CALTRANS-6, MP1-1, MP1-2, HASPA-11, HASPA-13, SMCMAD-2, SMCMAD-4, SCVWD-9, SCVWD-92, SCVWD-97, SCVWD-104, SCVWD-106, SCVWD-109, STB-16, AUDCA-2, AUDCA-20, XMF-1, FJD1-2, FJD1-10, and FJD2-8.

Implementation of the SBSP Restoration Project relies heavily upon adaptive management to progress along the 'staircase' of additional tidal habitat restoration without causing significant environmental impacts. The EIS/R describes a variety of proposed monitoring activities and applied studies that would be integral to successful progression along the staircase, but the document does not discuss funding for these elements of the Project. Several commenters expressed concern that the funding likely to be available for adaptive management decision-making would not be sufficient to adequately conduct the amount of monitoring, experimentation, and data synthesis required to avoid adverse environmental impacts and/or progress along the staircase of additional tidal habitat restoration in an informed fashion.

The SBSP Restoration Project will not implement the proposed Phase 1 actions or subsequent large-scale restoration actions (future actions) without adequate funding for the required adaptive management activities. Presently, the Project has yet to completely secure the funding for implementation of all of the proposed Phase 1 actions or the monitoring and applied studies required to initiate progression along the adaptive management staircase described in Sections 2.1 and 2.3. At any point along the staircase, implementation of additional tidal habitat restoration will be contingent upon an adequately funded adaptive management program. Failure to adequately fund adaptive management would halt progression along the staircase until monies were secured. Inadequate funding is defined to be the level of financial support at which the amount of monitoring, applied studies, and data synthesis is insufficient to resolve key uncertainties and the lack of data prevents management decisions from being made by the Project managers without major discomfort about the risks of restoration from the Lead Scientist and the scientific community.

If the cost of adaptive management proves to be prohibitive, the SBSP Restoration Project would be reevaluated at the program level and new environmental documentation would be generated for management of the former salt ponds. However, the cost of that reevaluation and new environmental documentation would be substantial and maybe no less than the cost of monitoring, applied studies and adaptive management associated with continued implementation of the SBSP Restoration Project.

Since various elements of the South Bay ecosystem are expected to respond to the proposed restoration actions at different time scales, not all of the activities identified in the Adaptive Management Plan (Appendix D) need to be initiated – or funded – immediately. For example, bird use at reconfigured

ponds is expected to respond relatively quickly once restoration actions are complete and water management strategies are implemented. In contrast, the large-scale changes to existing mudflats in the South Bay are expected to evolve more slowly, and only after a correspondingly large number of ponds are breached. The timing of applied studies and monitoring activities described in Section 2.3 will largely be driven by differences in various biological, chemical, and geomorphological timescales, as noted in the Adaptive Management Summary Table (5th column) in Section 2.3 and Appendix D. This sequencing will only require a portion of the adaptive management activities to be funded any given year. The Science Team has established a three-tier sequencing of the proposed applied studies (see revised Section 2.3 and Appendix D):

- <u>Sequence 1</u>. A certain number of applied studies would be initiated at the beginning of Phase 1, or before, because they address issues that relate directly to the Project's ability to achieve the Project Objectives, conditions during Phase 1 would provide the most ideal conditions to test a specific hypothesis, or findings from these studies would be essential to implementing future actions. Key first-tier applied studies are described in Section 2.3.3 of the Draft EIS/R and include:
 - Bird use in ponds reconfigured for nesting and foraging
 - Bird use in high and low salinity ponds
 - Wildlife response to increased exposure to methylmercury
- <u>Sequence 2</u>. Most of the second-tier applied studies would be implemented in conjunction with future actions, although a portion could be initiated sometime during Phase 1 (prior to Phase 2). Sequencing of these studies would generally depend on how quickly specific parts of the South Bay ecosystem respond to the limited number of Phase 1 actions. Key second-tier applied studies could include:
 - Sediment accumulation and initial mudflat evolution in breached ponds
 - o Effects of restoration activities on flood hazards
 - o Effects of invasive Spartina and hybrids on aquatic species and shorebird uses
- <u>Sequence 3</u>. Third-tier studies would be initiated once the ecosystem begins to exhibit large-scale changes due to the cumulative effects of prior restoration actions. Most of the studies conducted this last sequence cannot be initiated until the ecosystem has evolved in response to relatively large-scale tidal restoration and/or changes in pond management. These types of third-tier studies include:
 - o Habitat value and carrying capacity of South Bay for migratory and resident birds
 - Response of key tidal marsh species to variations in habitat quality
 - o Effects of social factors on continued Project implementation

Aircraft Bird Strikes

This master response addresses the following comments: CANG-1, CANG-2, CANG-3, CANG-4, CANG-5, ANG-1, NASA-2, NASA-14, NASA-17, NASA-22, and USDA-1.

The Federal Aviation Administration (FAA) Advisory Circular number 150/5200-33 recommends a distance of 10,000 ft between the airport and new wildlife attractants such as wetlands. The circular also provides for exceptions to the recommended distance when the wetland in consideration provides "unique ecological functions, such as critical habitat for threatened or endangered species." A primary goal of the SBSP Restoration Project is to provide habitat for the California clapper rail and the salt marsh harvest mouse, and therefore falls within the outlined exceptions. In addition, the airport is surrounded by existing aquatic and wetland habitat that already serves as an attractant to wildlife. However, the Project proponents are concerned about the potential for bird strikes at Moffett Federal Airfield, and have taken these issues into account at the programmatic level when formulating the alternatives.

Bird-strike data (Cleary and others 2002) were summarized for those species that occur in the San Francisco Bay Area (Table 2). It should be noted that a large percentage of wildlife strikes are also caused by mammals, particularly deer. The greatest concern is to avoid bird-strikes that cause an effect-on-flight (EOF) of the aircraft. The majority of strikes causing EOF were with gulls (*Larus* spp.), followed in frequency by waterfowl and raptors. Strikes with waterfowl were most likely to cause injury, followed by raptors and gulls.

The evolution of tidal marsh at Pond A3W in particular would likely be protracted as that pond is one of the more subsided ponds in the Alviso pond complex and would therefore remain as deep open water for many years if tidal action were restored. For this reason, Pond A3W is slated to be managed as a reconfigured pond. Much of this pond will be managed specifically to attract small shorebirds; ducks are also expected to use this pond (as they currently do), but it is likely that this pond will support fewer of the largest birds, such as pelicans and cormorants, than it does currently. Moffett Federal Airfield is considering a similar design for the Storm Water Retention Pond at the north end of the runway, south of Pond A2E. The preferred alternative for that plan (2A) includes shallow water foraging habitat for shorebirds and a series of islands for shorebirds roosting and nesting. Those islands are west of the main runway.

The remainder of ponds in the vicinity of the runway (AB1, A2E and AB2) will be restored to tidal salt marsh in the SBSP Restoration Project Alternative C. Bird communities are expected to shift immediately after tidal action is restored. Small shorebirds are likely to use new tidal flats for foraging, and as vegetation develops over the next several years, the bird community will likely shift to low numbers of rails, large shorebirds, and herons and egrets. This habitat is initially not likely to support songbirds or large numbers of raptors, although songbirds and Northern Harriers will use vegetated salt marsh that eventually develops within these ponds. Although waterfowl will use the mudflats and shallow-water habitats of ponds newly restored to tidal action, the number of waterfowl present in these ponds will slowly decrease as vegetated marsh develops and spreads. Eventually, the restoration of these ponds to tidal salt marsh has the potential to reduce bird strikes near Moffett Federal Airfield by reducing the number of gulls, terns, and waterfowl using the ponds immediately north of the northern end of the runway. Alternative B, the managed pond emphasis, includes managed ponds in portions of AB1, A2E and AB2. Those ponds would be managed primarily for shallow water foraging habitat for shorebirds under this alternative, similar to Alternative 2A of the Moffett Federal Airfield Storm Water Retention Basin Tidal Restoration Feasibility Study

BIRD TAXA	STRIKES RESULTING IN EOF	STRIKES RESULTING IN DAMAGE	STRIKES RESULTING IN INJURY OR FATALITY	TOTAL NUMBER OF STRIKES
Gulls	624	782	7	4501
Waterfowl	395	837	31	1834
Raptors	274	443	16	1996
Blackbirds	69	66		873
Starlings	55	41		876
Herons & Egrets	54	60	1	448
Sparrows	48	27		1204
Shorebirds	38	29		672
Crows and Jays	28	33		310
Owls	20	42	1	368
Swallows	16	9		513
Pelicans	10	15	1	26
Meadowlarks	9	4		227
Cormorants	3	8	1	20
Loons and Grebes	2	4	1	7
Rails and Coots	1	3	1	20
Terns	1	4		46
Data are sorted by strikes resulting in effect-on-flight (EOF).				

Table 2. Bird-strike Data 1990-2001 for Species Likely to Occur in the San Francisco Bay Area,from Cleary and others (2002)

All of the proposed restoration activities would result in an improvement over existing conditions based on the type of wildlife that will be attracted to the area from a standpoint of EOF. The resulting wetland system should actually be less attractive to wildlife species that pose the greatest threat to aircraft at Moffett Federal Airfield.

Public Access and Impacts to Wildlife

This master response addresses the following comments: NASA-27, NASA-38, SLC-16, SFBT-2, SFBT-3, MROSD-3, MROSD-7, EBRPD-7, BCDC-3, BCDC-4, AUDCA-13, CCCR-1, CCCR-8, CCCR-10, CCCR-12, CCCR-13, CCCR-14, CCCR-16, CCCR-17, CCCR-18, CCCR-20, PB-13, SFBBO-2, RS-7, MV2-1, FJD1-7, FJD2-7, JM-3, and RHE-3.

There were a number of comments regarding the degree of public access proposed in the two action alternatives and the potential impact of that access on wildlife resources and the ultimate success of habitat restoration. A key consideration of the Project is to provide for sufficient access so that the public will understand, enjoy, and support the restoration. The Project is committed to completion of the Bay Trail spine within the Project Area and does not envision any circumstances under which parts of the spine would be removed. In addition, it is the Project's intent that there be no net loss in quantity and quality of public access in the Project Area. In fact, the proposed wildlife-oriented public access is a

considerable expansion over existing conditions, but the Project must provide for it in a manner that protects and fosters wildlife. A cautious degree of balance is needed between these two considerations in achieving the Project objectives. The Project has made every effort to achieve this balance, taking into account all of the comments on this issue.

The EIS/R acknowledges that increased public access has the potential to increase human disturbance of wildlife, and describes the ways in which such increased disturbance might affect wildlife. However, increased public access need not result in substantial adverse effects on wildlife if the effects of initial actions are monitored, and public access adapted according to the monitoring results. The Adaptive Management Plan has been expanded to more explicitly incorporate Public Access elements and describe the process by which monitoring of effects of early public access elements on wildlife will inform subsequent public access and the degree of use of the public access will directly influence decision-making related to existing public access elements and future Project phases as understanding of the ecosystem response improves. Potential adverse environmental impacts can thus be avoided as decision makers better understand how public access actions affect the biological attributes of the South Bay ecosystem. The specific adaptive management elements of the Phase 1 actions can be found in Section 2.5 and Figure 2-3b, The Adaptive Management Staircase of Recreation and Public Access.

An example of the Project's sensitivity on this issue is the designation of certain trail segments in orange as opposed to yellow in Figures 2-5a, 2-7a, and 2-7b (as well as Figures ES-3a, ES-4a, and ES-4b). These trails were highlighted to denote that USFWS Ecological Services Unit had identified those trail segments to be of particular concern with regard to potential impacts on wildlife. The note on the maps has been revised as follows: "All public access and recreation features will be subject to funding and permitting constraints. Denotes trails that were identified during the alternatives development process as being of particular concern to permitting agencies for potential to disrupt habitat."

The Project will review the issue of public access and impacts to wildlife carefully in implementing Phase 1 and in each subsequent phase to provide for public access but at the same time minimize impacts to wildlife.

Wildlife Impact Significance Thresholds

This master response addresses the following comments: PRBO-4, PRBO-8, and SD-2.

Commenters asked why the thresholds of significance varied among species or groups of species. In identifying what effect (*e.g.*, a decline in numbers) would constitute a significant impact to a species or group of species, it was necessary to take into account both the magnitude of impacts to South Bay populations and the contribution of South Bay populations to larger-scale (*i.e.*, regional, flyway-level, continental, and range-wide) populations. For very rare species, or for species for which South Bay populations represent a large proportion of larger-scale populations, the percentage of the South Bay population that would have to decline in order for an impact to be considered significant was lower than for species for which South Bay populations represent only a small proportion of larger-scale populations. For example, recent surveys suggest that numbers of salt-pond specialists using the SBSP Restoration Project Area are currently, under baseline conditions, very low compared to flyway-level numbers, whereas a large percentage of small shorebirds in the Pacific flyway use the South Bay; consequently, a decline in South Bay numbers of 20 percent in both groups would have a much greater effect on flyway-level populations of small shorebirds than salt-pond specialists.

Commenters also asked why a certain percentage decline over a period of three years was used as the threshold of significance for certain species or groups of species. Initially, this time period was selected to represent a compromise between declines over a shorter duration, which might be obscured by interannual variability in population size, and declines over a longer duration, which might have longer-term population consequences if declines were left unchecked for long periods. Interannual variability in the numbers of certain species and species groups in the South Bay, particularly migratory birds, is very high. Potentially spurious determinations that a significant impact has occurred could arise due to natural interannual variability in the populations of many South Bay wildlife species if monitoring results over a shorter time period (*e.g.*, one or two years) were reviewed. If a longer period were used, *e.g.*, so that a long period of declines would be necessary to support a significant impact, then the consequences to the population might be particularly severe, particularly in long-lived species, because corrective action might be delayed. It is recognized that time lags between adverse effects and population responses may confound assessment of actual impacts on a given group of species, but a compromise between time periods that were too short or too long was necessary.

However, these comments have prompted a re-evaluation of the thresholds of significance for wildlife, particularly with regard to whether it is appropriate, or necessary, to specify that a decline has to occur over a given period to be considered significant. Accurately determining the actual population trends of a given group of species, then determining whether the trend is actually resulting from SBSP Restoration Project activities, is very difficult in practice. In addition, monitoring and adaptive management are intended to identify potential declines long before they reach the threshold of significance. As a result, the threshold of significance (*e.g.*, a 20 percent decline in numbers of small shorebirds in the South Bay) is more a conceptual threshold that the Project should not cross than a measurable number against which monitoring results will be compared. Rather, monitoring results will be compared to the more sensitive, and more easily measurable, adaptive management triggers to determine whether populations are on a trajectory toward the significance threshold.

In determining thresholds of significance, the period of time over which a decline occurs (*e.g.*, 3 years, 10 years, or 50 years) is not as important as whether an apparent decline is real (rather than resulting from natural population variability), and whether it is caused by the SBSP Restoration Project. Therefore, criteria regarding the number of years, or the number of consecutive years, over which a decline must be observed to conclude that a significant impact has occurred have been removed from the thresholds of significance for SBSP Impacts 3.6-1, 3.6-3, 3.6-4, 3.6-5, 3.6-6, 3.6-7, and 3.6-8.

Related comments concerned the use of declines over a period of three consecutive years to serve as adaptive management triggers. Identifying appropriate population-related adaptive management triggers for species that show considerable interannual variability in South Bay numbers is very difficult, and there was considerable discussion between the consultant team and Science Team members related to the

issue of how these triggers should be established, and whether they could be accurately detected through surveys. One commenter correctly noted that using three consecutive years of numbers below the baseline as a trigger could potentially allow for substantial long-term declines to occur, without tripping a trigger, if the population is above the baseline at least once every three years. For example, two years of bird numbers well below the baseline followed by a third year barely above the baseline would not trip a trigger, even though substantial declines may actually be occurring. However, because populations may dip considerably below the baseline in any given year due to natural variability, establishing triggers based on any apparent decline of a given percentage below the baseline may result in triggers being tripped frequently even if no actual decline has occurred.

Nevertheless, because of the critical biological importance of the South Bay to a variety of wildlife species, a conservative approach to identifying adaptive management triggers is appropriate. The adaptive management triggers for SBSP Impacts 3.6-1, 3.6-4, 3.6-5, and 3.6-6 have been revised to indicate that if average numbers over the previous three-year period are below the baseline (or a certain percentage below the baseline), then the trigger will have been tripped.

Flooding

This master response addresses the following comments: NASA-18, CALTRANS-2, CALTRANS-3, CALTRANS-4, MP2-1, MV1-5, HASPA-2, HASPA-12, SCVWD-4, SCVWD-27, SCVWD,-40, CARG-3, and FJD1-5

Several commenters requested clarification regarding potential flood hazards to adjacent communities as a result of the Project and alignment of the proposed flood protection levees. As stated in Section 2.4.1 of the EIS/R, a "key element of the SBSP Restoration Project is to ensure that flood hazards to adjacent communities and infrastructure do not increase as a result of the Project." The Project recognizes that flooding is a concern for many stakeholders adjacent to the SBSP Restoration Project Area. The SBSP Restoration Project is committed to ensuring that future flood protection with the Project is equal to, or better than, existing conditions. Beyond this, it is desirable by all entities to develop a flood management program around the SBSP Restoration Project Area that would provide a consistent level of flood hazard management with flood protection measures (levees, high ground) meeting both Federal Emergency Management Administration (FEMA) and Corps criteria. The Project expects to be able to achieve this objective. However, the actual level of protection over and above existing would depend on a number of considerations, but most important is funding.

The proposed restoration alternatives present a flood management program for managing flood hazards from both fluvial (stream) and coastal flood sources that includes an inboard levee system, increased conveyance and floodplain storage. One element that is consistent in both restoration alternatives is an inboard levee system (along the landward side of the ponds) to reduce the hazards of coastal flooding. The inboard levee system would tie into the existing levees along the South Bay's tributaries and creeks. This proposed line of flood protection would include modifying (raising or retrofitting) existing levees, placing fill to raise high ground areas, and constructing new levees. From a fluvial flood-management perspective, there are two approaches to reduce flood hazards: providing increased channel-flow conveyance or providing increased floodplain storage (detention). Conveyance would be increased by

removing, breaching, or setting back the existing pond levees and by utilizing regular tidal scour to enlarge the channel cross-sections. Under Alternative B, the ponds along at least one bank of each major slough would be tidal restored in order to increase conveyance. Under Alternative C, the ponds along both banks would be tidally restored for most major sloughs. The Project recognizes that channel scour would occur gradually in response to the phased implementation of the restoration actions, and it is important to provide a consistent level of flood protection throughout all phases of the Project. The Project therefore includes provisions to provide temporary floodplain storage within the managed ponds. Ponds would be operated as muted tidal or seasonal wetlands with flood-flow diversions as needed to increase the storage of fluvial flood waters, resulting in reduced upstream flood hazards.

The proposed flood protection levee alignments shown on the alternative figures represent potential alignments at the program level. The alignments could change through consultation with the local flood control agencies and stakeholders, and as a result of future project-level analysis and design. Several factors will be considered when locating the levee alignments, including the surrounding habitats, adjacent properties and land use, bird-aircraft strike hazards, complementary uses such as the Bay Trail and upland transition zones, during project-level levee design.

The Project acknowledges that the salt pond levees were built to enclose salt evaporation ponds on former tidal marshes and mudflats and to protect the salt ponds from Bay inundation. The salt pond levees were not designed, constructed, or maintained for urban flood protection. In most areas, restoring ponds to tidal inundation would require levee construction and/or improvements in order to maintain flood protection for adjacent developed areas. The Phase 1 actions were selected for early implementation because restoration in these areas would not affect flood hazards to adjacent communities. The Project would not implement a restoration action without ensuring that adequate flood protection would be provided to protect adjacent communities and infrastructure, and this issue will be analyzed in future project-level EIS/Rs.

Impacts of Sea Level Rise

This master response addresses the following individual comments: NASA-6, CALTRANS-1, SCVWD-66, SCVWD-122, SCVWD-124, AUDCA-7, and PB-14.

Several commenters requested additional clarification regarding how the Project incorporates sea level rise into the program-level planning, and how sea level rise would be considered in future project-level design and planning. Estimates of sea level rise typically provide a range of potential rates due to uncertainties in the prediction models and uncertainties related to future greenhouse gas emission scenarios. The Project generally utilized a mid-range sea level rise estimate for analysis¹, and planned for a wider range of possibilities through phased implementation and adaptive management.

¹ The South Bay Geomorphic Assessment included a sensitivity analysis with respect to sea level rise, and both mid-range and high-end rates of sea level rise were analyzed with respect to the assessment of potential future open water and intertidal habitats (South Bay Geomorphic Assessment, Appendix I).

The EIS/R (Executive Summary and Chapter 2) was updated to reflect additional discussion of sea level rise related to the Project.

Estimates of Future Sea Level Rise

The EIS/R utilized the 2001 Intergovernmental Panel on Climate Change (IPCC) mid-range sea level rise estimate of 6 inches by 2050 (3 mm/yr average) and 18 inches by 2100 (6 mm/yr average between 2050 and 2100) (IPCC 2001). The higher rates in the second half of the century reflect the effects of accelerated sea level rise. The IPCC uses a consensus-based process involving many hundreds of international experts on climate change.

In February 2007, the IPCC released a "Summary for Policymakers" of the full May 2007 report "The Physical Basis of Climate Change" (IPCC 2007) just as the Draft EIS/R was being finalized. As described in the Executive Summary of the EIS/R, the IPCC summary included revised sea level rise estimates for the twenty-first century (2000 to 2100), and the revised estimates were compared with the previous IPCC (2001) estimates used in the EIS/R. The 2007 IPCC estimates are slightly lower than the 2001 estimates with a narrower band of uncertainty (IPCC 2007). The 2001 IPCC estimate was selected because the EIS/R analyses occurred between January 2004 and February 2007 when the 2001 rates were the most recent.

It is important to note that the IPCC projections do not include the contribution of changes in ice sheet melting (referred to as ice sheet mass wasting) to sea level rise due to significant difficulties in predicting these contributions. The state of the science of sea level rise has been changing very rapidly recently. Over the last year, there have been major advances in the science, suggesting that future sea level rise may be much greater than that predicted by IPCC (2007). Semi-empirical models (Rahmstorf 2007) project a higher mid-range sea level rise of 28-39 inches (70-100 cm) over the next century and a larger range on the high end.² The Project would plan, design, and manage for higher rates of sea level rise using phased implementation, monitoring, and adaptive management, described below and in the EIS/R.

Sea Level Rise and Habitat Restoration

The consequences of accelerated sea level rise were evaluated in the habitat evolution assessment (SBGA, Appendix I). Watson (2004) showed that the high sediment availability in the far South Bay sustained marshes at a time when subsidence was very high. Therefore, if sea level rise rates match the lower to mid-range of the predictions and sediment availability remains high, tidal marshes in the South Bay should keep pace with changing conditions as they have done historically. If higher rates of sea level rise prevail, the timeframe for marsh development may be delayed, and tidally-restored areas within the SBSP Restoration Project Area may persist as intertidal unvegetated mudflats or shallow open water habitat for prolonged periods. However, the South Bay, and in particular the far South Bay, have historically been sediment-laden depositional environments (Jaffe and others 2006a, Jaffe and others 2006b), therefore the

² Rahmstorf, S. 2007. A Semi-Empirical Approach to Projecting Sea-Level Rise. Science. V. 315, pp. 368-370.

tidally-restored ponds are expected to accrete sediment and vegetation is expected to establish in the face of accelerated sea level rise (SBGA, Appendix I).

It should be noted that the South Bay Geomorphic Assessment (SBGA, Appendix I), which evaluated long-term trends with respect to the South Bay's sediment budget, geomorphic change and mudflat loss, evaluated a range of sea level rise scenarios, including doubling the IPCC 2001 mid-range estimate. Doubling the IPCC 2001 mid-range estimate is consistent with the IPCC (2001) high-end estimates. In this case, a range was evaluated because sediment budgets and sediment sinks are highly sensitive to the rate of sea level rise. The SBGA and the EIS/R acknowledge that higher than anticipated rates of sea level rise could have a considerable effect on the mix of habitats within the SBSP Restoration Project Area and within San Francisco Bay in general.

Higher than anticipated sea level rise rates that result in delayed or arrested marsh establishment could affect the progression between the 50:50 and 90:10 alternatives presented in the EIS/R. Tidal habitat restoration may be closer to the 50:50 bookend to increase the sediment supply to those ponds that are tidally restored. Adaptive management efforts would be used to encourage marsh establishment in the tidal ponds. The restoration actions most sensitive to sea level rise would contain features to accommodate accelerated sea level rise, such as constructing a gradually sloping marsh/upland transition zone surface that provides an elevation gradient over which tidal marsh could shift upslope as sea level rises and initiating marsh vegetation plantings to maximize sediment-trapping efficiencies and enhance the accumulation of organic matter in the developing marsh sediments.

Sea Level Rise and Flood Protection

The future design of the flood protection levees would also take into account the best available information on sea level rise at the time of project-level planning and design. The plans would outline a strategy for low-, mid-, and high-end sea level rise predictions. For example, the plan may include building a levee to accommodate the 50-year mid-range sea level rise projection, and incorporate features or outline a process to deal with higher or lower rates of sea level rise. Lower than anticipated sea level rise is generally not anticipated to be a problem. Higher than anticipated sea level rise would require subsequent design phases to raise the levee (*i.e.*, widening and raising the levee or building a flood wall) before sea level rises above the design level for flood protection. Other options would include overbuilding the levee initially to anticipate a higher rate of sea level rise, either by building a higher levee, or by building a levee with a wider base to more easily accommodate future increases in levee height. The future design of the flood protection levee would balance the cost and benefits of the potential approaches at the time of design. The project-level analysis and design would be presented in a future project-level EIS/R. Subsequent phases of environmental documentation may also be required to address changes to the Project based on updated sea level rise information and analysis. For example, there may be a need to import more fill than currently anticipated in this programmatic EIS/R for flood protection levee construction and maintenance of the flood protection and managed pond levees.

Phased Implementation, Monitoring, and Adaptive Management to Address Uncertainty in Future Sea Level Rise

The Project would use phased implementation, monitoring and adaptive management to plan for and accommodate a range of potential future sea level rise. Updated sea level rise estimates would be used as future phases were designed and implemented. Monitoring and adaptive management would provide updated assessments of future sea level rise, inform planning for future phases, and adjust previously-implemented phases as needed. These are described in the Adaptive Management Plan and summarized in Section 2.3 of the EIS/R. Examples of monitoring and adaptive management activities:

- As part of the adaptive management program, the Project would monitor sea level rise in the South Bay and review the scientific literature on sea level rise on an ongoing basis (discussed in Section 2.3 of the EIS/R and Appendix D).
- Additional monitoring and modeling of sediment dynamics within the South Bay are planned as part of the Adaptive Management Plan. A longer-term modeling effort led by Principal Investigators at U.C. Berkeley and Stanford University is being initiated to develop a coupled hydrodynamic and sediment transport model of the South Bay. The model, coupled with monitoring data from previous restorations and the Phase 1 actions, would inform future phasing and implementation with respect to sea level rise, sediment supply and sediment sinks. In the long term, the model may be extended to include morphological, water quality and biological modules to improve the ability to predict ecosystem response to restorations.
- The Adaptive Management Plan and South Bay Geomorphic Assessment (SBGA, Appendix I) provide examples of adaptive management actions that could be used to narrow the range of uncertainties and encourage restoration success: adjusting the phasing to better match the sediment supply; maintaining levees along the bayfront edge to shelter restored tidal areas from wave energy and encourage marsh formation; removing levees along the bayfront edge to restore sustainable mudflats within the ponds; restoring natural shorelines such as shell breaches, wrack lines, and Bay-edge pans; using imported fill to raise pond beds to elevations conducive to vegetation establishment; and prioritizing restoration of less subsided ponds and/or ponds close to sediment supplies within the Project Area.

In summary, the Project would seek to accommodate accelerated sea level rise, to the extent practicable, in order to maximize achievement of the project objectives.

Treatment of Sea Level Rise in Chapters 3 and 4

During the preparation of the Final EIS/R, the lead agencies discovered a discrepancy in the treatment of sea level rise in various impacts in Chapter 3, Environmental Setting, Impacts and Mitigation Measures, and Chapter 4, Cumulative Impacts of the Draft EIS/R. Section 3.3, Hydrology, Flood Management and Infrastructure, of the Draft EIS/R considered the effects of expected sea level rise in the assessment of Project impacts on coastal flooding (Impact 3.3-2). However, Section 3.6, Biological Resources, considered the effects of the Project only and excluded the effects of sea level rise since it is not attributable to the Project (Impact 3.6-2). Similarly, in Chapter 4, Cumulative Impacts, of the Draft

EIS/R, Cumulative Impact 3.3-2 considers the effects of expected sea level rise, while Cumulative Impact 3.6-2 does not.

Estimates of expected sea level rise and its effects are described consistently and correctly throughout Chapters 3 and 4 of the Draft EIS/R. However, the treatment of sea level rise is not consistent throughout the impact analyses, as noted above. The lead agencies have revised certain sections in Chapters 3 and 4 to correct this inconsistency.

To ensure a consistent approach in the treatment of this issue, Section 3.3, Hydrology, Flood Management and Infrastructure, Section 3.6, Biological Resources, and Section 3.16, Utilities, as well as Chapter 4 have been revised to clarify that sea level rise is an ongoing process that is not attributable to the Project. Consequently, the impact assessment in Chapter 3 characterizes impacts resulting from the Project only, and Chapter 4 identifies the cumulative impacts of the Project in combination with other cumulative projects and outside factors such as sea level rise.

Specifically, Impact 3.3-2 (increased coastal flood risk due to regional changes in Bay bathymetry and hydrodynamics), Impact 3.6-2 (loss of intertidal mudflats and reduction of habitat for mudflat-associated wildlife species), and 3.16-2 (reduced clearance between waterways and PG&E electrical transmission lines) have been revised to characterize impacts that would result from implementation of the Project only. Because sea level rise is an ongoing process that is not attributable to the Project, it is not included in the Project impact assessment presented in Chapter 3. The significance of the Project impacts in Chapter 3 remain the same as previously described in the Draft EIS/R, however the discussion of these impacts has been revised to clarify that sea level rise is an ongoing phenomenon that is not attributable to the Project.

In Chapter 4, the discussions of Cumulative Impacts 3.3-1, 3.6-2 and 3.16-2 have been revised to include the estimated future effects of sea level rise. As a result, the significance determination for Cumulative Impact 3.6-2 has been revised from less than significant to potentially significant for Alternatives B and C, as well as the Phase 1 No Action and Phase 1 actions. The significance determination for Cumulative Impact 3.3-1 has also been revised from less than significant to potentially significant for the Phase 1 No Action and Phase 1 actions. The significance for the Phase 1 No Action and Phase 1 actions. The change in the level of significance for the impacts is based on the clarification associated with the treatment of sea level rise. The description of the Project's contribution to this cumulative impact and the effects of sea level rise that were presented in the Draft EIS/R have not changed. This change in the level of significance represents a correction that was made to ensure that sea level rise is treated consistently throughout the EIS/R.

Hunting

This master response addresses the following comments: JW-1, TB-1, RSC-1, WL-1, SA-1, JG1-1, TO-1, MR-1, JS1-1, BW-1, LC-1, DC-1, DF-1, GG-1, JG2-1, SM-1, MMC-1, EN-1, DN-1, GB-1, KB-1, SC-1, BC-1, GD-1, PL-1, ANON1-1, MM-1, JR-3, JS2-3, JS2-4, and DA-5.

Numerous commenters expressed support for continuing hunting activities within the SBSP Restoration Project Area. As noted in Chapter 2 and Section 3.7 of the EIS/R, hunting will [would] continue to be allowed within the Project Area.

Invasive Spartina and Other Invasive Species

This master response addresses the following comments: SCVWD-135, AUDCA-14, PB-5, and PB-8.

The SBSP Restoration Project will consider the status of the San Francisco Estuary Invasive *Spartina* Project at the beginning of each Project phase. The status of the Invasive *Spartina* Project will be a factor in determining future Project activities such as the selection of ponds to be restored and the timing of levee breaches. The Project will incorporate the *Spartina* control techniques implemented under the Invasive *Spartina* Project into future phases and as part of the Adaptive Management Plan. The Project is currently working with the Invasive Spartina Project to develop a set of "best practices" for tidal marsh restoration to minimize the risk of spreading invasive Spartina and its hybrids. These practices include the following:

- No Spartina is proposed to be planted in the Project Area. If circumstances arise where Spartina
 will be planted in the Project Area, the plantings will be genetically verified to be Spartina
 foliosa.
- The Project Area should be monitored annually for the presence of non-native or hybrid Spartina. In addition to field identification, representative samples of any found Spartina should be genetically analyzed to verify absence of S. alterniflora or S. densiflora genetic markers. Any found non-native or hybrid Spartina plants should be removed or killed before their first season of flowering and seed set.
- One measure of the Project's success in achieving the Project Objective regarding management of "the spread of non-native invasive species" is that there is no non-native or hybrid Spartina found in the Project Area.
- The Project will not initiate connection of ponds with tidal flows (full or muted) at locations where S. alterniflora or S. alterniflora x S. foliosa seed or propagules are likely to get into the Project Area.
- The Project will take care to not introduce non-native Spartina seed or propagules into the Project Area on contaminated excavators, dredges, or other equipment. The Project will require that all equipment be cleaned prior to entry into an intertidal part of the Project Area if it has been in contact with non-native Spartina plants, seeds, or roots.
- The Project will make sure that any dredged materials brought to the Project Area do not contain non-native Spartina seed or fragments.
- Variations to the above best practices may be appropriate based on site-specific conditions and scientific analysis. Proposed variations should be developed with assistance or review from the Invasive Spartina Project. Additionally, the Project will discuss any proposed variations with nearby marsh owners/managers, who could be affected by the actions of the Project.

A section on non-native plant species invasion has been added to Section 3.6.1 of the EIS/R:

Invasive Plants in Upland and Wetland Habitats

Many invasive plant species are known to occur or may potentially occur within the SBSP Restoration Project Area. These species out-compete native plants, displacing entire communities of plants and associated wildlife. While some non-native plants are not problematic, control of invasive non-native plant species throughout the SBSP Restoration Project Area is important to allow the Project's objectives to be met. While the scope of this analysis does not include a species-by-species prescription for removal, the California Invasive Plant Council (Cal-IPC) publishes the Weed Worker's Handbook (1994) which describes the biology and tested methods of removal for 35 of the most noxious weeds in the Bay Area. The following species occur or may occur within the SBSP Restoration Project Area:

- <u>Non-native smooth cordgrass and, particularly, hybrids between smooth and</u> <u>Pacific cordgrass have spread throughout tidal salt marshes in much of the San</u> <u>Francisco Bay Area. The Invasive Spartina Project is actively engaged in</u> <u>eradicating non-native smooth cordgrass. Smooth cordgrass and its hybrids have</u> <u>been the primary focus of invasive plant control in tidal wetlands of San</u> <u>Francisco Bay;</u>
- Salt wheatgrass (Agropyron elongatum) has been planted along many levees to stabilize levee banks throughout San Francisco Bay, and has spread in areas near Union City;
- Perennial pepperweed (*Lepidium latifoium*) has invaded many wetland areas within San Francisco Bay, including the South Bay, but also occurs in upland areas with ruderal grassland habitat dominated by Italian ryegrass, various nonnative bromes, Mediterranean barley, and wild oats;
- 4) <u>Black mustard (*Brassica nigra*) and wild radish (*Raphanus sativus*) dominate the banks of the levees within much of the shoreline in the SBSP Restoration Project <u>Area;</u></u>
- 5) Pampas grass (*Cortaderia* sp.) occurs in ruderal areas including adjacent to developed areas;
- 6) French broom (*Genista monspessulana*) and Scotch broom (*Cytisus scoparius*) occur in upland, disturbed areas;
- 7) Giant reed (Arundo donax) invades freshwater marsh and creeks;
- 8) <u>Sweet fennel (Foeniculum vulgare) spreads quickly within ruderal areas;</u>

- 9) Yellow star-thistle (*Centaurea solstitialis*), purple star-thistle (*Centaurea calcitrapa*), and Italian thistle (*Carduus pycnocephalus*) quickly invade and dominate grassland areas;
- 10) <u>Russian wheatgrass (*Elytrigia pontica*) inhabits disturbed places throughout most of California;</u>
- 11) <u>Smilo grass (*Piptatherum miliaceum*) inhabits riparian areas, canyons, roadsides, fields, waste places, and other disturbed sites;</u>
- 12) <u>Australian bentgrass (Agrostis avenacea) inhabits open, disturbed, often moist places; and,</u>
- 13) <u>Stinkwort (*Dittrichia graveolens*) inhabits disturbed places and margins of tidal marshes in the absence of competition, especially in the southern portion of San Francisco Bay, although it does not seem to do well in healthy marshes.</u>

With the restoration of the SBSP Restoration Project Area, documentation of infestation by non-native plant species should allow for better planning of the removal/containment of these species.

The conversion of formerly hypersaline managed ponds to saline ponds, the creation of new islands and berms, and the creation/opening of trails opens many new areas to weed invasions. Realistic control of invasive, non-native plant species like perennial pepperweed and stinkwort will require pre-construction suppression of seed sources, rapid pre-emptive cover of levees by competitive, clonal, perennial, native plant species, substantial, specific, explicit weed management design (including timely revegetation designs) to target these species, and cooperation of adjacent landowners. Many of the invasive species listed above require labor-intensive methods of control (seed source removal, mowing, hand removal, or other manual extraction) for many years in sensitive areas and complete eradication is difficult to impossible. Monitoring of infestations of invasive plants and prevention of their spread using Best Management Practices are important steps in invasive plant management.

2.2 Individual Comments and Responses

2.2.1 Federal and State Agencies

Comments from federal and state agencies and the responses to those comments are presented in this section.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration PROGRAM PLANNING AND INTEGRATION Silver Spring, Maryland 20910

April 23, 2007

Mr. Clyde Morris US Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Ave Newark, CA 94560

Dear Mr. Morris:

Enclosed are comments on the Draft Environmental Impact Statement for the South Bay Salt Pond Restoration Project, Restored Tidal Marsh, Managed Ponds, Flood Control Measures and Public Access Features, Don Edward San Francisco Bay National Wildlife Refuge, Alameda, Santa Clara, and San Mateo Counties, CA (EPA EIS #20070083).

Our comments originate from two offices within the National Oceanic and Atmospheric Administration (NOAA): the National Marine Fisheries Service Southeast Regional Office and the NOAA Ocean Service National Geodetic Survey Office. The contacts for these offices respectively are:

Gary Stern NMFS NOAA 777 Sonoma Ave Santa Rosa, CA 95404-6515 Phone: 707-575-6060 Fax: 707-578-3435 Email Address: <u>gary.stern@noaa.gov</u> Brett Howe NOS NOAA 1315 East West Highway, Rm 8622 Silver Spring, MD 20910-3282 Phone: 301-713-3197 x115 Fax: 301-713-4175 Email Address: brett.howe@noaa.gov

We hope our comments will assist you. Thank you for giving us the opportunity to review this document.

Sincere

Rodney F. Weiher, Ph.D. NEPA Coordinator



Enclosure



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National Marine Fisheries Service Southeast Regional Office's Comments on the South Bay Salt Pond Draft Environmental Impact Statement

General Comments

The DEIS contains unclear and inconsistent information regarding the project's restoration and mitigation strategy for native fish species at managed ponds and muted tidal ponds. Section 3.6 of the DEIS discusses the potential loss of federally threatened steelhead and other fish species due to entrainment in managed ponds and then refers to the construction of fish screens to exclude fish from managed ponds. However, with the exception of Pond A17, the number and locations of proposed fish screens are not identified in the document. At Pond A17, the DEIS states fish screens will be installed if requested by NMFS (see page 2-126). The final DEIS should clearly present the fish screen component of each alternative, including where and when pond intakes will be screened. NMFS recommends the water intake structures for all managed ponds, including ponds with muted tidal action, be screened on Coyote Creek, Alviso Slough, Stevens Creek, and the Alameda Creek Flood Control Channel. For tidally restored marshes, the EIS should expand its discussion of the potential restoration benefits to fishes of San Francisco Bay, particularly fall-run Chinook salmon and other native species. The sloughs of South San Francisco Bay provide important breeding, nursery, and foraging habitat for native estuarine fishes.

Specific Comments

Page ES-22. Table ES-1. Impact 3.6-13 and 14. NMFS does not agree that fisheries impacts and entrainment issues at managed ponds are less than significant (LTS). The DEIS acknowledges that fish including the federally threatened Central California Coast steelhead will likely be entrained in managed ponds and "impair the health of, or cause the mortality of, steelhead" (see SBSP impact 3.6-13). This potential effect is significant and requires mitigation.

Page ES-51. S.7 Areas of Controversy. The potential loss of fish in managed ponds, including tidally muted pond A8, has not been resolved and may be an area of controversy.

Page 2-126. Pond A16-Water Management. The DEIS states fish screens will be installed on the existing and any new water intakes structures from Coyote Creek if requested by NMFS. During the development of the Initial Stewardship Program in 2004, it was agreed that the existing water intake structure for Pond A17 on Coyote Creek would be seasonally (December 1 through April 30) closed to protect outmigrating steelhead smolts. Alternatively, fish screens could be installed during Phase 1 in lieu of seasonal intake closures. In general, NMFS prefers positive barrier fish screens to prevent the entrainment of steelhead. The final project should incorporate the installation of screens on the existing and new water intakes or continue the program of seasonal intake closures.

Page 3.6–38. Table 3.6-4 Special-status Animal Species, Their Status, and Potential Occurrence in the South Bay Salt Ponds Project Area. Green Sturgeon. The southern distinct population segment of green sturgeon is likely to be found in South San Francisco Bay including the South Bay Salt Ponds project area. Anecdotal reports from recreational fishers in the vicinity of the Dumbarton Bridge indicate green sturgeon do occur in South San Francisco Bay as frequently as they do in Central and North bay areas.

Page 3.6-55. Threshold of Significance – Steelhead. The SBSP Restoration Project's Thresholds of Significance should be revised to be consistent with other federally listed animal species: NMFS suggest:

- The entrainment of adult or juvenile steelhead into managed ponds;
- The mortality of, or loss of adult or juvenile steelhead;
- A reduction in steelhead populations in South Bay streams.

NOAA-1

NOAA-2

NOAA-3

NOAA-4

NOAA-5

NOAA-6

Page 3.6-116. SBSP Impact 3.6-13: Potential entrainment of steelhead in managed ponds. Several comments are offered on this section:	
(1) This section discusses more than just the potential effects of entrainment. The potential benefits of shallow estuarine habitat creation at restored tidal marshes is also presented. Suggest this section be re-titled to include the effects of habitat conversion and operation of managed ponds.	NOAA-7
(2) The current operation of managed ponds on steelhead streams includes seasonal closure (December 1 through April 30) of "intakes" to prevent the entrainment of juvenile steelhead. This on-going operational practice likely avoids significant levels of entrainment and this should be considered when comparing project alternatives to existing baseline conditions.	NOAA-8
(3) The DEIS concludes that Alternatives B and C of the SBSP would involve fewer managed ponds than currently exists, and thus steelhead entrainment should not increase relative to existing conditions. However, Phase 1 and Alternatives B and C propose the creation of a new tidal intake structure on an important South Bay steelhead stream (<i>i.e.</i> , Pond A8 on the lower Guadalupe River). Currently, there is no water intake structure at this location, and thus steelhead migrating to and from the Guadalupe watershed could be entrained into Pond A8 as a result of the SBSP project.	NOAA-9
(3) This section of the DEIS presents for the first time an essential mitigation measure to avoid entrainment of fish into managed ponds – that is, the placement of fish screens on the intakes to all managed ponds on steelhead streams. NMFS is concerned that steelhead juveniles entrained into managed ponds will be lost to the population due to poor water quality, predation, or the inability to return to San Francisco Bay and complete their outmigration to the ocean. This adverse effect can be mitigated with fish screens. Steelhead streams in the SBSP project area include Coyote Creek, Alameda Creek, Guadalupe River (<i>i.e.</i> , Alviso Slough), and Stevens Creek. During Phase 1, fish screens should be installed on water control intake structures at Ponds A8, A9, A17, and E1C. The important mitigation measure should be clearly described in the EIS.	NOAA-10
Page 3.6-118. SBSP Impact 3.6-14: Potential impacts to estuarine fish. As discussed under Impact 3.6-13, shallow water, higher salinity, lower DO, or increased predation pressure may result in the loss of estuarine fish entrained into managed ponds. The proposed installation of fish screens on intakes to managed ponds will mitigate for this impact and should be presented in the EIS.	NOAA-11
Page 4-15. Boat Launch Facility at Alviso Marina County Park. The Alviso Boat Launch project also includes dredging in Alviso Slough and removal of established vegetation. Dredging and vegetation removal by this project will likely have an affect on tidal circulation and scour in Alviso Slough.	NOAA-12

MEMORANDUM FOR:

Rodney F. Weiher NEPA Coordinator

FROM:

David Zilkoski Director, National Geodetic Survey

SUBJECT:

DEIS 0703-04 for South Bay Salt Pond Restoration Project, Restored Tidal Marsh, Managed Ponds, Flood Control Measures & Public Access Features, Don Edward San Francisco Bay NWR, Alameda, Santa Clara & San Mateo Counties, CA

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

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

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

For further information about geodetic control monuments, please contact:

Brett Howe SSMC3 8622, NOAA, N/NGS 1315 East West Highway Silver Spring, Maryland 20910

Voice: (301) 713-3197 ext. 115 Fax: (301) 713-4175 Email: <u>Brett.Howe@noaa.gov</u> NOAA-13

Response to NOAA National Marine Fisheries Service and Ocean Service National Geodetic Survey

NOAA-1: National Oceanic and Atmospheric Administration (NOAA) Fisheries' concerns about the potential for entrainment into managed ponds and muted tidal ponds is acknowledged. The existing condition of most of the ponds along Stevens and Coyote creeks, Alviso Slough and the Alameda Creek Flood Control Channel does not provide for tidal circulation or fish passage; the ISP actions provided for restoration of full tidal circulation along three ponds (A19, 20, 21) along Coyote Creek. Seasonal closure of Pond A17 to protect outmigrating steelhead smolts will occur prior to screen construction in 2008 as part of the Pond A16 Phase 1 action. Any proposed changes to the baseline will be to restore tidal action and will be beneficial to salmonids. The need to screen additional ponds will be considered on a case by case basis, and will take into account results of a study to be initiated in 2008 on Pond A8. This study will be conducted in coordination with NOAA Fisheries and will evaluate if entrainment and stranding at managed ponds or muted tidal ponds results in substantial adverse effects on fish; results of this study will inform the decision process on the need for screening or other operational changes at Pond A8 as well as other ponds along Stevens Creek, Alviso Slough, and the Alameda Creek Flood Control Channel.

Tidally restored marshes will provide important foraging, rearing and migratory habitats for all salmonids in the South Bay. Recent studies have indicated benefits of marsh restoration to juvenile Chinook salmon (Bottom and others 2005, Beamer and others 2005, Miller and Sadro 2003, Simenstad 2000).

- NOAA-2: At most ponds, the potential for entrainment as a result of the SBSP Restoration Project will be reduced relative to existing conditions, as many managed ponds with intakes that have some potential to allow for fish entrainment will be restored to tidal habitats. It is not known whether fish entrainment at managed ponds is a substantial problem under existing conditions. Because of this gap in information, the Project team is working in cooperation with NOAA Fisheries to address the potential for entrainment in managed ponds. A study is being developed with NOAA Fisheries to evaluate the potential for entrainment and stranding at Pond A8. Results from this study will inform the need for mitigation at managed ponds.
- NOAA-3: Agreed, the potential for entrainment and loss of fish at managed ponds may be an area of controversy. However, as noted in the response to Comment NOAA-2, the potential for entrainment over the entire SBSP Restoration Project Area will be reduced, relative to existing conditions, due to the restoration of some existing intake ponds to tidal habitats. Nevertheless, the entrainment issue will be addressed in a study to be developed with NOAA Fisheries.

In response to this comment, the bulleted list in Section S.7, Areas of Controversy, in the Executive Summary of the EIS/R has been revised as follows:

- Availability of funding for implementation of the Adaptive Management Plan (monitoring)
- <u>The potential entrainment of fish in managed ponds, including tidally</u> <u>muted Pond A8</u>
- NOAA-4: Based on discussions with NOAA Fisheries since release of the Draft EIS/R, Pond A17 will be closed for one season only to protect outmigrating steelhead smolts, followed by screen construction in 2008 as part of the Pond A16 Phase 1 action.
- NOAA-5: The Project proponents are unaware of any information indicating that green sturgeon are captured by recreational fishers in south San Francisco Bay as frequently as in the Central and North Bay areas. Based on trawl surveys, juvenile green sturgeon are found throughout the Sacramento/San Joaquin River delta and San Francisco Bay (Randy Baxter, CDFG, unpublished data). However, green sturgeon appears to be very rare in south San Francisco Bay. CDFG conducts monthly monitoring of fish assemblages at numerous sites in San Francisco, San Pablo, and Suisun bays using otter trawls and midwater trawls, of which 13 sites are in South San Francisco Bay. Between 1980 and 2006, 69 green sturgeon have been captured in the San Francisco Estuary; however, only four green sturgeon have been collected in the South Bay, two at a main channel site near the Bay Bridge and two from a shoal site north of the San Mateo Bridge (R. Baxter, CDFG, unpublished data). These four fish ranged in size from 605–736 mm total length (TL).
- NOAA-6: The commenter's suggestion that steelhead entrainment and mortality be added to the list of significance thresholds is not consistent with their comment that the significance thresholds for steelhead should be revised "to be consistent with other federally listed animal species". For other federally listed species, such as western snowy plover and California least tern, the significance threshold was an overall reduction in populations, not impacts to individuals. It is the net effect of the SBSP Restoration Project, after both adverse effects and Project benefits are considered, on overall South Bay populations that are most important to consider for NEPA/CEQA purposes, rather than adverse effects on individuals. In the case of steelhead, it is expected that the net effect of the Project on this species will be beneficial due to the expected benefit of tidal restoration along steelhead-bearing streams. However, there is some potential for adverse effects (e.g., if fish entrainment in ponds causes adverse effects, or if mortality of adults or juveniles occurs) to occur during activities such as breaching, or during the Phase 1 operation and study of Pond A8 (which is necessary to determine whether full tidal restoration to Pond A8 is desirable). Because these activities are necessary for the ultimate restoration of tidal action to areas that will be used by steelhead, there is the potential that some localized adverse effects may occur, but that they would be offset by the overall Project's tidal restoration.

Thus, while the entrainment of adult or juvenile steelhead into managed ponds has the potential to adversely affect some individual steelhead, and the mortality or loss of adult or juvenile steelhead would certainly constitute an adverse effect, the threshold of significance for this species should reflect the net effect of Project activities (*i.e.*, whether the Project as a whole results in a reduction in steelhead populations in the South Bay). Nevertheless, per conversations with NOAA Fisheries, a study is planned for Pond A8 after implementation of Phase 1 activities to determine the magnitude and potential effects of entrainment of salmonids.

NOAA-7: In response to this comment, SBSP Impact 3.6-13 and Phase 1 Impact 3.6-13 will be retitled as follows:

Potential <u>effects of habitat conversion and pond management</u> on <u>entrainment</u> of steelhead in managed ponds.

- NOAA-8: Intakes that are currently closed seasonally to avoid entrainment of juvenile steelhead under the ISP will continue to be closed seasonally under the SBSP Restoration Project, unless/until the ponds in question are restored to tidal habitats.
- NOAA-9: The commenter correctly notes that the proposed notch in Pond A8 along Alviso Slough does represent a potential adverse effect on steelhead, if steelhead are entrained in the pond and adverse effects (*e.g.*, mortality, decline in condition, or failure to reproduce) result. However, the conclusion regarding overall Project effects on steelhead weighed this potential adverse effect (which will be short-lived if mercury studies indicate that Pond A8 can be restored to tidal marsh) against the benefits of restoring tidal marsh along this and other steelhead-bearing streams. In addition, the management of this notch will be informed by the applied study at Pond A8 that will investigate the potential for, and potential effects of, entrainment on fish. If this study concludes that entrainment effects on steelhead could be substantial, then management of the notch (*e.g.*, seasonal closure) or other measures to minimize impacts to steelhead would be enacted under the Adaptive Management Plan.
- NOAA-10: See the response to Comment NOAA-1.
- NOAA-11: See the response to Comment NOAA-1.
- NOAA-12: The construction of the boat launch facility at Alviso Marina County Park, which is described in Section 4.2.2 of the EIS/R, does not involve any additional dredging or vegetation removal. NOAA Fisheries is most likely referring to the Alviso Slough Restoration Project being considered by SCVWD. The latter Project could result in changes to tidal circulation and scour in Alviso Slough, and is being evaluated in conjunction with the proposed changes at Pond A8. The Alviso Slough Restoration Project is described in Section 1.6.5 of the EIS/R and is considered in the Project impact

analysis presented in Chapter 3 as well as in the cumulative impact assessment presented in Chapter 4.

NOAA-13: The commenter requested that National Geodetic Survey (NGS) geodetic control monuments within the SBSP Restoration Project Area be reviewed at the NGS home page at http://www.ngs.noaa.dov. The commenter suggests that if any Project activities would disturb or destroy a monument, the National Ocean Service (NOS) would require not less than 90 days notification in advance of such activities in order to plan for their relocation. The commenter recommends that the funding for the Project include the cost of any relocation(s) required.

Information regarding NGS geodetic control monuments within and adjacent to the SBSP Restoration Project Area, as well as geodetic control maintained by others, has been added to the setting in Section 3.16, Utilities. The NGS database includes both "historical" control monuments (*i.e.*, monuments that have not been located and resurveyed for two or more decades) and current, or recently updated, control monuments. The NGS is also maintaining a framework of high-accuracy control monuments referred to as the Continuously Operating Reference System (CORS). The CORS system is maintained by satellite at a frequency of 30 seconds or less. No CORS stations are located within or adjacent to the SBSP Restoration Project Area.

Recent surveys for the Phase 1 actions have utilized the recently updated NGS benchmarks located outside of the SBSP Restoration Project Area. As each Project phase is implemented, if historical control monuments are located within the phased implementation area, coordination with NGS/NOS would occur prior to construction to document and relocate the monuments as necessary. If no known monuments are located during the surveying and detailed design phase, NGS/NOS would be contacted so that their database can be updated to list the control monuments "Mark Not Found".



DEPARTMENT OF THE AIR FORCE 129TH RESCUE WING (ANG) CALIFORNIA AIR NATIONAL GUARD MOFFETT FEDERAL AIRFIELD, CA

MEMORANDUM FOR

 Ms. Yvonne LeTellier, Project Manager U.S. Army Corps of Engineers 1455 Market Street
 San Francisco, CA 94103
 THROUGH: COL BAGDASARIAN

FROM: 129 RQW/SE

SUBJECT: Public comment for the Draft Environmental Impact Statement/Report (DEIS/R) for the South Bay Salt Ponds Restoration Project

1. Representing the California Air National Guard and the 129th Rescue Wing I am offering comments to address legitimate safety concerns with regards to the South Bay Salt Ponds Restoration Project. These comments will highlight those concerns and to provide specific guidance over how this project can meet its stated goals while simultaneously taking reasonable and prudent steps to preserve aviation and public safety.

2. As users of Moffett Federal Airfield operating large turbine-powered aircraft, the 129th Rescue Wing is very concerned about how wetland restoration could increase the hazard associated with aircraft striking birds at low altitude in close proximity to the airfield. The USFWS and the Army have already agreed that aircraft-wildlife strikes pose a significant safety concern, and as evidence of this agreement we wish to call your attention to the attached 2003 Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes. That Memorandum of Agreement (MOA) not only states that the concerned agencies agree that aircraft-wildlife strikes pose a significant safety concern, but it also cites the FAA's Advisorty Circular (AC) number 150/5200-33A for guidance on how best to enhance public and aviation safety in this arena. The 129th Rescue Wing and the California Air National Guard urge the Corps to follow that guidance.

3. FAA Advisorty Circular (AC) 150/5200-33A designates a 10,000 foot perimeter around airfields such as Moffett which serve turbine-powered aircraft within which "hazardous wildlife attractants should be avoided, eliminated, or mitigated." Therefore, in pursuing the South Bay Salt Ponds Restoration Project, we urge the involved agencies to take steps to preserve aviation safety within 10,000 feet of Moffett's runways. For that 10,000 foot zone, the Corps should consult with U.S. Department of Agriculture (USDA) Wildlife Services or other wildlife damage management biologists as suggested by the FAA.

4. In January 2006 a team of Air Force wildlife biologists conducted a review of wildlife hazard conditions at/near Moffett. During their visit these experts informally offered some recommendations on how to achieve wetlands restoration while simultaneously eliminating hazardous bird attractants within the 10,000 foot separation zone. We recognize that pursuit of the Project will require you to retain experts of your own, but we offer the following specific recommendations in the interest of aviation and public safety.

a. Restoration project is designed to eliminate non-native and invasive Spartina alterniflora (Cordgrass) within the SF Bay estuaries. Recommend conversion to contiguous native species (Spartina foliosa) or similar cover without creek channels or pockets of open water over the entire area within a two-mile zone off the runway ends.

b. Ensure there is a steep, rapid transition to open water (deeper the better) off the end of the salt marsh habitat to minimize or eliminate mudflats exposed at low tide. This will limit waders, shorebirds, and waterfowl

23 Apr 06

CANG-1

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THAT OTHERS MAY LIVE



DEPARTMENT OF THE AIR FORCE 129TH RESCUE WING (ANG) CALIFORNIA AIR NATIONAL GUARD MOFFETT FEDERAL AIRFIELD, CA

feeding and loafing areas.

d. Ensure there is no exposed high ground amid open water within the 10,000 foot zone where evening roost of gulls, cormorants, pelicans and other species may occur. This will require exploring the option of eliminating all levees within the two-mile separation zone.

e. Construct no boardwalks, poles, markers etc in the salt marsh that will attract perching and roosting birds within the separation zone. We understand that exceptions to this may be necessary in order to pursue other public safety imperatives.

5. I trust that this provides adequate detail on the concerns of the Air National Guard in this matter. Any questions on this letter should be addressed to the 129th Rescue Wing Safety Office at <u>SE.129RQW@camoff.ang.af.mil</u>.

JEFFREY WALDMAN, Major, CA ANG Chief of Safety

Attachments:

- Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes

- FAA Advisory Circular: "Hazardous Wildlife Attractants on or Near Airports"

cc: Sandy Olliges, NASA Ames Research Center, Moffett Field, CA Jeff Amaral, USDA-APHIS-Wildlife Services, Moffett Field, CA Maj Dwight Robinson, US Army, AFDD Flight Projects Office Chief, Moffett Field, CA

1st Ind, Wing/CC, 23-Apr-07

MEMORANDUM FOR Ms. Yvonne LeTellier, Project Manager, US Army Corps of Engineers

I sincerely hope the Corps, USFWS and other agencies take aviation safety concerns into consideration in pursuing the South Bay Salt Ponds Restoration Project. I can only speak for my organization, but I suspect that the myriad of agencies which rely on Moffett Federal Airfield as a resource share in these concerns. I look forward to hearing how the Corps and USFWS plan to incorporate aviation safety into the Project.

AMOS BAGDASARIAN, Colonel, CA ANG Wing Commander

CANG-3

CANG-4

CANG-5

Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes

PURPOSE

The signatory agencies know the risks that aircraft-wildlife strikes pose to safe aviation.

This Memorandum of Agreement (MOA) acknowledges each signatory agency's respective missions. Through this MOA, the agencies establish procedures necessary to coordinate their missions to more effectively address existing and future environmental conditions contributing to aircraft-wildlife strikes throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety, while protecting the Nation's valuable environmental resources.

BACKGROUND

Aircraft-wildlife strikes are the second leading causes of aviation-related fatalities. Globally, these strikes have killed over 400 people and destroyed more than 420 aircraft. While these extreme events are rare when compared to the millions of annual aircraft operations, the potential for catastrophic loss of human life resulting from one incident is substantial. The most recent accident demonstrating the grievous nature of these strikes occurred in September 1995, when a U.S. Air Force reconnaissance jet struck a flock of Canada geese during takeoff, killing all 24 people aboard.

The Federal Aviation Administration (FAA) and the United States Air Force (USAF) databases contain information on more than 54,000 United States civilian and military aircraft-wildlife strikes reported to them between 1990 and 1999¹. During that decade, the FAA received reports indicating that aircraft-wildlife strikes, damaged 4,500 civilian U.S. aircraft (1,500 substantially), destroyed 19 aircraft, injured 91 people, and killed 6 people. Additionally, there were 216 incidents where birds struck two or more engines on civilian aircraft, with damage occurring to 26 percent of the 449 engines involved in these incidents. The FAA estimates that during the same decade, civilian U.S. aircraft sustained \$4 billion worth of damages and associated losses and 4.7 million hours of aircraft downtime due to aircraft-wildlife strikes. For the same period,

¹ FAA estimates that the 28,150 aircraft-wildlife strike reports it received represent less than 20% of the actual number of strikes that occurred during the decade.

USAF planes colliding with wildlife resulted in 10 Class A Mishaps², 26 airmen deaths, and over \$217 million in damages.

Approximately 97 percent of the reported civilian aircraft-wildlife strikes involved common, large-bodied birds or large flocks of small birds. Almost 70 percent of these events involved gulls, waterfowl, and raptors (Table 1).

About 90 percent of aircraft-wildlife strikes occur on or near airports, when aircraft are below altitudes of 2,000 feet. Aircraft-wildlife strikes at these elevations are especially dangerous because aircraft are moving at high speeds and are close to or on the ground. Aircrews are intently focused on complex take-off or landing procedures and monitoring the movements of other aircraft in the airport vicinity. Aircrew attention to these activities while at low altitudes often compromises their ability to successfully recover from unexpected collisions with wildlife and to deal with rapidly changing flight procedures. As a result, crews have minimal time and space to recover from aircraft-wildlife strikes.

Increasing bird and wildlife populations in urban and suburban areas near airports contribute to escalating aircraft-wildlife strike rates. FAA, USAF, and Wildlife Services (WS) experts expect the risks, frequencies, and potential severities of aircraft-wildlife strikes to increase during the next decade as the numbers of civilian and military aircraft operations grow to meet expanding transportation and military demands.

SECTION I.

SCOPE OF COOPERATION AND COORDINATION

Based on the preceding information and to achieve this MOA's purpose, the signatory agencies:

- **A.** Agree to strongly encourage their respective regional and local offices, as appropriate, to develop interagency coordination procedures necessary to effectively and efficiently implement this MOA. Local procedures should clarify time frames and other general coordination guidelines.
- **B.** Agree that the term "airport" applies only to those facilities as defined in the attached glossary.
- **C.** Agree that the three major activities of most concern include, but are not limited to:
 - 1. airport siting and expansion;

² See glossary for the definition of a Class A Mishap and similar terms.

- 2. development of conservation/mitigation habitats or other land uses that could attract hazardous wildlife to airports or nearby areas; and
- 3. responses to known wildlife hazards or aircraft-wildlife strikes.
- D. Agree that "hazardous wildlife" are those animals, identified to species and listed in FAA and USAF databases, that are most often involved in aircraft-wildlife strikes. Many of the species frequently inhabit areas on or near airports, cause structural damage to airport facilities, or attract other wildlife that pose an aircraft-wildlife strike hazard. Table 1 lists many of these species. It is included solely to provide information on identified wildlife species that have been involved in aircraft-wildlife strikes. It is <u>not</u> intended to represent the universe of species concerning the signatory agencies, since more than 50 percent of the aircraft-wildlife strikes reported to FAA or the USAF did not identify the species involved.
- E. Agree to focus on habitats attractive to the species noted in Table 1, but the signatory agencies realize that it is imperative to recognize that wildlife hazard determinations discussed in Paragraph L of this section may involve other animals.
- **F.** Agree that not all habitat types attract hazardous wildlife. The signatory agencies, during their consultative or decisionmaking activities, will inform regional and local land use authorities of this MOA's purpose. The signatory agencies will consider regional, local, and site-specific factors (e.g., geographic setting and/or ecological concerns) when conducting these activities and will work cooperatively with the authorities as they develop and implement local land use programs under their respective jurisdictions. The signatory agencies will encourage these stakeholders to develop land uses within the siting criteria noted in Section 1-3 of FAA Advisory Circular (AC) 150.5200-33 (Attachment A) that do not attract hazardous wildlife. Conversely, the agencies will promote the establishment of land uses attractive to hazardous wildlife outside those siting criteria. Exceptions to the above siting criteria, as described in Section 2.4.b of the AC, will be considered because they typically involve habitats that provide unique ecological functions or values (e.g., critical habitat for federally-listed endangered or threatened species, ground water recharge).
- **G.** Agree that wetlands provide many important ecological functions and values, including fish and wildlife habitats; flood protection; shoreline erosion control; water quality improvement; and recreational, educational, and research opportunities. To protect jurisdictional wetlands, Section 404 of the Clean Water Act (CWA) establishes a program to regulate dredge and/or fill activities in these wetlands and navigable waters. In recognizing Section 404 requirements and the Clean Water Action Plan's goal to annually increase the Nation's net wetland acreage by 100,000 acres through 2005, the signatory agencies agree to resolve aircraft-wildlife conflicts. They will do so by

avoiding and minimizing wetland impacts to the maximum extent practicable, and will work to compensate for all associated unavoidable wetland impacts. The agencies agree to work with landowners and communities to encourage and support wetland restoration or enhancement efforts that do not increase aircraft-wildlife strike potentials.

- H. Agree that the: U.S. Army Corps of Engineers (ACOE) has expertise in protecting and managing jurisdictional wetlands and their associated wildlife; U.S. Environmental Protection Agency (EPA) has expertise in protecting environmental resources; and the U.S. Fish and Wildlife Service (USFWS) has expertise in protecting and managing wildlife and their habitats, including migratory birds and wetlands. Appropriate signatory agencies will cooperatively review proposals to develop or expand wetland mitigation sites, or wildlife refuges that may attract hazardous wildlife. When planning these sites or refuges, the signatory agencies will diligently consider the siting criteria and land use practice recommendations stated in FAA AC 150/5200-33. The agencies will make every effort to undertake actions that are consistent with those criteria and recommendations, but recognize that exceptions to the siting criteria may be appropriate (see Paragraph F of this section).
- I. Agree to consult with airport proponents during initial airport planning efforts. As appropriate, the FAA or USAF will initiate signatory agency participation in these efforts. When evaluating proposals to build new civilian or military aviation facilities or to expand existing ones, the FAA or the USAF, will work with appropriate signatory agencies to diligently evaluate alternatives that may avoid adverse effects on wetlands, other aquatic resources, and Federal wildlife refuges. If these or other habitats support hazardous wildlife, and there is no practicable alternative location for the proposed aviation project, the appropriate signatory agencies, consistent with applicable laws, regulations, and policies, will develop mutually acceptable measures, to protect aviation safety and mitigate any unavoidable wildlife impacts.
- J. Agree that a variety of other land uses (e.g., storm water management facilities, wastewater treatment systems, landfills, golf courses, parks, agricultural or aquacultural facilities, and landscapes) attract hazardous wildlife and are, therefore, normally incompatible with airports. Accordingly, new, federally-funded airport construction or airport expansion projects near habitats or other land uses that may attract hazardous wildlife must conform to the siting criteria established in the FAA Advisory Circular (AC) 150/5200-33, Section 1-3.
- K. Agree to encourage and advise owners and/or operators of non-airport facilities that are known hazardous wildlife attractants (See Paragraph J) to follow the siting criteria in Section 1-3 of AC 150/5200-33. As appropriate, each signatory agency will inform proponents of these or other land uses about the land use's potential to attract hazardous species to airport areas.

The signatory agencies will urge facility owners and/or operators about the critical need to consider the land uses' effects on aviation safety.

- L. Agree that FAA, USAF, and WS personnel have the expertise necessary to determine the aircraft-wildlife strike potentials of various land uses. When there is disagreement among signatory agencies about a particular land use and its potential to attract hazardous wildlife, the FAA, USAF, or WS will prepare a wildlife hazard assessment. Then, the appropriate signatory agencies will meet at the local level to review the assessment. At a minimum, that assessment will:
 - 1. identify each species causing the aviation hazard, its seasonal and daily populations, and the population's local movements;
 - 2. discuss locations and features on and near the airport or land use attractive to hazardous wildlife; and
 - 3. evaluate the extent of the wildlife hazard to aviation.
- M. Agree to cooperate with the airport operator to develop a specific, wildlife hazard management plan for a given location, when a potential wildlife hazard is identified. The plan will meet applicable FAA, USAF, and other relevant requirements. In developing the plan, the appropriate agencies will use their expertise and attempt to integrate their respective programmatic responsibilities, while complying with existing laws, regulations, and policies. The plan should avoid adverse impacts to wildlife populations, wetlands, or other sensitive habitats to the maximum extent practical. Unavoidable impacts resulting from implementing the plan will be fully compensated pursuant to all applicable Federal laws, regulations, and policies.
- **N.** Agree that whenever a significant aircraft-wildlife strike occurs or a potential for one is identified, any signatory agency may initiate actions with other appropriate signatory agencies to evaluate the situation and develop mutually acceptable solutions to reduce the identified strike probability. The agencies will work cooperatively, preferably at the local level, to determine the causes of the strike and what can and should be done at the airport or in its vicinity to reduce potential strikes involving that species.
- O. Agree that information and analyses relating to mitigation that could cause or contribute to aircraft-wildlife strikes should, whenever possible, be included in documents prepared to satisfy the National Environmental Policy Act (NEPA). This should be done in coordination with appropriate signatory agencies to inform the public and Federal decision makers about important ecological factors that may affect aviation. This concurrent review of environmental issues will promote the streamlining of the NEPA review process.
- **P.** Agree to cooperatively develop mutually acceptable and consistent guidance, manuals, or procedures addressing the management of habitats attractive to

hazardous wildlife, when those habitats are or will be within the siting criteria noted in Section 1-3 of FAA AC 5200-33. As appropriate, the signatory agencies will also consult each other when they propose revisions to any regulations or guidance relevant to the purpose of this MOA, and agree to modify this MOA accordingly.

SECTION II. GENERAL RULES AND INFORMATION

- **A.** Development of this MOA fulfills the National Transportation Safety Board's recommendation of November 19, 1999, to form an inter-departmental task force to address aircraft-wildlife strike issues.
- B. This MOA does not nullify any obligations of the signatory agencies to enter into separate MOAs with the USFWS addressing the conservation of migratory birds, as outlined in Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, dated January 10, 2001 (66 *Federal Register*, No. 11, pg. 3853).
- **C.** This MOA in no way restricts a signatory agency's participation in similar activities or arrangements with other public or private agencies, organizations, or individuals.
- D. This MOA does not alter or modify compliance with any Federal law, regulation or guidance (e.g., Clean Water Act; Endangered Species Act; Migratory Bird Treaty Act; National Environmental Policy Act; North American Wetlands Conservation Act; Safe Drinking Water Act; or the "no-net loss" policy for wetland protection). The signatory agencies will employ this MOA in concert with the Federal guidance addressing wetland mitigation banking dated March 6, 1995 (60 Federal Register, No. 43, pg. 12286).
- E. The statutory provisions and regulations mentioned above contain legally binding requirements. However, this MOA does not substitute for those provisions or regulations, nor is it a regulation itself. This MOA does not impose legally binding requirements on the signatory agencies or any other party, and may not apply to a particular situation in certain circumstances. The signatory agencies retain the discretion to adopt approaches on a case-by-case basis that differ from this MOA when they determine it is appropriate to do so. Such decisions will be based on the facts of a particular case and applicable legal requirements. Therefore, interested parties are free to raise questions and objections about the substance of this MOA and the appropriateness of its application to a particular situation.
- **F.** This MOA is based on evolving information and may be revised periodically without public notice. The signatory agencies welcome public comments on this MOA at any time and will consider those comments in any future revision of this MOA.

- **G.** This MOA is intended to improve the internal management of the Executive Branch to address conflicts between aviation safety and wildlife. This MOA does not create any right, benefit, or trust responsibility, either substantively or procedurally. No party, by law or equity, may enforce this MOA against the United States, its agencies, its officers, or any person.
- **H.** This MOA does not obligate any signatory agency to allocate or spend appropriations or enter into any contract or other obligations.
- I. This MOA does not reduce or affect the authority of Federal, State, or local agencies regarding land uses under their respective purviews. When requested, the signatory agencies will provide technical expertise to agencies making decisions regarding land uses within the siting criteria in Section 1-3 of FAA AC 150/5200-33 to minimize or prevent attracting hazardous wildlife to airport areas.
- **J.** Any signatory agency may request changes to this MOA by submitting a written request to any other signatory agency and subsequently obtaining the written concurrence of all signatory agencies.
- **K.** Any signatory agency may terminate its participation in this MOA within 60 days of providing written notice to the other agencies. This MOA will remain in effect until all signatory agencies terminate their participation in it.

SECTION III. PRINCIPAL SIGNATORY AGENCY CONTACTS

The following list identifies contact offices for each signatory agency.

Federal Aviation Administration Office Airport Safety and Standards Airport Safety and Compliance Branch (AAS-310) 800 Independence Ave., S.W. Washington, D.C. 20591 V: 202-267-1799 F: 202-267-7546 U.S. Army Directorate of Civil Works Begulatory Branch (CECW OP)

Directorate of Civil Works Regulatory Branch (CECW-OR) 441 G St., N.W. Washington, D.C. 20314 V: 202-761-4750 F: 202-761-4150 U.S. Air Force HQ AFSC/SEFW 9700 Ave., G. SE, Bldg. 24499 Kirtland AFB, NM 87117 V: 505-846-5679 F: 505-846-0684

U.S. Environmental Protection Agy. Office of Water Wetlands Division Ariel Rios Building, MC 4502F 1200 Pennsylvania Ave., SW Washington, D.C. 20460 V: 202-260-1799 F: 202-260-7546 U.S. Fish and Wildlife Service Division of Migratory Bird Management 4401 North Fairfax Drive, Room 634 Arlington, VA 22203 V: 703-358-1714 F: 703-358-2272 U.S. Department of Agriculture Animal and Plant Inspection Service Wildlife Services Operational Support Staff 4700 River Road, Unit 87 Riverdale, MD 20737 V: 301-734-7921 F: 301-734-5157 **Signature Page**

Word forder

Associate Administrator for Airports. Federal Aviation Administration

Banuth W. Hen

Chief of Safety, U. S. Air Force

Acting Assistant Secretary of the Army (Civil Works) Department of the Army

Man

Assistant Administrator, Office of Water, U.S. Environmental Protection Agency

R. Schmidt

Assistant Director, Migratory Birds and State Programs, U.S. Fish and Wildlife Service

Carrow

Acting Deputy Administrator, Wildlife Services U.S. Department of Agriculture

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GLOSSARY

This glossary defines terms used in this MOA.

Airport. All USAF airfields or all public use airports in the FAA's National Plan of Integrated Airport Systems (NPIAS). Note: There are over 18,000 civil-use airports in the U.S., but only 3,344 of them are in the NPIAS and, therefore, under FAA's jurisdiction.

Aircraft-wildlife strike. An aircraft-wildlife strike is deemed to have occurred when:

- 1. a pilot reports that an aircraft struck 1 or more birds or other wildlife;
- 2. aircraft maintenance personnel identify aircraft damage as having been caused by an aircraft-wildlife strike;
- 3. personnel on the ground report seeing an aircraft strike 1 or more birds or other wildlife;
- 4. bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal's death is identified; or
- 5. the animal's presence on the airport had a significant, negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal)

(Source: *Wildlife Control Procedures Manual*, Technical Publication 11500E, 1994).

Aircraft-wildlife strike hazard. A potential for a damaging aircraft collision with wildlife on or near an airport (14 CFR 139.3).

Bird Sizes. Title 40, Code of Federal Regulations, Part 33.76 classifies birds according to weight:

small birds weigh less than 3 ounces (oz). medium birds weigh more than 3 oz and less than 2.5 lbs. large birds weigh greater than 2.5 lbs.

Civil aircraft damage classifications. The following damage descriptions are based on the *Manual on the International Civil Aviation Organization Bird Strike Information System*:

Minor: The aircraft is deemed airworthy upon completing simple repairs or replacing minor parts and an extensive inspection is not necessary.

Substantial: Damage or structural failure adversely affects an aircraft's structural integrity, performance, or flight characteristics. The damage normally requires major repairs or the replacement of the entire affected component. Bent fairings or cowlings; small dents; skin punctures; damage to wing tips, antenna, tires or brakes, or engine blade damage not requiring blade replacement are specifically excluded.

Destroyed: The damage sustained makes it inadvisable to restore the aircraft to an airworthy condition.

Significant Aircraft-Wildlife Strikes. A significant aircraft-wildlife strike is deemed to have occurred when any of the following applies:

- 1. a civilian, U.S. air carrier aircraft experiences a multiple aircraft-bird strike or engine ingestion;
- 2. a civilian, U.S. air carrier aircraft experiences a damaging collision with wildlife other than birds; or
- 3. a USAF aircraft experiences a Class A, B, or C mishap as described below:
 - A. Class A Mishap: Occurs when at least one of the following applies:
 - 1. total mishap cost is \$1,000,000 or more;
 - 2. a fatality or permanent total disability occurs; and/or
 - 3. an Air Force aircraft is destroyed.
 - **B. Class B Mishap:** Occurs when at least one of the following applies:
 - 1. total mishap cost is \$200,000 or more and less than \$1,000,000; and/or
 - 2. a permanent partial disability occurs and/or 3 or more people are hospitalized;
 - **C. Class C Mishap:** Occurs when at least one of the following applies:
 - cost of reported damage is between \$20,000 and \$200,000;
 - an injury causes a lost workday (i.e., duration of absence is at least 8 hours beyond the day or shift during which mishap occurred); and/or
 - 3. an occupational illness causing absence from work at any time.

Wetlands. An ecosystem requiring constant or recurrent, shallow inundation or saturation at or near the surface of the substrate. The minimum essential characteristics of a wetland are recurrent, sustained inundation or saturation at or

near the surface and the presence of physical, chemical, and biological features indicating recurrent, sustained inundation, or saturation. Common diagnostic wetland features are hydric soils and hydrophytic vegetation. These features will be present, except where specific physiochemical, biotic, or anthropogenic factors have removed them or prevented their development.

(Source the 1987 Delineation Manual; 40 CFR 230.3(t)).

Wildlife. Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring there of (50 CFR 10.12, *Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants*). As used in this MOA, "wildlife" includes feral animals and domestic animals while out of their owner's control (14 CFR 139.3, *Certification and Operations: Land Airports Serving CAB-Certificated Scheduled Air Carriers Operating Large Aircraft (Other Than Helicopters*))

Table 1. Identified wildlife species, or groups, that were involved in two or more aircraft-wildlife strikes, that caused damage to one or more aircraft components, or that had an adverse effect on an aircraft's flight. Data are for 1990-1999 and involve only civilian, U.S. aircraft.

Diada	
Birds	No. reported strikes
Gulls (all spp.)	874
Geese (primarily, Canada geese)	458
Hawks (primarily, Red-tailed hawks)	182
Ducks (primarily Mallards.)	166
Vultures (primarily, Turkey vulture)	142
Rock doves	122
Doves (primarily, mourning doves)	109
Blackbirds	81
European starlings	55
Sparrows	52
Egrets	41
Shore birds (primarily, Killdeer & Sandpipers)	40
Crows	31
Owls	24
Sandhill cranes	22
American kestrels	15
Great blue herons	15
Pelicans	14
Swallows	14
Eagles (Bald and Golden)	14
Ospreys	13
Ring-necked pheasants	11
Herons	11
Barn-owls	9
American robins	8
Meadowlarks	8
Buntings (snow)	7
Cormorants	6
Snow buntings	6
Brants	5
Terns (all spp.)	5
Great horned owls	5
Horned larks	4
Turkeys	4
Swans	3
Mockingbirds	3
Quails	3
Homing pigeons	3
Snowy owls	3
Anhingas	2

Ravens	2
Kites	2
Falcons	2
Peregrine falcons	2
Merlins	2
Grouse	2
Hungarian partridges	2
Spotted doves	2
Thrushes	2
Mynas	2
Finches	2
Total known birds	2,612

Mammals	No. reported strikes
Deer (primarily, White-tailed deer)	285
Coyotes	16
Dogs	10
Elk	6
Cattle	5
Bats	4
Horses	3
Pronghorn antelopes	3
Foxes	2
Raccoons	2
Rabbits	2
Moose	2
Total known mammals	340

Ring-billed gulls were the most commonly struck gulls. The U.S. ring-billed gull population increased steadily at about 6% annually from 1966-1988. Canada geese were involved in about 90% of the aircraft-goose strikes involving civilian, U.S. aircraft from 1990-1998. Resident (non-migratory) Canada goose populations increased annually at 13% from 1966-1998. Red-tailed hawks accounted for 90% of the identified aircraft-hawk strikes for the 10-year period. Red-tailed hawk populations increased annually at 3% from 1966 to 1998. Turkey vultures were involved in 93% of he identified aircraftvulture strikes. The U.S. Turkey vulture populations increased at annually at 1% between 1966 and 1998. Deer, primarily white-tailed deer, have also adapted to urban and airport areas and their populations have increased dramatically. In the early 1900's, there were about 100,000 white-tailed deer in the U.S. Current estimates are that the U.S. population is about 24 million.



Federal Aviation Administration

Advisory Circular

Subject: HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS

Date: 5/1/97 Initiated by: AAS-310 and APP-600 AC No: 150/5200-33 Change:

1. PURPOSE. This advisory circular (AC) provides guidance on locating certain land uses having the potential to attract hazardous wildlife to or in the vicinity of public-use airports. It also provides guidance concerning the placement of new airport development projects (including airport construction, expansion, and renovation) pertaining to aircraft movement in the vicinity of hazardous wildlife attractants. Appendix 1 provides definitions of terms used in this AC.

2. APPLICATION. The standards, practices, suggestions contained in this AC and are recommended by the Federal Aviation Administration (FAA) for use by the operators and sponsors of all public-use airports. In addition, the standards, practices, and suggestions contained in this AC are recommended by the FAA as guidance for land use planners, operators, and developers of projects, facilities, and activities on or near airports.

3. BACKGROUND. Populations of many species of wildlife have increased markedly in the

last few years. Some of these species are able to adapt to human-made environments, such as exist on and around airports. The increase in wildlife populations, the use of larger turbine engines, the increased use of twin-engine aircraft, and the increase in air-traffic, all combine to increase the risk, frequency, and potential severity of wildlifeaircraft collisions.

Most public-use airports have large tracts of open, unimproved land that are desirable for added margins of safety and noise mitigation. These areas can present potential hazards to aviation because they often attract hazardous wildlife. During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives world-wide, as well as billions of dollars worth of aircraft damage. Hazardous wildlife attractants near airports could jeopardize future airport expansion because of safety considerations.

DAVID L. BENNETT Director, Office of Airport Safety and Standards

SECTION 1. HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS.

1-1. TYPES OF HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS. Human-made or natural areas, such as poorlydrained areas, retention ponds, roosting habitats on buildings, landscaping, putrescible-waste disposal operations, wastewater treatment plants, agricultural or aquacultural activities, surface mining, or wetlands, may be used by wildlife for escape, feeding, loafing, or reproduction. Wildlife use of areas within an airport's approach or departure airspace, aircraft movement areas, loading ramps, or aircraft parking areas may cause conditions hazardous to aircraft safety.

All species of wildlife can pose a threat to aircraft safety. However, some species are more commonly involved in aircraft strikes than others. Table 1 lists the wildlife groups commonly reported as being involved in damaging strikes to U.S. aircraft from 1993 to 1995.

Wildlife Groups	Percent involvement in reported damaging strikes
Gulls	28
Waterfowl	28
Raptors	11
Doves	6
Vultures	5
Blackbirds-	5
Starlings	
Corvids	3
Wading birds	3
Deer	11
Canids	1

Table 1. Wildlife Groups Involved in DamagingStrikes to Civilian Aircraft, USA, 1993-1995.

1-2. LAND USE PRACTICES. Land use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife-aircraft collisions. FAA recommends against land use practices, within the siting criteria stated in 1-3, that attract or sustain populations of hazardous wildlife within the vicinity of airports or cause movement of hazardous wildlife onto, into, or across the approach or departure airspace, aircraft movement area, loading ramps, or aircraft parking area of airports.

Airport operators, sponsors, planners, and land use developers should consider whether proposed land uses, including new airport development projects, would increase the wildlife hazard. Caution should be exercised to ensure that land use practices on or near airports do not enhance the attractiveness of the area to hazardous wildlife.

1-3. SITING CRITERIA. FAA recommends separations when siting any of the wildlife attractants mentioned in Section 2 or when planning new airport development projects to accommodate aircraft movement. The distance between an airport's aircraft movement areas, loading ramps, or aircraft parking areas and the wildlife attractant should be as follows:

a. Airports serving piston-powered aircraft. A distance of 5,000 feet is recommended.

b. Airports serving turbine-powered aircraft. A distance of 10,000 feet is recommended.

c. Approach or Departure airspace. A distance of 5 statute miles is recommended, if the wildlife attractant may cause hazardous wildlife movement into or across the approach or departure airspace.

SECTION 2. LAND USES THAT ARE INCOMPATIBLE WITH SAFE AIRPORT OPERATIONS.

2-1. GENERAL. The wildlife species and the size of the populations attracted to the airport environment are highly variable and may depend on several factors, including land-use practices on or near the airport. It is important to identify those land use practices in the airport area that attract hazardous wildlife. This section discusses land use practices known to threaten aviation safety.

2-2. PUTRESCIBLE-WASTE DISPOSAL OPERATIONS. Putrescible-waste disposal operations are known to attract large numbers of wildlife that are hazardous to aircraft. Because of this, these operations, when located within the separations identified in the sitting criteria in 1-3 are considered incompatible with safe airport operations.

FAA recommends against locating putrescible-waste disposal operations inside the separations identified in the siting criteria mentioned above. FAA also recommends against new airport development projects that would increase the number of aircraft operations or that would accommodate larger or faster aircraft, near putrescible-waste disposal operations located within the separations identified in the siting criteria in 1-3.

2-3. WASTEWATER TREATMENT FACILI-TIES. Wastewater treatment facilities and associated settling ponds often attract large numbers of wildlife that can pose a threat to aircraft safety when they are located on or near an airport.

a. New wastewater treatment facilities. FAA recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in the siting criteria in 1-3. During the siting analysis for wastewater treatment facilities, the potential to attract hazardous wildlife should be considered if an airport is in the vicinity of a proposed site. Airport operators should voice their opposition to such sitings. In addition, they should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.

b. Existing wastewater treatment FAA recommends correcting any facilities. wildlife hazards arising from existing wastewater treatment facilities located on or near airports without delay, using appropriate wildlife hazard mitigation techniques. Accordingly, measures to minimize hazardous wildlife attraction should be developed in consultation with a wildlife damage management biologist. FAA recommends that wastewater treatment facility operators incorporate appropriate wildlife hazard mitigation techniques into their operating practices. Airport operators also should encourage operators to those incorporate these mitigation techniques in their operating practices.

c. Artificial marshes. Waste-water treatment facilities may create artificial marshes and use submergent and emergent aquatic vegetation as natural filters. These artificial marshes may be used by some species of flocking birds, such as blackbirds and waterfowl, for breeding or roosting activities. FAA recommends against establishing artificial marshes within the separations identified in the siting criteria stated in 1-3.

d. Wastewater discharge and sludge disposal. FAA recommends against the discharge of wastewater or sludge on airport property. Regular spraying of wastewater or sludge disposal on unpaved areas may improve soil moisture and quality. The resultant turf growth requires more frequent mowing, which in turn may mutilate or flush insects or small animals and produce straw. The maimed or flushed organisms and the straw can attract hazardous wildlife and jeopardize aviation safety. In addition, the improved turf may attract grazing wildlife such as deer and geese.

Problems may also occur when discharges saturate unpaved airport areas. The resultant soft, muddy conditions can severely restrict or prevent emergency vehicles from reaching accident sites in a timely manner.

e. Underwater waste discharges. The underwater discharge of any food waste, e.g., fish processing offal, that could attract scavenging wildlife is not recommended within the separations identified in the siting criteria in 1-3.

2-4. WETLANDS.

a. Wetlands on or near Airports.

(1) Existing Airports. Normally, wetlands are attractive to many wildlife species. Airport operators with wetlands located on or nearby airport property should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations.

(2) Airport Development. When practicable, the FAA recommends siting new airports using the separations identified in the siting criteria in 1-3. Where alternative sites are not practicable or when expanding existing airports in or near wetlands, the wildlife hazards should be evaluated and minimized through a wildlife management plan prepared by a wildlife damage management biologist, in consultation with the U.S. Fish and Wildlife Service (USFWS) and the U.S. Army Corps of Engineers (COE).

NOTE: If questions exist as to whether or not an area would qualify as a wetland, contact the U.S. Army COE, the Natural Resource Conservation Service, or a wetland consultant certified to delineate wetlands.

b. Wetland mitigation. Mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects. Wetland mitigation should be designed so it does not create a wildlife hazard.

(1) FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in the siting criteria in 1-3. Wetland mitigation banks meeting these siting criteria offer an ecologically sound approach to mitigation in these situations.

(2) Exceptions to locating mitigation activities outside the separations identified in the siting criteria in 1-3 may be considered if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge. Such mitigation must be compatible with safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife should be avoided. On-site mitigation plans may be reviewed by the FAA to determine compatibility with safe airport operations.

(3) Wetland mitigation projects that are needed to protect unique wetland functions (see 2-4.b.(2)), and that must be located in the siting criteria in 1-3 should be identified and evaluated by a wildlife damage management biologist before implementing the mitigation. A wildlife damage management plan should be developed to reduce the wildlife hazards.

NOTE: AC 150/5000-3, *Address List for Regional Airports Division and Airports District/Field Offices*, provides information on the location of these offices.

2-5. DREDGE SPOIL CONTAINMENT AREAS. FAA recommends against locating dredge spoil containment areas within the separations identified in the siting criteria in 1-3, if the spoil contains material that would attract hazardous wildlife. **3-1. GENERAL.** Even though they may, under certain circumstances, attract hazardous wildlife, the land use practices discussed in this section have flexibility regarding their location or operation and may even be under the airport operator's or sponsor's control. In general, the FAA does not consider the activities discussed below as hazardous to aviation if there is no apparent attraction to hazardous wildlife, or wildlife hazard mitigation techniques are implemented to deal effectively with any wildlife hazard that may arise.

3-2. ENCLOSED WASTE FACILITIES. Enclosed trash transfer stations or enclosed waste handling facilities that receive garbage indoors; process it via compaction, incineration, or similar manner: and remove all residue by enclosed vehicles, generally would be compatible, from a wildlife perspective, with safe airport operations, provided they are not located on airport property or within the runway protection zone (RPZ). No putrescible-waste should be handled or stored outside at any time, for any reason, or in a partially enclosed structure accessible to hazardous wildlife.

Partially enclosed operations that accept putrescible-waste are considered to be incompatible with safe airport operations. FAA recommends these operations occur outside the separations identified in the siting criteria in 1-3.

3-3. RECYCLING CENTERS. Recycling centers that accept previously sorted, non-food items such as glass, newspaper, cardboard, or aluminum are, in most cases, not attractive to hazardous wildlife.

OPERATIONS 3-4. COMPOSTING ON AIRPORTS. FAA recommends against locating composting operations on airports. However, when they are located on an airport, composting operations should not be located closer than the greater of the following distances: 1,200 feet from any aircraft movement area, loading ramp, or aircraft parking space; or the distance called for by airport design requirements. This spacing is intended to prevent material, personnel, or equipment from penetrating any Obstacle Free Area (OFA), Obstacle Free Zone (OFZ), Threshold Siting Surface (TSS), or Clearway (see AC 150/5300-13, Airport Design). **On-airport** disposal of compost by-products is not recommended for the reasons stated in 2-3.d.

a. Composition of material handled. Components of the compost should never include any municipal solid waste. Non-food waste such as leaves, lawn clippings, branches, and twigs generally are not considered a wildlife attractant. Sewage sludge, wood-chips, and similar material are not municipal solid wastes and may be used as compost bulking agents.

b. Monitoring on-airport composting operations. If composting operations are to be located on airport property, FAA recommends that the airport operator monitor composting operations to ensure that steam or thermal rise does not affect air traffic in any way. Discarded leaf disposal bags or other debris must not be allowed to blow onto any active airport area. Also, the airport operator should reserve the right to stop any operation that creates unsafe, undesirable, or incompatible conditions at the airport.

3-5. ASH DISPOSAL. Fly ash from resource recovery facilities that are fired by municipal solid waste, coal, or wood, is generally considered not to be a wildlife attractant because it contains no putrescible matter. FAA generally does not consider landfills accepting only fly ash to be wildlife attractants, if those landfills: are maintained in an orderly manner; admit no putrescible-waste of any kind; and are not co-located with other disposal operations.

Since varying degrees of waste consumption are associated with general incineration, FAA classifies the ash from general incinerators as a regular waste disposal by-product and, therefore, a hazardous wildlife attractant.

3-6. CONSTRUCTION AND DEMOLITION (C&D) DEBRIS LANDFILLS. C&D debris (Class IV) landfills have visual and operational characteristics similar to putrescible-waste disposal sites. When co-located with putrescible-waste disposal operations, the probability of hazardous wildlife attraction to C&D landfills increases because of the similarities between these disposal activities.

FAA generally does not consider C&D landfills to be hazardous wildlife attractants, if those landfills: are maintained in an orderly manner; admit no putrescible-waste of any kind; and are not colocated with other disposal operations. **3-7. WATER DETENTION OR RETENTION PONDS.** The movement of storm water away from runways, taxiways, and aprons is a normal function on most airports and is necessary for safe aircraft operations. Detention ponds hold storm water for short periods, while retention ponds hold water indefinitely. Both types of ponds control runoff, protect water quality, and can attract hazardous wildlife. Retention ponds are more attractive to hazardous wildlife than detention ponds because they provide a more reliable water source.

To facilitate hazardous wildlife control, FAA recommends using steep-sided, narrow, linearlyshaped, rip-rap lined, water detention basins rather than retention basins. When possible, these ponds should be placed away from aircraft movement areas to minimize aircraft-wildlife interactions. All vegetation in or around detention or retention basins that provide food or cover for hazardous wildlife should be eliminated.

If soil conditions and other requirements allow, FAA encourages the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

3-8. LANDSCAPING. Wildlife attraction to landscaping may vary by geographic location. FAA recommends that airport operators approach landscaping with caution and confine it to airport areas not associated with aircraft movements. All landscaping plans should be reviewed by a wildlife damage management biologist. Landscaped areas should be monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be implemented immediately.

3-9. GOLF COURSES. Golf courses may be beneficial to airports because they provide open space that can be used for noise mitigation or by aircraft during an emergency. On-airport golf courses may also be a concurrent use that provides income to the airport.

Because of operational and monetary benefits, golf courses are often deemed compatible land uses on or near airports. However, waterfowl (especially Canada geese) and some species of gulls are attracted to the large, grassy areas and open water found on most golf courses. Because waterfowl and gulls occur throughout the U.S., FAA recommends that airport operators exercise caution and consult with a wildlife damage management biologist when considering proposals for golf course construction or expansion on or near airports. Golf courses should be monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be implemented immediately.

3-10. AGRICULTURAL CROPS. As noted above, airport operators often promote revenuegenerating activities to supplement an airport's financial viability. A common concurrent use is agricultural crop production. Such use may create potential hazards to aircraft by attracting wildlife. Any proposed on-airport agricultural operations should be reviewed by a wildlife damage management biologist. FAA generally does not object to agricultural crop production on airports when: wildlife hazards are not predicted; the guidelines for the airport areas specified in 3-10.a-f. are observed; and the agricultural operation is closely monitored by the airport operator or sponsor to ensure that hazardous wildlife are not attracted.

NOTE: If wildlife becomes a problem due to onairport agricultural operations, FAA recommends undertaking the remedial actions described in 3-10.f.

a. Agricultural activities adjacent to runways. To ensure safe, efficient aircraft operations, FAA recommends that no agricultural activities be conducted in the Runway Safety Area (RSA), OFA, and the OFZ (see AC 150/5300-13).

b. Agricultural activities in areas requiring minimum object clearances. Restricting agricultural operations to areas outside the RSA, OFA, OFZ, and Runway Visibility Zone (RVZ) (see AC 150/5300-13) will normally provide the minimum object clearances required by FAA's airport design standards. FAA recommends that farming operations not be permitted within areas critical to the proper operation of localizers, glide slope indicators, or other visual or electronic navigational aids. Determinations of minimal areas that must be kept free of farming operations should be made on a case-by-case basis. If navigational aids are present, farm leases for on-airport agricultural activities should be coordinated with FAA's Airway Facilities Division, in accordance with FAA Order 6750.16, Siting Criteria for Instrument Landing Systems.

NOTE: Crop restriction lines conforming to the dimensions set forth in Table 2 will normally provide the minimum object clearance required by

FAA airport design standards. The presence of navigational aids may require expansion of the restricted area.

c. Agricultural activities within an airport's approach areas. The RSA, OFA, and OFZ all extend beyond the runway shoulder and into the approach area by varying distances. The OFA normally extends the farthest and is usually the controlling surface. However, for some runways, the TSS (see AC 150/5300-13. Appendix 2) may be more controlling than the OFA. The TSS may not be penetrated by any object. The minimum distances shown in Table 2 are intended to prevent penetration of the OFA, OFZ, or TSS by crops or farm machinery.

NOTE: Threshold Siting standards should not be confused with the approach areas described in Title 14, Code of Federal Regulations, Part 77, (14 CFR 77), *Objects Affecting Navigable Airspace.*

d. Agricultural activities between intersecting runways. FAA recommends that no agricultural activities be permitted within the RVZ. If the terrain is sufficiently below the runway elevation, some types of crops and equipment may be acceptable. Specific determinations of what is permissible in this area requires topographical data. For example, if the terrain within the RVZ is level with the runway ends, farm machinery or crops may interfere with a pilot's line-of-sight in the RVZ. e. Agricultural activities in areas adjacent to taxiways and aprons. Farming activities should not be permitted within a taxiway's OFA. The outer portions of aprons are frequently used as a taxilane and farming operations should not be permitted within the OFA. Farming operations should not be permitted between runways and parallel taxiways.

f. Remedial actions for problematic agricultural activities. If a problem with hazardous wildlife develops, FAA recommends that a professional wildlife damage management biologist be contacted and an on-site inspection be conducted. The biologist should be requested to determine the source of the hazardous wildlife attraction and suggest remedial action. Regardless of the source of the attraction, prompt remedial actions to protect aviation safety are recommended. The remedial actions may range from choosing another crop or farming technique to complete termination of the agricultural operation.

Whenever on-airport agricultural operations are stopped due to wildlife hazards or annual harvest, FAA recommends plowing under all crop residue and harrowing the surface area smooth. This will reduce or eliminate the area's attractiveness to foraging wildlife. FAA recommends that this requirement be written into all on-airport farm use contracts and clearly understood by the lessee.

Aircraft Approach Category And	Distance In Feet From Crop	a Runway Centerline To	Distance In Fe End To Crop	Distance In Feet From Runway End To Crop	Distance In Feet From Centerline Of Taxiway	Distance In Feet From Edge Of
dinoito ingisora	Visual &		Visual &			
	\ge 34 mile	< 3/4 mile	\geq 34 mile	< ¾ mile		
Category A & B Aircraft						
Group I	200 ²	400	300 ³	600	45	40
Group II	250	400	400 ³	600	66	58
Group III	400	400	600	800	93	81
Group IV	400	400	1,000	1,000	130	113
Category C, D & E Aircraft	f	-				
Group I	530 ³	575 ³	1,000	1,000	45	40
Group II	530 ³	575 ³	1,000	1,000	6 6	58
Group III	530 ³	5753	1,000	1,000	93	81
Group IV	530 ³	575 ³	1,000	1,000	130	113
Group V	530 ³	575 ³	1,000	1,000	160	138
Group VI	530 ³	<i>5</i> 75 ³	1,000	1,000	193	167
1. Design Groups are based on wing span, and Category depends on approach speed of the aircraft	I on wing span, and Cat	egory depends on approa	ch speed of the ai	rcraft.		
Group I: Wing span up to 49 ft.	49 ft.	Cate	Category A:	Speed less than 91 knots	191 knots	
Group II: Wing span 49ft. up to 78 ft.	up to 78 ft.	Cate	Category B:	Speed 91 knot	Speed 91 knots up to 120 knots	
Group III: Wing span 79 ft. up to 117 ft.	up to 117 ft.	Cate	Category C:	Speed 121 kno	Speed 121 knots up to 140 knots	
Group IV: Wing span 118 ft. up to 170 ft.	ft. up to 170 ft.	Cate	Category D:	Speed 141 kno	Speed 141 knots up to 165 knots	
Group V: Wing span 171 ft. up to 213 ft.	ft. up to 213 ft.	Cate	Category E:	Speed 166 knots or more	ts or more	
Group VI: Wing span 214 ft. up to 261 ft.	ft. up to 261 ft.					
2. If the runway will only serve small airplanes (12,500 lb. And under) in Design Group I, this dimension may be reduced to 125 feet; however, this dimension should be increased where necessary to accommodate visual navigational aids that may be installed. For example farming operations should not be allowed within 25 feet of a Precision Approach Path Indicator (PAPI) light box.	erve small airplanes (12 necessary to accommo n Approach Path Indicat	2,500 lb. And under) in D date visual navigational i tor (PAPI) light box.	esign Group I, th aids that may be	is dimension may installed. For exa	500 lb. And under) in Design Group I, this dimension may be reduced to 125 feet; however, this dimension ate visual navigational aids that may be installed. For example farming operations should not be allowed r (PAPI) light box.	wever, this dimension should not be allowed
3. These dimensions reflect the TSS as defined in AC 150/5300-13, Appendix 2. The TSS cannot be penetrated by any object. Under these conditions, the TSS is more restrictive than the OFA, and the dimensions shown here are to prevent penetration of the TSS by crops and farm machinery.	the TSS as defined in A OFA, and the dimension	AC 150/5300-13, Appendix 2. The TSS cannot be penetrated by any object. Und ns shown here are to prevent penetration of the TSS by crops and farm machinery.	lix 2. The TSS ca ent penetration of	nnot be penetrated the TSS by crops a	by any object. Under thes ind farm machinery.	se conditions, the TSS

Table 2. Minimum Distances Between Certain Airport Features And Any On-Airport Agriculture Crops.

SECTION 4. NOTIFICATION OF FAA ABOUT HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AN AIRPORT.

4-1. GENERAL. Airport operators, land developers, and owners should notify the FAA in writing of known or reasonably foreseeable land use practices on or near airports that either attract or may attract hazardous wildlife. This section discusses those notification procedures.

4-2. NOTIFICATION REQUIREMENTS FOR WASTE DISPOSAL SITE OPERATIONS.

The Environmental Protection Agency (EPA) requires any operator proposing a new or expanded waste disposal operation within 5 statute miles of a runway end to notify the appropriate FAA Regional Airports Division Office and the airport operator of the proposal (40 CFR 258, Criteria for Municipal Solid Waste Landfills, section 258.10, Airport Safety). The EPA also requires owners or operators of new municipal solid waste landfill (MSWLF) units, or lateral expansions of existing MSWLF units that are located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used only by piston-type aircraft, to demonstrate successfully that such units are not hazards to aircraft.

a. Timing of Notification. When new or expanded MSWLFs are being proposed near airports, MSWLF operators should notify the airport operator and the FAA of this as early as possible pursuant to 40 CFR Part 258. Airport operators should encourage the MSWLF operators to provide notification as early as possible.

NOTE: AC 150/5000-3 provides information on these FAA offices.

b. Putrescible-Waste Facilities. In their effort to satisfy the EPA requirement, some putrescible-waste facility proponents may offer to undertake experimental measures to demonstrate that their proposed facility will not be a hazard to aircraft. To date, the ability to sustain a reduction in the numbers of hazardous wildlife to levels that existed before a putrescible-waste landfill began operating has not been successfully demonstrated. For this reason, demonstrations of experimental wildlife control measures should not be conducted in active aircraft operations areas.

c. Other Waste Facilities. To claim successfully that a waste handling facility sited within the separations identified in the siting criteria in 1-3

does not attract hazardous wildlife and does not threaten aviation, the developer must establish convincingly that the facility will not handle putrescible material other than that as outlined in 3-2. FAA requests that waste site developers provide a copy of an official permit request verifying that the facility will not handle putrescible material other than that as outlined in 3-2. FAA will use this information to determine if the facility will be a hazard to aviation.

4-3. NOTIFYING FAA ABOUT OTHER WILDLIFE ATTRACTANTS. While U. S. EPA regulations require landfill owners to provide notification. no similar regulations require notifying FAA about changes in other land use practices that can create hazardous wildlife Although it is not required by attractants. regulation, FAA requests those proposing land use changes such as those discussed in 2-3, 2-4, and 2-5 to provide similar notice to the FAA as early in the development process as possible. Airport operators that become aware of such proposed development in the vicinity of their airports should also notify the FAA. The notification process gives the FAA an opportunity to evaluate the effect of a particular land use change on aviation safety.

The land use operator or project proponent may use FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, or other suitable documents to notify the appropriate FAA Regional Airports Division Office.

It is helpful if the notification includes a 15-minute quadrangle map of the area identifying the location of the proposed activity. The land use operator or project proponent should also forward specific details of the proposed land use change or operational change or expansion. In the case of solid waste landfills, the information should include the type of waste to be handled, how the waste will be processed, and final disposal methods.

4-5. FAA REVIEW OF PROPOSED LAND USE CHANGES.

a. The FAA discourages the development of facilities discussed in section 2 that will be located within the 5,000/10,000-foot criteria in 1-3.

b. For projects which are located outside the 5,000/10,000-foot criteria, but within 5 statute miles of the airport's aircraft movement areas, loading ramps, or aircraft parking areas, FAA may review development plans, proposed land use changes, operational changes, or wetland mitigation plans to determine if such changes present potential wildlife hazards to aircraft operations. Sensitive airport areas will be identified as those that lie under or next to approach or departure airspace. This brief examination should be sufficient to determine if further investigation is warranted.

c. Where further study has been conducted by a wildlife damage management biologist to evaluate a site's compatibility with airport operations, the FAA will use the study results to make its determination.

d. FAA will discourage the development of any excepted sites (see Section 3) within the criteria specified in 1-3 if a study shows that the area supports hazardous wildlife species.

4-6. AIRPORT OPERATORS. Airport operators should be aware of proposed land use changes, or modification of existing land uses, that could create hazardous wildlife attractants within the separations identified in the siting criteria in 1-3. Particular attention should be given to proposed land uses involving creation or expansion of waste water treatment facilities, development of wetland mitigation sites, or development or expansion of dredge spoil containment areas.

a. AIP-funded airports. FAA recommends that operators of AIP-funded airports, to the extent practicable, oppose off-airport land use changes or practices (within the separations identified in the siting criteria in 1-3) that may attract hazardous wildlife. Failure to do so could place the airport operator or sponsor in noncompliance with applicable grant assurances. FAA recommends against the placement of airport development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants. Airport operators, sponsors, and planners should identify wildlife attractants and any associated wildlife hazards during any planning process for new airport development projects.

b. Additional coordination. If, after the initial review by FAA, questions remain about the existence of a wildlife hazard near an airport, the airport operator or sponsor should consult a wildlife damage management biologist. Such questions may be triggered by a history of wildlife strikes at the airport or the proximity of the airport to a wildlife refuge, body of water, or similar feature known to attract wildlife.

c. Specialized assistance. If the services of a wildlife damage management biologist are required. FAA recommends that land use developers or the airport operator contact the appropriate state director of the United States Department of Agriculture/Animal Damage Control (USDA/ADC), or a consultant specializing in wildlife damage management. Telephone numbers for the respective USDA/ADC state offices may be obtained by contacting USDA/ADC's Operational 4700 River Road. Support Staff, Unit 87. Riverdale. 20737-1234. MD, Telephone (301) 734-7921, Fax (301) 734-5157. The ADC biologist or consultant should be requested to identify and quantify wildlife common to the area and evaluate the potential wildlife hazards.

d. Notifying airmen. If an existing land use practice creates a wildlife hazard, and the land use practice or wildlife hazard cannot be immediately eliminated, the airport operator should issue a Notice to Airmen (NOTAM) and encourage the land owner or manager to take steps to control the wildlife hazard and minimize further attraction.

APPENDIX 1. DEFINITIONS OF TERMS USED IN THIS ADVISORY CIRCULAR.

1. GENERAL. This appendix provides definitions of terms used throughout this AC.

a. Aircraft movement area. The runways, taxiways, and other areas of an airport which are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft exclusive of loading ramps and aircraft parking areas.

b. Airport operator. The operator (private or public) or sponsor of a public use airport.

c. Approach or departure airspace. The airspace, within 5 statute miles of an airport, through which aircraft move during landing or takeoff.

d. Concurrent use. Aeronautical property used for compatible non-aviation purposes while at the same time serving the primary purpose for which it was acquired; and the use is clearly beneficial to the airport. The concurrent use should generate revenue to be used for airport purposes (see Order 5190.6A, *Airport Compliance Requirements*, sect. 5h).

e. Fly ash. The fine, sand-like residue resulting from the complete incineration of an organic fuel source. Fly ash typically results from the combustion of coal or waste used to operate a power generating plant.

f. Hazardous wildlife. Wildlife species that are commonly associated with wildlife-aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a wildlife-aircraft strike hazard.

g. Piston-use airport. Any airport that would primarily serve FIXED-WING, piston-powered aircraft. Incidental use of the airport by turbine-powered, FIXED-WING aircraft would not affect this designation. However, such aircraft should not be based at the airport.

h. Public-use airport. Any publicly owned airport or a privately-owned airport used or intended to be used for public purposes.

i. Putrescible material. Rotting organic material.

j. Putrescible-waste disposal operation. Landfills, garbage dumps, underwater waste discharges, or similar facilities where activities include processing, burying, storing, or otherwise disposing of putrescible material, trash, and refuse.

k. Runway protection zone (RPZ). An area off the runway end to enhance the protection of people and property on the ground (see AC 150/5300-13). The dimensions of this zone vary with the design aircraft, type of operation, and visibility minimum.

I. Sewage sludge. The de-watered effluent resulting from secondary or tertiary treatment of municipal sewage and/or industrial wastes, including sewage sludge as referenced in U.S. EPA's *Effluent Guidelines and Standards*, 40 C.F.R. Part 401.

m. Shoulder. An area adjacent to the edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface, support for aircraft running off the pavement, enhanced drainage, and blast protection (see AC 150/5300-13).

n. Turbine-powered aircraft. Aircraft powered by turbine engines including turbojets and turboprops but excluding turbo-shaft rotary-wing aircraft.

o. Turbine-use airport. Any airport that ROUTINELY serves FIXED-WING turbine-powered aircraft.

p. Wastewater treatment facility. Any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes. including Publicly Owned Treatment Works (POTW), as defined by Section 212 of the Federal Water Pollution Control Act (P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-576) and the Water Quality Act of 1987 (P.L. 100-4). This definition includes any pretreatment involving the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or introducing such pollutants into a otherwise POTW. (See 40 C.F. R. Section 403.3 (o), (p), & (q)).

q. Wildlife. Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, offspring there of egg, or (50 CFR 10.12, Taking, Possession, Transportation, Sale. Purchase. Barter. Exportation, and Importation of Wildlife and Plants). As used in this AC, WILDLIFE includes feral animals and domestic animals while out of the control of their owners (14 CFR 139.3, Certification and Operations: Land Airports Serving CAB-Certificated Scheduled Air Carriers Operating Large Aircraft (Other Than *Helicopters)*).

r. Wildlife attractants. Any human-made structure, land use practice, or human-made or natural geographic feature, that can attract or sustain hazardous wildlife within the landing or departure airspace, aircraft movement area, loading ramps, or aircraft parking areas of an airport. These attractants can include but are not limited to architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquacultural activities, surface mining, or wetlands.

s. Wildlife hazard. A potential for a damaging aircraft collision with wildlife on or near an airport (14 CFR 139.3).

2. RESERVED.

Response to California Air National Guard

- CANG-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of aircraft bird strike issues.
- CANG-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a general discussion of aircraft bird strike issues. The commenter recommended that contiguous native vegetation (e.g., Spartina foliosa) without creek channels or other open-water areas be restored within a two-mile zone off the ends of the runways at Moffett Federal Airfield. Extensive tidal marsh restoration is anticipated within the two mile radius of concern, but restoration of a complex of multi-order tidal channels is part of that restoration plan. The marsh plains of these areas will evolve from mudflat to cordgrass dominated marshes to complex marshes with pickleweed, cordgrass, and gumplant components. Many of the existing levees would be lowered. Tidal channels, and possibly open-water features such as marsh pannes are expected to form naturally in response to tidal restoration within breached ponds. Achieving contiguous tidal marsh cover without such features is impossible; if these marshes are poorly drained, extensive open-water marsh pannes may form, whereas well-drained marshes naturally contain extensive channel networks. Restoring marshes without such open-water features would also severely limit their wildlife habitat value, and the channels are primary habitat for fish species as well. Natural levees that form along the edges of channels provide nesting habitat for California clapper rails and high-tide refugia for that species and salt marsh harvest mouse; the rails require the channels themselves for foraging.

Although Pond A2E and portions of Ponds AB2 and A3W would be managed ponds under Alternative B, this alternative would still result in a substantial reduction in managed pond habitat (due to tidal restoration) within two miles of the ends of the runways. Under Alternative C, only A3W would remain a managed pond, the rest being restored to tidal action. As discussed in the Master Response regarding aircraft bird strike issues, the number of large birds that would pose particular hazards to aircraft (*e.g.*, gulls, pelicans, and cormorants) is expected to be reduced in the vicinity of the Mountain View-area salt ponds as a result of restoration under Alternatives B or C. Nevertheless, as future phases of the restoration are planned, there will be opportunities to revisit the issue of the location of tidal marsh restoration vs. managed ponds.

CANG-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a general discussion of aircraft bird strike issues. The commenter recommends that the Project ensure that there be a steep, rapid transition to deep open water off the end of the salt marsh in the vicinity of Moffett Federal Airfield to minimize the availability of mudflats exposed at low tide, thus limiting the number of waders, shorebirds, and waterfowl in the area. The bathymetry of the subtidal and intertidal areas in this portion of the Bay, and thus the extent of mudflats, is influenced by sediment inputs to the South Bay, current, and winds, all of which affect erosion and deposition. In particular, the Bayward edge of any tidal marsh, existing or restored, in the Mountain View area will be heavily influenced by prevailing west/northwest winds and the long fetch in this portion of the Bay. Thus, the Project can have little influence, if any, on the bathymetry and extent of mudflats in this area.

- CANG-4: The commenter recommended that the Project ensure that there is no exposed high ground amid open water (*e.g.*, levees) within the 10,000-ft zone where evening roosts of gulls, cormorants, pelicans and other species may occur. The SBSP Restoration Project would reduce the availability of levees surrounded by open water by restoring extensive tidal marsh. This tidal restoration would eliminate open water in the areas around many of the levees in the vicinity of the airfield, remove or possibly lower portions of the existing levees for tidal restoration purposes (making the levees less attractive to roosting birds), allow vegetation to colonize much of the remnant levee system (again, making the levees less attractive to roosting waterbirds), and eventually allow unmaintained levees to erode. Thus, less roosting habitat or these large waterbird species would be available after Project implementation than is currently available. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a general discussion of aircraft bird strike issues.
- CANG-5: The commenter recommended that no boardwalks or other structures that would attract perching and roosting birds be constructed within the salt marsh in the 10,000-ft separation zone. A wildlife observation platform may be constructed near the mouth of Stevens Creek, but no other structures in the vicinity of the airfield are proposed. This small platform is not expected to be used as a roost site regularly or by large numbers of birds. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a general discussion of aircraft bird strike issues.



DEPARTMENT OF THE AIR FORCE

AIR NATIONAL GUARD

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NGB/A7CV Conaway Hall 3500 Fetchet Avenue Andrews AFB MD 20762-5157

Yvonne LeTellier US Army Corps of Engineers 1455 Market Street San Francisco, CA 94103

Dear Ms. LeTellier

The purpose of this letter is to provide comments on the Draft Environmental Impact Statement/Report (DEIS/R) for the South Bay Salt Pond Restoration Project. During the scoping process the California Air National Guard's 129th Rescue Wing (129 RQW), U.S. Department of Agriculture (USDA), and the Federal Aviation Administration (FAA) expressed concerns to aviation safety with respect to potential wildlife hazards this proposal has to low-flying aircraft operating at airfields in the immediate vicinity of the project areas.

The Air Force records approximately 3,000 bird strikes each year. Almost half of these occur in the airfield environment. In 1995 the Air Force suffered 24 fatalities and the complete loss of an E-3 aircraft (modified Boeing 707) shortly after take-off when it struck a flock of birds. After reviewing the DEIS/R we find that the analysis is silent on wildlife hazard to aviation at both San Francisco International Airport and at Moffett Federal Airfield. The 129 RQW is based at and flies C-130 aircraft and HH-60 helicopters from Moffett Federal Airfield. The DEIS/R does not analyze the associated aviation safety risks of the proposed project.

Your agency along with the FAA, U.S. Air Force, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the USDA signed a Memorandum of Agreement acknowledging this issue and committing to work cooperatively to avoid wildlife hazards to aviation. Attached is a signed copy. In the spirit of the National Environmental Policy Act, aviation safety, and military readiness the DEIS/R should include thorough analysis of the wildlife hazards to aviation for each of the alternatives. If necessary, the alternatives should be redefined to avoid increasing wildlife hazard before implementing any federal undertaking.

The Air National Guard recognizes the unique wetland functions of the proposed restoration plan. As this process continues the consequences associated with aviation safety should be fully considered by the decision maker. Please include my office on the distribution for all future documents associated with this proposal. The point of contact for this issue is ANG-1

Mr. Robert Dogan, NGB/A7CVN. He can be reached at (301) 836-8859 or by email at robert.dogan@ang.af.mil.

ANG-1 continued

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Sincerely

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DAVID C. VAN GASBECK, GS-15, REM, CIPS Chief, Environmental Division

Attachment: MOU

Response to Air National Guard

ANG-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a general discussion of aircraft bird strike issues. Bird strike issues were not addressed explicitly in the Draft EIS/R because it is anticipated that the SBSP Restoration Project has the potential to reduce, rather than increase, the risk of bird strikes to aircraft using either San Francisco International Airport (SFO) or Moffett Federal Airfield. The conversion of managed ponds to tidal marsh is expected to reduce the extent of habitat for gulls, pelicans, and cormorants in the South Bay. Although dabbling ducks may benefit from tidal marsh, concentrations of large numbers of individuals, such as currently occur in the ponds immediately north of Moffett Federal Airfield, are expected to be fewer in restored tidal marshes than in managed ponds providing suitable habitat for these species.

As discussed in the Master Response regarding aircraft bird strike issues and in the response to Comment CANG-2 above, the restoration of tidal marsh under Alternatives B or C is particularly expected to reduce the number of large waterbirds in the areas immediately north of the runways at Moffett Federal Airfield. All of the proposed restoration activities would result in an improvement over existing conditions based on the type of wildlife that will be attracted to the area. The resulting wetland system should actually be less attractive to wildlife species that pose the greatest threat to aircraft at Moffett Federal Airfield.

SBSP Restoration Project activities are far enough removed from SFO that activities designed to attract and concentrate waterbirds in a particular portion of the Project Area (*e.g.*, due to management of enhanced ponds for particular species) are not expected to increase the risk of air strikes associated with SFO. Rather, the conversion of extensive areas of managed ponds used by large birds such as gulls, pelicans, and cormorants to vegetated tidal marsh that is not as conducive to use by these species is expected to result in an overall reduction in the abundance of these species in the vicinity of Moffett Federal Airfield. While numbers of nesting California Gulls continue to increase in the Bay area as a whole, this population increase will not be fostered by the SBSP Restoration Project. Rather, predator management activities and tidal restoration associated with the SBSP Restoration Project may actually result in a reduction of South Bay California Gull populations.

National Aeronautics and Space Administration

Ames Research Center Moffett Field, CA 94035-1000



May 3, 2007

Reply to Attn of: Q:218-6

Mr. Mendel Stewart USFWS Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

Dear Mr. Stewart:

NASA Ames Research Center (NASA Ames) has the following comments on the Draft South Bay Salt Pond Restoration Project Environmental Impact Statement/Report of March 2007.

General Comments

NASA Ames supports the project intentions of wetlands restoration, flood protection and public access.

Bird-Aircraft Strike Hazard

NASA would like to call your attention to the Federal Aviation Administration (FAA) Advisory Circular (AC 150/5200-33A, July 27, 2004), "Hazardous Wildlife Attractants on or Near Airports", which indicates that the greatest risk for a bird-aircraft strike is from large, heavy bodied birds, such as gulls, and flocking birds, such as geese, found within 10,000 ft of airfields, particularly in the take off and landing zones. Thus, consistent with the FAA AC, we request that priority be given to managing the restoration activities in AB1, AB2, A2W, A2E, and A3W to minimize this risk. These ponds are located in within 3,000 feet of the take off and landing zone or are adjacent to this zone where there is the greatest risk of an aircraft-bird. Ponds located further to the west, i.e., A1 and further to the east, i.e., A3N should also be managed to the extent possible to reduce bird-aircraft strike risk.

Converting these ponds to tidal marsh and minimizing open water habitat would help reduce bird-aircraft strike hazard, as would creating a contiguous cover of native cordgrass (*Spartina foliosa*) in the zone north of the runways. NASA Ames also recommends minimizing exposed high ground to the extent feasible consistent with flood protection requirements. Where levees are required, NASA Ames recommends designing, vegetating, and maintaining the levees and trails to discourage birds that pose a high risk to aircraft. NASA-1

NASA-2

Location of Bay Trail Segment North of Moffett Field

Realign the trail from from the southeast corner of A3W across A3W to the point where the southwestern corner of AB2 and the southeastern corner of A2E come together toward the north of the Airfield. See Attachment 1. The purpose of the realignment would be to minimize risk to NASA security, aviation safety, and wildlife conservation and to the safety of Bay Trail users and Refuge visitors, while still allowing recreational access to the Bay.

Impact on Western Pond Turtles from Phase 1 Bay Trail Opening North of Moffett Field

Increasing public access along the Northern Channel, which is proposed as a Phase 1 action, may have significant negative impacts on the Western pond turtle (*Clemmys marmorata*) population in that location, resulting from disturbance of the Western pond turtles' nesting and basking behaviors. In addition, with increased public access there would be increased risk of introduction of non-native red eared slider turtles to the Northern Channel. Red eared sliders are a serious concern in Western pond turtle habitat. They tend to out compete the natives for basking areas and food supply. Red eared sliders are now found in most of the small creeks that enter the San Francisco Bay. The Northern Channel has a very unique situation, where no sliders have been found and there is a large population of native Western pond turtles. This could potentially change with the trail opening, because of the increased risk of people releasing pet turtles into the Northern Channel.

NASA Ames is concerned that the Phase 1 action of opening the Bay Trail segment north of Moffett Field would occur prior to establishing baseline population numbers and habitat conditions for the Western pond turtle, and prior to establishing a monitoring plan and identifying triggers for adaptive management strategies.

NASA Ames as a Cooperating Agency

As a cooperating agency, NASA Ames would prepare a Record of Decision (ROD) after the Final South Bay Salt Pond Restoration Project Environmental Impact Statement/Report is published. The ROD would adopt the portions of the Final South Bay Salt Pond Restoration Project Environmental Impact Statement/Report pertaining to the portions of NASA Ames site that would be affected by the Restoration Project and the Phase 1 Actions.

Sea Level Rise

The Draft South Bay Salt Pond Restoration Project Environmental Impact Statement/Report states that levee heights will be based on a predicted sea level rise of six inches. However, the California Environmental Protection Agency's *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, dated March 2006, states: NASA-3

NASA-4

NASA-5

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p.3

Global sea level rise is projected to range from 4 to 33 inches during the 2000 to 2100 period. This compares to a rate of approximately 7.6 inches (19 cm) per century observed at San Francisco and San Diego during the last 100 years. Superimposed on these rising seal [sic] levels will be astronomically-driven tides, and fluctuations from weather, El Nino and other influences, so that, the occurrence of extreme events will increase as sea level rises (pp. 32-33).	NASA-6 continued
The findings of this, and other relevant reports, should be taken into account when deciding the height of the flood control levees.	
Clean Air Act Conformity	
The Draft South Bay Salt Pond Restoration Project Environmental Impact Statement/Report does not quantify the emissions of ozone precursors associated with the project from construction, traffic, operations and maintenance. As this is a federal action that is proposed in an ozone nonattainment area, a Clean Air Act Conformity determination is required.	NASA-7
Specific Comments	
p. ES-4, second line. It would make more sense to say that "managed ponds under Alternative B would not be converted," since under Alternative C, they would already be converted.	NASA-8
p. ES-23, Table ES-1, Impact 3.6-18. In the Alviso column under Phase 1 Actions, it is stated that the impact would be less than significant (LTS). However, mitigation may be required to avoid a significant impact on the Western pond turtle population in the Northern Channel. Please change the impact level to less than significant with mitigation (LTSM). If the mitigation is assumed to be the Adaptive Management Plan, which is an inherent part of the project, then a specific adaptive management strategy must be identified to address potential impacts from this proposed Phase 1 action.	NASA-9
p. ES-34, Table ES-2, Impact 3.12-3. Rather than only focusing on increased parking, the project should propose working with local and regional transit agencies to increase public transit access to recreational facilities. This would help to reduce air emissions associated with the project.	NASA-10
p. ES-35, Table ES-2, Impact 3.13-1. States that construction can occur in Hayward Monday through Friday, and on Sunday and holidays. No mention is made of construction on Saturday.	NASA-11
p. 1-5, Section 1.2.1, paragraph. Other portions of the document state that its purpose is also to provide a program level analysis for the Shoreline Study.	NASA-12
p. 1-27, Section 1.7, paragraph 1. Add: This EIS/R will be used by NASA Ames, a cooperating agency, when considering approval of the portions of the SBSP Restoration	NASA-13

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Project and the Shoreline Study that are within and adjacent to NASA Ames property boundary.	NASA-13
p. 2-2, Table 2-1, Row 2. In the column for Alternative C, it should be noted that Pond A2E, which is north of the Moffett Field runways, would not be reconfigured to enhance foraging, roosting and nesting opportunities. Rather it would be managed to reduce the risk of bird-aircraft strike hazard.	NASA-14
p. 2-4, Table 2.3, Public Access. Add specific monitoring parameters and methods for the Western pond turtle population in the Northern Channel.	NASA-15
p. 2-47, paragraph 2, line 1. Change east to west.	NASA-16
p. 2-53, paragraph 2. Add discussion of management of Ponds A2E and A3W to reduce risk of bird-aircraft strike hazard.	NASA-17
p. 2-55, Figure 2-6b. The proposed levee alignment north of Moffett Field along the Northern Channel does not reflect NASA previous comments about realigning this levee to the north. See Attachment 1 for NASA preferred location. This same change should be made on all Figures that show the proposed levee alignment in this location.	NASA-18
p. 2-59, Alviso Section, paragraph 1. Change description of levee to address NASA's preferred route as shown on Attachment 1.	NASA-19
p. 2-64, Table 2-8. Trails, Row 2. Change description of levee to address NASA's preferred route as shown on Attachment 1. Ensure safety and security, access points, staging areas, and waterfowl hunting in Pond A3W should only occur north of the levee alignment proposed by NASA as shown on Attachment 1.	NASA-20
p. 2-65. Change: "The segment of Bay Trail spine from Stevens Creek to Sunnyvale would be along an existing levee" to a description of NASA's preferred alignment as shown in Attachment 1.	NASA-21
p. 2-73, paragraph. Change to all managed ponds in Alternative C, except A3W, would be reconfigured	NASA-22
p. 2-79, paragraph 2. How would fill used for the project be screened to ensure that is does not contain persistent, bioaccumulative, toxic contaminants?	NASA-23
p. 2-82, Public Access and Recreation Plan. States tht all Phase 1 actions will be ADA accessible. Is this true of the Bay Trail segment on existing levees north of Moffett Field?	NASA-24
p. 2-86, paragraph 3. Fencing may be needed to minimize human disturbance to other wildlife, as well as to birds.	NASA-25

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p. 2-153, Section 2.6.1. Add to end of last sentence:in determining the extent and location of future tidal restoration and public access features.	NASA-26	
p. 3.1-5, Adaptive Management Plan. Add discussion of how adaptive management would be used to phase, mitigate, and make other decisions about public access.	NASA-27	
p. 3.3-44, Adaptive Management Plan, paragraph 2. How many months of consistent observations would occur before the frequency was reduced to annually? For how long would the levees be surveyed annually? After decreasing from annual surveys, how often would they be surveyed and over what duration?	NASA-28	
p. 3.3-51, Adaptive Management Plan, paragraph 2. For how long would the initial monitoring occur? What time interval would ensure that no further changes were occurring? For how long would the initial monthly levee checks occur? Same questions on 3.3-54.	NASA-29	
p. 3.4-59, Increased Methylmercury Production and Bioaccumulation, paragraph 3. When would site-specific food web modeling and other tools be developed to establish numeric trigger levels?	NASA-30	
p. 3.4-60, paragraph 2. States that guidelines for sediment quality objectives may be adopted by early 2007. Have they been adopted?	NASA-31	
p. 3.4-86, SBSP Mitigation Measure 3.4-5c. Should include receptacles for recyclable materials.	NASA-32	
p. 3.5-5, Faults. The Calaveras and Greenville Faults are not shown on Figure 3.5-1.	NASA-33	
p. 3.5-27, Alviso. The findings that levees could be overtopped or breached, causing flooding to areas adjacent to the ponds seem inconsistent with the determination that the potential impacts would be less than significant.	NASA-34	
p. 3.6-15, paragraph 2. Crittenden Marsh is west of the north end of the Moffett Field runways.	NASA-35	
p. 3.6-30, Bullet 1. There is a black crowned night heron rookery in the northern part of Moffett Field.	NASA-36	
p. 3.6-47, Section 3.6.3, Bullet 6. This bullet does not pertain to biological resources.	NASA-37	
p. 3.6-48, paragraphs 2 and 3. Potential impacts to habitats could also occur from increased public access.	NASA-38	
p. 3.6-56, Impact: Potential recreation-oriented impacts to sensitive species and their habitats. Add a bullet describing the threshold of significance for the Western pond turtle population in the Northern Channel.	NASA-39	

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p. 3.6-126, SBSP Impact 3.6-18, paragraph 1. Add increased introduction of nonnative species to the list of potential impacts caused by increased recreational use.	NASA-39 continued
p. 3.6-127, paragraph 1. Add discussion of potential impacts to Western pond turtle.	NASA-40
p. 3.6-128, Determination of Threshold of Significance. Add a bullet describing the threshold of significance for the Western pond turtle population in the Northern Channel.	NASA-41
p. 3.6-128, Adaptive Management Plan. Add Western pond turtle to list of species whose numbers and locations will be monitored.	NASA-42
p. 3.6-129, Determination of Baseline and Monitoring. Baseline for the Western pond turtle population in the Northern Channel should be established prior to implementation of the proposed Phase 1 action of opening a Bay Trail segment north of Moffett Field.	NASA-43
p. 3.6-129, Adaptive Management Triggers. Adaptive Management Triggers for the Western pond turtle population in the Northern Channel should be established prior to implementation of the proposed Phase 1 action of opening a Bay Trail segment north of Moffett Field.	NASA-44
p. 3.6-155, Alviso. Include discussion of potential impacts on Western pond turtles.	NASA-45
p. 3.6-184, paragraph 1. Include discussion of potential impacts on Western pond turtles.	NASA-46
p. 3.14-7, Table 3.14-3, Ozone row, Attainment status column. There is a number ⁹ , but no footnote.	NASA-47
p. 3.16-4, Figure 3.16-2. Add location of Mountain View sanitary sewer line's route to the Palo Alto Regional Water Quality Control Plant.	NASA-48
p. 3.16-18, SBSP Impact 3.16-6, Alternative B Managed Pond Emphasis. Add discussion of Mountain View sanitary sewer line in the vicinity of the Midpeninsula Regional Open Space Lands that are proposed for tidal restoration.	NASA-49
p. 3.16-21, SBSP Impact 3.16-9. Add discussion of Mountain View sanitary sewer line in the vicinity of the Midpeninsula Regional Open Space Lands where new flood control levee is proposed.	NASA-50
Appendix D, p. 15, line 17. Add Northern Channel to locations where studies are planned in relation to Phase 1.	NASA-51
NASA Ames looks forward to working with the South Bay Salt Pond Restoration Project Team on the implementation of this important project. Thank you for this opportunity to comment on the Draft EIS/R. If you have any questions, I can be reached at 650-604-3355.	

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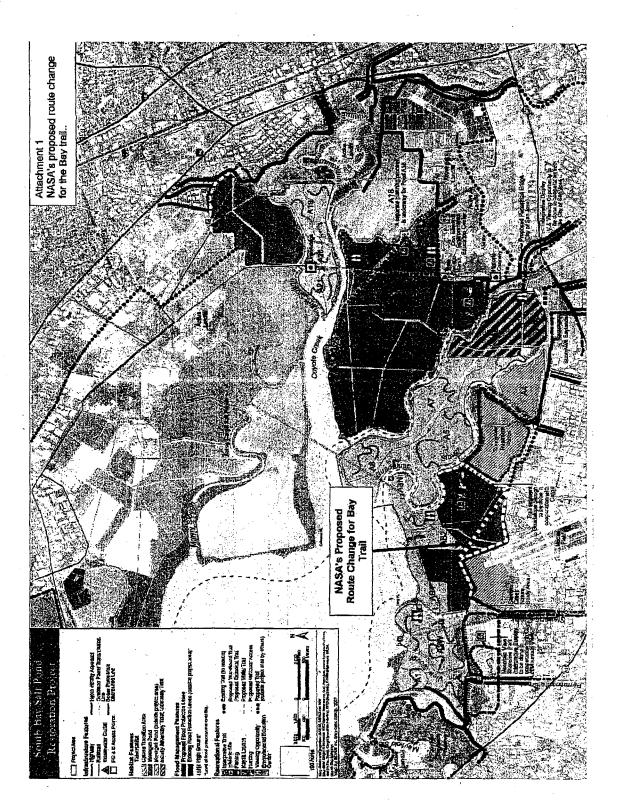
Sincerely,

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Sandy Olliges Deputy Director Safety, Environmental, and Mission Assurance

Attachment

cc: Yvonne LeTellier, US Army Corps of Engineers John Krause, California Department of Fish and Game



Response to NASA

- NASA-1: Comment acknowledged. The comment expresses support for the intentions of the SBSP Restoration Project and does not address the adequacy of the EIS/R.
- NASA-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of aircraft bird strike issues.
- NASA-3: The trails outlined on the Alviso pond complex maps (Figures 2-5b and 2-7b (as well as Figures ES-3b and ES-4b) in the EIS/R) illustrate potential alignments at the program level. The alignments could change as a result of the project-level analysis and design (including the location of the proposed Bay Trail segment along Pond A3W just north of Moffett Federal Airfield, which the commenter wants moved farther north). During the project-level design process, it will be determined whether to keep the proposed alignment or change it. A number of factors will be considered during project-level design for the trail, including safety, security, and habitat.
- NASA-4: The 2.25-mile Stevens Creek to Sunnyvale Bay Trail Spine will be an integral spine connection in the Association of Bay Area Government's Bay Trail Project, a partially constructed 400-mile recreational "ring around the Bay." Given the proximity of this particular reach of trail to a known breeding population of western pond turtles, measures will be included in the Phase 1 action to educate the public about and help protect this population. These measures include symbolic fencing (post and cable) along the south side of the trail and educational signage to inform trail users of the presence of this breeding population and to discourage actions such as the release of non-native pet turtles that could adversely affect the western pond turtles at this location. Dogs will not be allowed on this trail except for trained dogs used in hunting. These measures, which are incorporated into the Project, will preclude a significant impact to this western pond turtle population, and thus the additional impact discussion regarding this population, recommended in NASA's comments, not necessary.

Text has been added to the discussion under SBSP Impact 3.6-18 and Phase 1 Impact 3.6-18 regarding measures that are incorporated into the Project to minimize impacts to western pond turtles.

Potential effects of the Project, including public access, on western pond turtles using the Northern Channel is not a "staircase" issue; thus, study of these effects was not included in the list of Phase 1 applied studies in Appendix D. However, the Project will encourage outside researchers to examine a number of issues not specifically listed in Appendix D, including potential effects of the Project on western pond turtles. A list of such "encouraged" studies would be maintained on the Project's website on an ongoing basis.

NASA-5: Comment acknowledged. As noted in Section 1.2 of the EIS/R, NASA is a cooperating agency under NEPA, and as such it can prepare a Record of Decision (ROD) that adopts

the component of the Final SBSP Restoration Project that pertains to the portions of the NASA Ames site that would be affected by the Project and the Phase 1 actions.

NASA-6: The commenter suggests that the findings of the *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, dated March 2006, and other relevant reports, be taken into account when deciding the height of the flood protection levees. This report was reviewed, and the findings of this report rely on the 2001 Intergovernmental Panel on Climate Change (IPCC 2001) analysis with respect to future rates of global sea level rise. The programmatic-level EIS/R impact analyses used the IPCC 2001 mid-range estimate of 6 inches of sea level rise over the next 50 years. The EIS/R acknowledged that this estimate was in process of being updated and that future sea level rise estimates and rates could be greater than 6 inches. During the phased implementation, the height of the flood protection levees would be designed based on the best information available at the time, including the California Climate Change Center report (CCCC 2006) and the updated IPCC (2007) report.

Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

- NASA-7: Please see the response to Comment USEPA-3.
- NASA-8: The suggested revision in Section S.1.1 has been made. The sentence below has been revised as follows:

The implicit assumption in this construct is that ponds that are managed ponds under Alternative $C \underline{B}$ would not be converted to tidal habitat unless and until after:

- NASA-9: Please see the response to Comment NASA-4.
- NASA-10: The Project proponents have not yet worked with local and regional transit agencies to increase public transit access to recreational facilities. However, this is a good suggestion and the Project proponents are willing to work with these agencies to increase public transit access.
- NASA-11: As described in Section 3.13.3 of the EIS/R, Section 4.1.03 of the City of Hayward Municipal Code prohibits construction noise level of more than six dB above the ambient level at any point outside the property plane before 7 am and after 7 pm daily except on Sundays and holidays. As such, noise levels from 7 am to 7 pm are allowed from Monday through Saturday. The Mitigation Measure SBSP Impact 3.13-1 inadvertently limits construction activities to the weekdays. Mitigation Measure 3.13-1 in Section 3.13 of the EIS/R has been revised as follows:

Eden Landing

- City of Hayward: construction activities shall occur between 7 am and 7 pm Monday through Friday Saturday, and between 10 am and 6 pm on Sunday and holidays.
- NASA-12: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Shoreline Study.
- NASA-13: As stated in Section 1.2 of the EIS/R and discussed in the response to Comment NASA-5, NASA is a cooperating agency for the SBSP Restoration Project. Section 1.7 of the EIS/R has been revised as follows:

The EIS/R will also be used by responsible agencies that have review and permit authority over the Project. <u>NASA Ames, a cooperating agency, will use this EIS/R</u> when considering approval of the portions of the SBSP Restoration Project that are within and/or adjacent to the NASA Ames property boundary.

- NASA-14: Table 2-1 of the EIS/R is intended to provide an overview of the Project and does not specify the changes to any individual ponds. Figures 2-5b and 2-7b (also Figures ES-3b and ES-4b) show the anticipated changes of Pond A2E over the 50-year planning period for Alternatives B and C, respectively. Under Alternative B, Pond A2E would become a managed pond, and under Alternative C, this pond would become tidal habitat. As described in Section 2.4.3, managed ponds would be reconfigured to improve foraging, roosting, and nesting opportunities for shorebirds, waterfowl, and other waterbirds. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of aircraft bird strikes.
- NASA-15: Please refer to the response to Comment NASA-4.
- NASA-16: The EIS/R text under the heading Alviso in Section 2.4.2 has been revised as follows:

The levees around the ponds <u>east west</u> of Guadalupe Slough (Ponds A1 through A3W) are high priority levees to be maintained.

- NASA-17: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of aircraft bird strike issues.
- NASA-18: The levee alignment north of Moffett Federal Airfield along the North Channel could be placed at either NASA's proposed location, the location shown in the EIS/R, or another location to be determined. The figures illustrate a potential alignment at the program level. The alignment could change as a result of project-level analysis and design. Several factors will be considered when locating the levee and the corresponding segment of the Bay Trail, including potential aircraft bird strike hazards, safety and security, access points, and habitat, during project-level design for the levee and trail.

- NASA-19: Comment acknowledged. Please see the response to Comment NASA-18.
- NASA-20: Please see the response to Comment NASA-3 above.
- NASA-21: Please see the response to Comment NASA-3 above.
- NASA-22: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of aircraft bird strike issues, including waterfowl.
- NASA-23: Mitigation Measure 3.4-5d calls for monitoring sediments to follow existing guidance and comply with emerging regulations. The recent Water and Sediment Quality Analysis Report produced for SCVWD's Alviso Slough Restoration Project is an example of how Mitigation Measure 3.4-5d would be implemented by the Project. That report compares concentrations of PCBs and legacy organochlorine pesticides to guidelines established by the San Francisco Bay Regional Water Quality Control Board. A similar approach is anticipated in implementing SBSP Mitigation Measure 3.4-5d. Fill would be screened according to currently accepted sampling and analysis protocols and compared to existing guidelines and regulations.
- NASA-24: Per this comment, the following text change was made to Chapter 2, Section 2.5.1 Overview, Public Access and Recreation Plan, paragraph 1:

All Phase 1 actions are designed to be accessible under the American with Disabilities Act (ADA) of 1990; however, not all levee trail improvements may be completed in the initial phases of construction due to funding constraints. Many of the proposed Phase 1 action sites may be universally accessible with the current levee surfacing however some locations will need improvements such as regrading and resurfacing. For the Bay Trail spine segment along the existing levee at Pond A3W, it would be made open to the public in its current condition, with a smooth earthen surfacing. Ultimately this trail segment would be rebuilt when the flood control levee is built so future improvements for accessibility would be made at that time.

NASA-25: Per this comment, the following text change was made to Chapter 2, Section 2.5.1 Overview, Public Access and Recreation Plan, paragraph 3:

Fencing along trails, if needed, would be provided for public safety or to minimize human disturbance to bird<u>s and other wildlife</u> habitat areas.

NASA-26: The last sentence of Section 2.6.1 in the EIS/R has been revised as follows:

Future actions would be based, in part, on the evaluation of adaptive management information collected in previous phases. Information collected in Phase 1 from monitoring and applied studies on bird response to management, MeHg, and public access-wildlife interactions would be instrumental in determining the extent and location of future tidal restoration and public access features.

NASA-27: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

The Adaptive Management Plan has been expanded to more explicitly incorporate public access elements. New information obtained from monitoring of the wildlife responses to changes in public access will directly influence decision-making related to existing public access elements and future Project phases as understanding of the ecosystem response improves. Potential adverse environmental impacts can thus be avoided as decision makers better understand how public access actions affect the biological attributes of the South Bay ecosystem. The specific adaptive management elements of the Phase 1 actions can be found in Section 2.5 and Figure 2-3b, The Adaptive Management Staircase of Recreation and Public Access.

NASA-28: The commenter requests additional information regarding when the frequency of levee inspections under the Adaptive Management Plan would be reduced from monthly to annually with respect to SBSP Impact 3.3-1. Monthly monitoring would occur until consistent observations are observed for several consecutive months, as stated in the EIS/R. The length of monthly monitoring is therefore difficult to predict at this time as it would depend on the monitoring observations. The number of consistent months required to decrease from monthly to annual observations would depend on many factors, such as the season in which observations were made, climatic conditions, and previous observational data recorded before consistency was achieved. Annual levee observations would continue indefinitely, and more frequent observations would be obtained if needed (*e.g.*, after large rainfall or storm events) as described in Table 2.3, Adaptive Management Summary Table.

The commenter requests additional information regarding when the frequency of annual levee surveys under the Adaptive Management Plan would be reduced. The levees would be surveyed annually in order to characterize settlement of the newly constructed and/or improved levees. In areas where little settlement/subsidence is observed, the frequency of the surveys would be reduced sooner than in areas where settlement/subsidence of the levees is more pronounced. As with the monthly levee inspections, the timeframe for reducing the frequency of the annual surveys is difficult to predict as it would depend on many factors.

- NASA-29: Please refer to the response to Comment NASA-28.
- NASA-30: Work to develop site-specific food web models for methylmercury production and bioaccumulation is currently under way by the South Baylands Mercury Project. Upon completion and peer review of that work, numeric trigger levels can be proposed. This may take up to two years, and possibly longer.

NASA-31: The status of the State's Sediment Quality Objective Program is periodically updated at http://www.swrcb.ca.gov/bptcp/sediment.html. The most recent document is a *Supplemental Agreement and Stipulated Further Order* by the Superior Court of California dated March 19, 2007. That court order mandates the following timeline for the State Water Resources Control Board:

February 29, 2008: SWRCB shall adopt and submit to the Office of Administrative Law all Phase 1 sediment quality objectives;

June 30, 2008: SWRCB shall complete and circulate for public review a draft proposal for Phase II sediment quality objectives and related implementation policy; and

December 31, 2010: SWRCB shall adopt and submit to the Office of Administrative Law all Phase II sediment quality objectives.

The text under the heading Mobilization and Transport of Other Contaminants in Section 3.4.4 of the EIS/R has been revised as follows:

Guidelines for developing these objectives may be adopted by early 2007. This policy development is expected to be completed by the end of 2010.

NASA-32: Mitigation Measure 3.4-5c of Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

This mitigat<u>iones addresses</u> impacts from illegal discharge and dumping. The likelihood of increasing frequency of illegal discharge and dumping could likely will be minimized with adequate public education and outreach, patrolling of the area, readily accessible and frequently serviced trash <u>and</u> <u>recyclable materials</u> receptacles, and timely clean-up activities.

State law prohibits littering, and all municipalities in the SBSP Restoration Project Area have anti-littering ordinances. As long as existing laws are enforced, negative impacts from illegal discharges and dumping will be avoided. Implementation of trash TMDLs planned for the Guadalupe River and Coyote Creek will increase the likelihood of effective implementation of existing litter control ordinances by municipalities with jurisdiction in or near the Project Area. Specifically, the Project will undertake the following activities to ensure that existing programs and practices avoid impacts due to illegal discharge and dumping:

 Gate structures upstream of the Project Area will include a trash capture device that will prevent fouling of marsh and pond complexes;

- <u>Plans for recreational access in the Project Area will include</u> <u>appropriate trash collection receptacles and a plan for ensuring</u> <u>regular collection and servicing; and</u>
- <u>"No Littering" signs will be posted in public access areas.</u>
- NASA-33: Figure 3.5-1 has been revised to include the label for the Calaveras Fault. The Greenville Fault is located more than 20 miles from the SBSP Restoration Project Area and as such is not within the map extent of Figures 3-5.1. However, the text under Regional Geology of Section 3.5, Geology, Soils, and Seismicity, has been revised to indicate the fault's distance from the SBSP Restoration Project Area, as follows:

The San Francisco Bay Region is located within a very broad zone of rightlateral transpression (strike-slip faulting and compression) marking a tectonic boundary zone dominated by strike-slip faulting associated with the San Andreas Fault system. The major active components of the San Andreas Fault system that occur in the South San Francisco Bay Region include the proper or main trace of the San Andreas Hayward, and Calaveras, and Greenville Faults (Figure 3.5-1). Locations of the San Andreas, Hayward, and Calaveras Faults are shown on Figure 3.5-1. The Greenville Fault is approximately 33 km northeast of the SBSP Restoration Project Area.

- NASA-34: Overtopping and breaching of outboard pond levees is a possible consequence of ongoing subsidence. The no action level of significance is "potentially significant". The Phase 1 action level of significance is lower because new and/or improved flood control levees will be designed and constructed to protect inland areas from the effects of a breach in the outboard levees.
- NASA-35: Comment acknowledged. The text in Section 3.6.1, Biological Resources of the EIS/R, under the heading Other Watershed Habitats, has been revised to read as follows:

Crittenden Marsh, a small nontidal salt marsh <u>west of</u> the north end of Moffett Federal Airfield <u>runways</u>, also supports high numbers of waterbirds, including breeding black-necked stilts, American avocets, and waterfowl, foraging ducks and terns, and up to thousands of shorebirds that roost and forage in the shallow water and on exposed mud during high tide (when water levels within the marsh are not too high).

NASA-36: The text in Section 3.6.1, Biological Resources of the EIS/R, under the heading Low Salinity Ponds has been revised to include a description of Black-crowned Night-Heron rookery in the northern part of Moffett Federal Airfield, as follows:

Mixed heronries are currently located along Guadalupe Slough and at the west end of the Coyote Creek Lagoon near Newby Island, <u>a black-crowned</u>

<u>night-heron rookery has been observed at least some years in the northern</u> <u>part of Moffett Airfield</u>, and small numbers of great blue herons nest on transmission towers in or adjacent to several salt ponds in this pond complex (see Figure 3.6-4);

- NASA-37: Comment acknowledged. No revision to the text is required. This bullet describes guidelines for determining significant effects under CEQA Guidelines.
- NASA-38: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- NASA-39: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues. Text has been added to the first paragraph under SBSP Impact 3.6-18 as follows:

New trails would be built, increasing access for pedestrians and bicyclists, and several new kayak launching areas would be established, increasing boat-based use of tidal sloughs in the Project Area. Increased recreational use and the maintenance of trails and recreational facilities have the potential to disturb wildlife, trample vegetation, decrease nesting success, increase predation, increase the introduction of non-native species, and decrease habitat quality (*e.g.*, see Korschgen and Dahlgren [1992] for a summary of the effects of human disturbance on waterfowl). Ultimately, such impacts could result in decreases in the abundance of breeding, foraging, and roosting wildlife.

- NASA-40: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-41: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-42: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-43: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-44: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-45: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.
- NASA-46: Please see the response to Comment NASA-4 for a discussion of western pond turtle issues.

- NASA-47: The footnote reference number was incorrectly identified in Table 3.14-3 under "Attainment Status" in the "Ozone" column. The reference should be to footnote 7, which specifies that "[t]he 1-hour ozone NAAQS was revoked on June 15, 2005." The footnote reference has been revised in the EIS/R.
- NASA-48: It is acknowledged that numerous wastewater (sanitary sewer) lines are adjacent to the SBSP Restoration Project Area that are not shown on the utility figures, such as the sanitary sewer line running from Mountain View through the Palo Alto Baylands Preserve (adjacent to the Alviso pond complex) to the Palo Alto Regional Water Quality Control Plant. The wastewater force mains outside the Project Area are shown on the figures, but the extensive storm drain and wastewater line networks within the adjacent communities have not been shown. There are a considerable number of storm drains and wastewater lines outside of the Project Area within the respective community networks and these facilities are not shown because they are outside of the SBSP Restoration Project Area and they are not directly affected by the Project. Where these networks intersect with the Project Area (*e.g.*, at pump station locations), the relevant facilities are shown on the figures.
- NASA-49: The wastewater (sanitary sewer) mentioned in Comment NASA-48 is outside of the SBSP Restoration Project Area and would not be affected by the proposed tidal restoration in the Alviso pond complex.
- NASA-50: The wastewater (sanitary sewer) mentioned in Comments NASA-48 and NASA-49 is outside of the SBSP Restoration Project Area and would not be affected by the construction of new and/or improved flood protection levees proposed in the Alviso pond complex.
- NASA-51: The commenter requests that the Northern Channel be added to the locations where studies are planned in relation to the Phase 1 actions. Potential effects of the Project, including public access, on western pond turtles using the Northern Channel is not a "staircase" issue; thus, study of these effects was not included in the list of Phase 1 applied studies in Appendix D. However, the Project will encourage outside researchers to examine a number of issues not specifically listed in Appendix D, including potential effects of the Project on western pond turtles. A list of such "encouraged" studies would be maintained on the Project's website on an ongoing basis. The Project will not be able to provide funding for all such studies, but Project Managers should assist to the extent they can with permits, letters of support, and other in-kind services, for valuable studies when appropriate. If demand is great for this type of research, the Project's science managers may develop a review system to help managers select research most likely to assist the Project.

USDA

USDA-1

Date: May 3, 2007



Jnited States Separament of Agriculture

Animal and Plant Health Inspection Service

Wildlife Services

California State Office

3419A Arden Way Sacramento, CA 95825 (916) 979-2675

Clyde Morris USFWS Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, Ca 94560

Dear Mr. Morris,

USDA Wildlife Services is providing the following comments on the Draft Environmental Impact Statement/Report for the South Bay Salt Pond Restoration Project. The U.S. Fish and Wildlife Service is a signatory on a Memorandum of Agreement (7/29/2003) between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, and the U.S. Department of Agriculture to address Aircraft-Wildlife Strikes. This Memorandum of Agreement (MOA) acknowledges each signatory agency's respective missions. Through this MOA, the agencies establish procedures necessary to coordinate their missions to more effectively address existing and future environmental conditions contributing to aircraft-wildlife strikes throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety, while protecting the Nation's valuable environmental resources. USDA's concern lies under Section 1 Para C2: The signatory agencies:

C. Agree that the three major activities of most concern include, but are not limited to: 2. development of conservation/mitigation habitats or other land uses that could attract hazardous wildlife to airports or nearby areas.

Under this MOA, as a signatory, USDA WS recommends that the USFWS South Bay Salt Pond Restoration Project (Project) should take into consideration the impacts that restoration plans will have to aircraft and human safety at Moffett Federal Airfield in Santa Clara County, CA. Shorebirds, waterfowl, and other waterbirds represent significant threat to aircraft that utilize Moffett Field. Both Alternative B and Alternative C of the Draft EIS/R include managing ponds for a variety of bird species. The Project has the potential to create a hazardous risk to aircraft and human safety, through the increased possibility of aircraft collisions with bird species.

The Federal Aviation Authority's Advisory Circular # AC5200-33A, "Hazardous Wildlife Attractants on or near Airports", designates a 10,000 foot separation radius around airports in which certain land uses that can attract hazardous wildlife are not recommended. The Project should not manage ponds to enhance and maximize their use by shorebirds and waterfowl within a 10,000 feet radius of Moffett Field. There are five ponds that fall within a 10,000 foot radius of Moffett Federal Airport. These ponds are identified on the Project map as AB1, A2E, AB2, A3W, and A2W. Alternative B states, "Approximately 20 percent of the managed ponds (approximately 1,600 acres) would be reconfigured and intensively managed



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to improve foraging, roosting, and nesting opportunities for shorebirds, waterfowl, and other waterbirds." Alternative C states, "All the managed ponds in Alternative C would be reconfigured and intensively managed to substantially enhance foraging, roosting, and nesting opportunities for shorebirds, waterfowl, and other waterbirds."

USDA WS strongly recommends that the Project minimize the attractiveness of the restoration area within the 10,000 foot radius of Moffett Field to shorebirds, waterfowl, waterbirds, and other colonial roosting birds. Pursuant to this goal, we make the following specific recommendations.

- 1) No intensively managed ponds within 10,000 feet of Moffett Field AOA,
- 2) Convert ponds AB1, A2E, AB2, A3W, and A2W into tidal marsh habitat,
- 3) Minimize or eliminate open water,
- 4) Any open water areas be maintained as deepwater sites,
- 5) No internal islands be created and remove any existing islands.

By following these recommendations the USFWS will be working within, the signed MOA and USDA WS believes that the attractiveness of these ponds to gulls, terns, ducks, geese and shorebirds will be reduced. Consequently, the safety of aircraft operations at Moffett Federal Airfield will be improved.

Jeff Amaral Wildlife Biologist USDA-Wildlife Services Moffett Field, CA 94035 650-604-4119 Email: Jeffrey.F.Amaral@aphis.usda.gov USDA-1 continued

Response to US Department of Agriculture

- USDA-1: The commenter notes that several ponds within 10,000 ft of Moffett Federal Airfield will be managed specifically to attract waterbirds, and makes the following specific recommendations:
 - 1) No intensively managed ponds within 10,000 ft of Moffett Federal Airfield;
 - 2) Convert ponds AB1, A2E, AB2, A3W, and A2W into tidal marsh habitat;
 - 3) Minimize or eliminate open water;
 - 4) Any open water areas should be maintained as deepwater sites; and
 - 5) No internal islands should be created, and existing islands should be removed.

As discussed in the Master Response regarding aircraft bird strike issues in Section 2.1, and in the responses to Comments CANG-2 to CANG-4 and ANG-1 above, the SBSP Restoration Project is expected to result in a general decrease in the abundance of large waterbirds in the areas immediately north of the runways at Moffett Federal Airfield due to the conversion of many of the managed ponds in the vicinity to tidal marshes. Although some ponds (e.g., Pond A3W) would be managed specifically for bird use, (a) the number of large waterbirds such as gulls, pelicans, and cormorants using this pond would likely be lower after the pond is reconfigured, since the majority of the pond would likely be managed for smaller species such as shorebirds and ducks, and (b) the overall abundance of large waterbirds in the immediate vicinity of the runways would decrease. The Master Response regarding aircraft bird strike issues discusses why Pond A3W is more suitable for use as a managed pond than for tidal marsh restoration. The responses to comments CANG-2, CANG-3, and CANG-4 above respond to the commenter's concerns regarding minimization of open water, maintenance of open-water areas as deepwater sites, and reduction of upland levees that may be used by roosting birds. If internal islands are constructed in Pond A3W for use by nesting birds, these islands could be placed as far as possible from the airfield runways, and management could discourage the use of these islands by nesting gulls to reduce the abundance of larger waterbirds in the area.

FAX NO. 4159478026

USEPA



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

May 3, 2007

Clyde Morris U.S. Fish and Wildlife Service Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

Yvonne LeTellier U.S. Army Corps of Engineers 1455 Market Street San Francisco, CA 94103

Subject: EPA Comments on the Draft Programmatic Environmental Impact Statement (PEIS) for the South Bay Salt Ponds Restoration Project, Alameda, Santa Clara, and San Mateo Counties, California (CEQ #20070083)

Dear Mr. Morris and Ms. LeTellier:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Programmatic Environmental Impact Statement (Draft PEIS) for the South Bay Salt Ponds (SBSP) Restoration Project, 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 Draft PEIS analyzes the proposed management strategy for 15,100 acres of former commercial salt ponds in South San Francisco Bay and includes an adaptive management strategy to restore tidal habitat and create managed pond habitat. EPA supports this restoration project and the environmental benefits that will be achieved through the eventual restoration of the South Bay. USEPA-1

Based on our review, we have rated the Draft PEIS as Environmental Concerns -Insufficient Information (EC-2). A Summary of EPA Ratings is enclosed. Additional information and clarification is needed in the PEIS to identify the strategy for NEPA compliance for the separate, but closely-related, U.S. Army Corps of Engineers' (Corps) South San Francisco Bay Shoreline Study (Shoreline Study). In addition, EPA is concerned that the Draft PEIS does not sufficiently address how the programmatic and project-level documents will address air quality conformity.

The alternatives in the Draft PEIS analyze options for a 50-year management plan for the area and "Phase 1" project-level activities of the SBSP Restoration Project. The Draft PEIS also is intended to serve as the "tiering document" for future phases of both the SBSP Restoration Project and the Shoreline Study, a separate effort to provide flood protection, environmental

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P. 03

restoration, and improvements to recreational and public access for the South Bay. The Corps is also preparing a separate EIS for the first component of the Shoreline Study (Alviso Ponds and Santa Clara County Interim Feasibility Study) which will tier off of the SBSP Restoration Project PEIS.

EPA is concerned that the intent of this Draft PEIS is to provide programmatic NEPA compliance for areas outside the geographic scope covered. Specifically, the overall geographic scope of the Shoreline Study exceeds the geographic scope of the SBSP Restoration Project Draft PEIS, yet this Draft PEIS is intended to serve as a programmatic EIS which the Shoreline Study will tier-off of when future projects are proposed. Although alternatives for the Shoreline Study are not currently developed at this time, the Final PEIS for the Restoration Project should clarify what specific Shoreline Study activities are intended to be covered programmatically by this NEPA documentation and how the tiering process would work for future analysis of interim feasibility studies. The Final PEIS should outline the future NEPA compliance process for feasibility studies that would occur outside of the geographic scope of the SBSP Restoration Project or would result in activities or impacts that are not assessed in the SBSP Restoration Project Draft PEIS.

EPA is also concerned that the Draft PEIS does not sufficiently address how the programmatic and project-level documents will address conformity to the area's air quality state implementation plan. EPA recommends the Final EIS address the applicability of conformity for Phase 1 of the SBSP Restoration Project and identify the process and timeframe to determine conformity for future phases of the SBSP Restoration Project and the separate Shoreline Study. EPA also recommends reducing construction and operation-related air quality impacts and avoiding activities that will disturb (i.e., create airborne dust) mercury-contaminated sediments that may affect nearby residents and sensitive receptors. Please see the enclosed Detailed Comments for a description of these concerns and our recommendations.

EPA supports this project and the environmental benefits that will be achieved through the eventual restoration of the South Bay. EPA notes that the Draft PEIS identifies that the likely environmentally preferred alternative will be a possible outcome somewhere between the range of Alternative B – Managed Pond Emphasis (50:50 tidal habitat: managed ponds by area) and Alternative C – Tidal Emphasis (90:10 tidal habitat: managed ponds by area) due to the integral adaptive management component of this project. As the intent of the adaptive management strategy is to avoid and reduce the potential of significant environmental impacts, EPA recommends that the project proponents strive to restore natural, self-sustaining tidal habitat to the greatest degree possible. USEPA-5

USEPA-4

continued

We appreciate the opportunity to review this Draft PEIS. When the Final EIS is released for public review, please send three copies to the address above (mail code: CED-2). If you have any questions, please contact me or Susan Sturges, the lead reviewer for this project. Susan can be reached at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

Connell Oung

For Nova Blazej, Manager Environmental Review Office

Enclosures:

EPA's Detailed Comments Summary of EPA Rating Definitions

cc: John Krause, California Department of Fish and Game Marie Galvin, EDAW MAY-03-2007 THU 04:19 PM U.S.E.P.A.

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EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DRAFT PEIS) FOR THE SOUTH BAY SALT PONDS RESTORATION PROJECT, MAY 3, 2007

Scope of NEPA Compliance

EPA is concerned that the intent of this Salt Bay Salt Ponds (SBSP) Restoration Project Draft Programmatic Environmental Impact Statement (Draft PEIS) is to provide programmatic National Environmental Policy Act (NEPA) compliance for areas outside the geographic scope covered. The overall geographic scope of a future, separate South San Francisco Bay Shoreline Study (Shoreline Study) exceeds the geographic scope of this Draft PEIS, yet this Draft PEIS is intended to serve as a "programmatic" EIS which the separate Shoreline Study will tier-off of for future projects.

The Draft PEIS indicates that future feasibility studies of the Shoreline Study will tier off this Draft PEIS, including the first interim feasibility study for Alviso Ponds and Santa Clara County. The document also identifies activities that may occur with the separate Shoreline Study, such as the possible taking of homes, or the construction of a floodwall, that are not assessed in the Draft PEIS. While the Draft PEIS indicates that the assessment of the Shoreline Study in the SBSP Restoration DEIS is not meant to be conclusive, nor meant to provide adequate coverage pursuant to NEPA, it is not clear to what extent this Draft PEIS will provide NEPA compliance documentation.

Recommendations:

The Final PEIS should clarify what specific activities and areas associated with the separate Shoreline Study are intended to be covered programmatically by this SBSP Restoration Project PEIS and how the tiering process would apply to future interim feasibility studies. The Final EIS should specifically identify the future NEPA compliance efforts for feasibility studies that would occur outside of the geographic scope of the SBSP Restoration Project or would result in activities or impacts that are not assessed in this SBSP Restoration Project Draft PEIS.

Air Quality

National Ambient Air Quality Standards (NAAQS)

The San Francisco Bay Area is designated as nonattainment for the federal ozone standard, and is a maintenance area for carbon monoxide (CO). Further, while EPA has not yet designated areas as non-attainment for the new 24-hour standard for Particulate Matter with a diameter of 2.5 microns or less ($PM_{2.5}$), preliminary monitoring data indicate that the San Jose monitor is recording violations of the new standard and monitors in Livermore and Concord are very close to violating the standard. The Draft PEIS includes tables that summarize the ambient air quality both regionally and in the vicinity of the SBSP restoration area (See Tables 3.14-2 3.14-4.). The tables provide data regarding several pollutants, but do not include $PM_{2.5}$.

1

USEPA-9

Recommendation:

- Consider the impact on the ambient level of PM_{2.5} both locally and regionally, in the Final PEIS.
- Include data for PM_{2.5} to the tables. Additionally, the data for all pollutants should be updated to include data for 2006, which should be available before the Final PEIS is completed. Also note that the title of Table 3.14-2 indicates that it contains data from 1998 to 2005, but the earliest year represented is 2000. Please correct the table accordingly.

General Conformity

The Draft PEIS includes a brief discussion of general conformity requirements, but does not include an analysis of applicability. Rather, it postpones that determination to a future time, "before the record of decision is signed."

Recommendations:

- Since this programmatic Draft PEIS also includes a project-level decision for Phase 1 activities of the SBSP Restoration Project, the Final EIS should specifically address the applicability of general conformity to Phase 1 activities of the SBSP Restoration Project.
- Identify in the Final PEIS how and when conformity will be determined for future phases of both the SBSP Restoration Project and the Shoreline Study.
- The Final PEIS should include a determination of whether the Phase 1 activities meet the requirements of general conformity. It should discuss, and quantify where feasible, short and long-term emissions of criteria air pollutants from implementation of the proposed project. The document should also demonstrate that total direct and indirect emissions will not cause or contribute to any new violation of any standard, interfere with maintenance of any standard, increase the frequency or severity of any existing violation of any standard, or delay timely attainment of any standard (i.e., General Conformity Determination, 40 CFR Part 93 Subpart B). If air quality standards are exceeded, the Final EIS needs to include appropriate mitigation measures.

Construction Mitigation Measures

In order to reduce construction and operation-related air quality impacts, which include both diesel particulate as well as precursors to ozone and $PM_{2.5}$, EPA recommends the project proponent consider, and discuss in the Final EIS, opportunities for reducing impacts to air quality by reducing the use of diesel-powered equipment, requiring contractors to keep the equipment fine-tuned, or using alternative fueled vehicles. EPA is aware of the serious health effects that diesel particulate and other fine particulates can cause and urges project proponents to reduce particulate emissions to the greatest extent possible. USEPA-9 continued

USEPA-10

Recommendations:

Commit to specific construction emissions mitigation measures to minimize diesel particulate matter (DPM) impacts and include plans for fugitive dust control in the Final PEIS and Record of Decision (ROD). EPA provides the following recommendations to incorporate into the Final EIS, where feasible and applicable:

- Establish an activity schedule designed to minimize traffic congestion around the construction site.
- Utilize EPA-registered particulate traps and other appropriate controls to reduce emissions of diesel particulate matter and other pollutants at the construction site.
- Locate construction equipment and staging zones away from sensitive receptors such as children and the elderly as well as away from fresh air intakes to buildings and air conditioners.
- Use low sulfur fuel (diesel with 15 parts per million or less).
- Reduce use, trips, and unnecessary idling from heavy equipment.
- Lease newer and cleaner equipment (1996 or newer).
- Periodically inspect construction sites to ensure construction equipment is properly maintained at all times.

Entrained Mercury in Dust Emissions

There are several known health concerns associated with inhalation and ingestion exposure to mercury compounds (http://www.epa.gov/mercury/effects.htm). Mercury is a neurological toxic and can cause effects such as mood swings, memory loss, and muscle weakness in adults. Exposure to mercury is of particular concern to pregnant women, fetuses, infants, and young children, since exposure to methylmercury may lead to impaired neurological development, affecting a baby's growing brain and nervous system.

Recommendation:

In the Final PEIS, specifically commit to avoiding activities that will disturb (i.e., create airborne dust) mercury-contaminated sediments in the vicinity (i.e., within a 1000 feet), of residents and other sensitive receptors to the extent feasible. If activity must occur within 1000 feet of residences and sensitive receptors, the Final PEIS should provide details regarding how the project proponents will inform the nearby residences of the activity, and encourage everyone, especially pregnant women and young children, to avoid exposure to the mercury-contaminated dust.

USEPA-11 continued

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (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

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 these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should 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

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 potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (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 of 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 analyzed 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 analyzed in the draft EIS, which should be analyzed 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 National Environmental Policy Act 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. February, 1987.

Response to US Environmental Protection Agency

- USEPA-1: Comment acknowledged. The comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.
- USEPA-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the SBSP Restoration Project's relationship to the Shoreline Study.
- USEPA-3: As discussed in Section 3.14.2 of the EIS/R, general conformity requires that all federal actions conform to the State Implementation Plan (SIP) as approved or promulgated by USEPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine state or local efforts to achieve and maintain NAAQS. General conformity applies in both federal nonattainment and maintenance areas. Within these areas, it applies to any federal action not specifically exempted by the CAA or USEPA regulations. Emissions from construction activities are also included. If a federal action falls under the general conformity rule, the federal agency responsible for the action is responsible for making the conformity determination.

As shown in Table 3.14-3, the Bay Area is designated nonattainment (marginal) for ozone under National standards. As such, an evaluation of the applicability of general conformity for this air quality pollutant would be required.

A discussion of the SBSP Restoration Project's applicability to conformity to the area's air quality SIP has been included in Section 3.14 of the EIS/R. This general conformity applicability analysis has been prepared for the short-term construction and long-term operational emissions associated with the project-level Phase 1 actions only. General conformity applicability analyses would be conducted for futures phases of the Project when subsequent environmental project-level documentation is prepared, and when specific details of each phase is developed. For Phase 1 actions and future phases of the Project, the applicability analyses would provide a quantification of short and long-term emissions of air pollutants from implementation of the proposed Project, and describes whether the Project would cause or contribute to any new violation of any standard, interfere with maintenance of any standard, increase the frequency or severity of any existing violation of any standard, or delay timely attainment of any standard.

The Corps will conduct its own general conformity for the Shoreline Study as more information for the Shoreline Study components is developed.

- USEPA-4: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the SBSP Restoration Project's relationship to the Shoreline Study.
- USEPA-5: Please see the response to Comment USEPA-3 above for a discussion of air quality conformity.

- USEPA-6: SBSP Impact 3.14-3 evaluates the potential exposure of sensitive receptors to TAC emissions, including the airborne entrainment of contaminants (*e.g.*, mercury) in fugitive dust associated with soil disturbance activities. To reduce potential effects to less than significant levels, SBSP Mitigation Measure 3.14-1 (dust control BMPs) and SBSP Mitigation Measure 3.14-3b (preparation of a Health and Safety Plan that includes Project-specific air quality monitoring procedures and action levels for dust) would be required. Construction activities would occur within 1,000 ft of sensitive receptors. As such, the commenter's recommendations are included in Mitigation Measure 3.14-3b as part of the Health and Safety Plan. These recommendations further clarify the mitigation measures.
- USEPA-7: Comment acknowledged.
- USEPA-8 Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the SBSP Restoration Project's relationship to the Shoreline Study.
- USEPA-9: PM_{2.5} was not included in Table 3.14-2 because those data are not available for the SFBAAB basin (http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start). Table 3.14-4 has been revised to include PM_{2.5}, and both Tables 3.14-2 and 3.14-4 have been revised to include 2006 data. The title of Table 3.14-4 was incorrect and has been revised to reflect the data presented (please see the EIS/R). BAAQMD, which has jurisdiction over the Project, has not adopted any thresholds or methodology for evaluating PM_{2.5}. Because PM_{2.5} is a subset of PM₁₀, the evaluation of short-term construction-generated air pollutant emissions, including PM₁₀, would also be relevant to PM_{2.5} (see SBSP Impact 3.14-1). Similarly, the Mitigation Measure 3.14-1, which applies to PM₁₀, would also apply to PM_{2.5}. As such, a stand-alone discussion of PM_{2.5} is not required.
- USEPA-10: Please see the response to Comment USEPA-3 above for a discussion of air quality conformity.
- USEPA-11: SBSP Impact 3.14-3 evaluates the potential exposure of sensitive receptors to TAC emissions. SBSP Mitigation Measure 3.14-3a identifies actions that must be taken to reduce TAC emissions from construction activities within 500 ft of sensitive receptors. These include the use of equipment that would reduce the generation of TAC emissions, minimization of idling time, and placement of staging and maintenance activities away from sensitive receptors. The recommended measures have also been included in SBSP Mitigation Measure 3.14-3a. Although the measure as proposed already reduces potential impacts to less than significant, these recommendations would further reduce potential TAC effects.
- USEPA-12: Please see the response to Comment USEPA-6 above for a discussion of entrained mercury in dust emissions.

ARNOLD SCHWARZENEGGER, Governor

STATE OF CALIFORNIA

CALIFORNIA STATE LANDS COMMISSION

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April 12, 2007

File Ref: SCH# 2004114003

Clyde Morris, Refuge Manager, USFWS Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

Subject: South Bay Salt Pond Restoration Project DEIR

Dear Mr. Morris:

Staff of the California State Lands Commission (CSLC or Commission) has reviewed the proposed Draft Environmental Impact Statement/Report (EIS/R), SCH#2004114003, for the South Bay Salt Pond Restoration Project, dated February of 2007. The CSLC is a Responsible and Trustee Agency under the California Environmental Quality Act (CEQA). Based on this review, we offer the following comments.

Jurisdiction

The State acquired sovereign ownership of all tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all the people of the State for statewide Public Trust purposes which include waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. The landward boundaries of the State's sovereign interests are generally based upon the ordinary high water marks of these waterways as they last naturally existed. Thus, such boundaries may not be readily apparent from present day site inspections. The State's sovereign interests are under the jurisdiction of the CSLC. The CSLC has a leasing interest over the submerged lands of the numerous sloughs present within Project boundaries. The CSLC also has jurisdiction over several small areas of State-owned land within what is now the Project area, resulting from prior title, boundary and mitigation settlements.

SLC-1

General Comments

The CSLC needs to be added to the list of responsible agencies in Section 1.2, as some of the land within the Project area is under our jurisdiction. In the Project area, the CSLC has jurisdiction over several small areas of land due to boundary and mitigation settlements, along with the submerged lands of the numerous sloughs that are present. Our jurisdiction, and the corresponding need for obtaining leases from the CSLC, should be briefly enumerated in the document.

As a general comment, the EIS/R should more clearly state in the executive summary and introduction that it addresses two separate CEQA requirements: one, for a Programmatic EIS/R for the entire restoration Project, and two, for a Project EIS/R for Phase 1 of the restoration.

At the Program level, section S.8 of the Executive Summary (Issues to be Resolved) contains several extremely important questions. It is implied that the Adaptive Management Program is meant to provide these answers; could it be explicitly stated that answers to these questions will come from the Adaptive Management Program and will be incorporated into the Project EIRs prepared for subsequent Phases?

At the Project level, the document should provide more discussion of the rationale for presenting only one Project and the No Project alternatives.

Specific Comments

The Project presents the restoration plan as a 'staircase', with restoration progressing one cautious step at a time toward greater tidal habitat area and less managed habitat area. However, it is easy to foresee circumstances under which different impacts might pull the 'staircase' in different directions. For example, a Dissolved Oxygen issue that demands more managed pond habitat could be simultaneous with an endangered species issue that demands greater tidal habitat. How will conflicting concerns be handled? Will some concerns be weighted differently from others? What general methodology will be used to resolve such a situation?

In the discussion of the impacts of increased public access, SBSP Impact 3.4-5, the issue of illegal dumping is discussed but not the issue of vagrancy. Has vagrancy been examined and is it a potential issue?

A predator control program is mentioned in several places in the document and a list of the species the program currently focuses on is given on Page 3.6-113. Does the predator control program also address stray/feral domesticated species? If not, how will the Restoration Project approach the issue of stray/feral cats and dogs?

A PG&E substation and transmission lines are described as being present at the Ravenwood pond location (page 2-47 and subsequent). Given the issues this creates, was any consideration given to relocating PG&E's substation and transmission lines?

SLC-1 continued

SLC-4

SLC-5

Within SBSP Impact 3.3-5 (Potential interference with navigation), are compatibility determinations anticipated to be controversial? Are there any specific areas that would be likely to generate controversy? Given that the Project discusses constructing 'non-powered-docks', which imply some anticipated limitations, should likely compatibility limitations be presented here? Further, how will limitations potentially alter the Project's public use and recreation impacts?	SLC-9
Dissolved Oxygen (DO) levels influence several different potential impacts, including mercury availability, bay shrimp populations, and avian botulism spread. For ease of understanding, all of the effects low DO can have should be briefly introduced where the impacts of DO levels are first discussed in section 3.4, with page references to the sections of the document where these impacts are discussed at greater length.	SLC-10
The Geology, Soils and Seismicity programmatic sections (section 3.5) do not appear to address concerns related to locating structures and improvements within the area, despite the improvements shown in Sections 1 and 2 of the DEIS/R. Should impacts relating to these planned improvements be discussed here, or are they intended to be discussed at the Project level? If the latter is intended, it should be explicitly stated.	SLC-11
As a separate concern, a large portion of the Project's design relies on creating specific differences in depth and elevation in order to create varied and productive habitat, and many impacts rely on topographical features to offset harmful impacts and create beneficial ones. Could earth movement potentially upset that? Some discussion of potential seismic impacts to Project habitat features seems warranted.	SLC-12
Under Phase 1 Impact 3.5-5, Eden Landing is described under the No Action Alternative as having no subsurface utilities, but under the Phase 1 Action Alternative a sewer line is described as being present. Could this be clarified?	SLC-13
On page 3.6-56 is a subheading for "Impact: Potential recreation-oriented impacts to sensitive species and their habitats". Why do the significance criteria for this impact focus solely on shorebirds? Should this impact be renamed to account for its narrow focus? Alternatively, the significance criteria could be augmented to be inclusive of all special-status species that are potentially impacted by the Project.	SLC-14
For SBSP Impact 3.6-15 (Potential impacts to piscivorous birds), if the impacts to piscivorous birds are beneficial, why are they designated only "Less than Significant"? Thus far, other beneficial impacts have been designated "Less than Significant (CEQA); Beneficial (NEPA)".	SLC-15
Under SBSP Impact 3.6-18 (Potential recreation-oriented impacts to sensitive species and their habitats), a suggested action under the Adaptive Management Program to minimize the impact of public use is to close access trails, the example given on page 3.6-130 reading "[I]f the trail is near sensitive breeding birds, it would be closed during the breeding season[.]" If trails are closed during the breeding season, as per the example, would that mean they could potentially be closed several months	SLC-16

Clyde Morris, USFWS	Page 4	April 12, 2007	
each year? Could trail closures rep public use and recreation?	present a potentially significant	negative impact to	SLC-16
Under Phase 1 Impact 3.6-1 disturbance to, nesting pond assoc are mentioned, but they are not par nor are they described as being inc 10). It would be appropriate for thes for this impact.	t of a proposed Mitigation Mea orporated into the Project (e.g	inimization measures" asure for this impact ., Phase 1 Impact 3.6-	SLC-17
Similarly, under Phase 1 Imp managed ponds), it would be appro a Mitigation Measure.	pact 3.6-13 (Potential entrainm priate for the installation of fis		SLC-18
Phase 1 Impact 3.6-19 (Pote describe what would occur if survey	ential impacts to special-status /s discovered special-status pl	, ,	SLC-19
In section 3.13, Noise, the position significance criteria and are not add	otential effects of noise on wild Iressed.	llife are not given	SLC-20
We look forward to receiving	responses to these comment		

notification of the consideration of action by the US Fish and Wildlife Service (USFWS), US Army Corps of Engineers (Corps), and California Department of Fish and Game (CDFG) on this environmental document and project.

Please contact Nanci Smith at (916) 574-1862 for more information about the Commission's leasing jurisdiction. You may contact Peter Strait at (916) 574-1956, to discuss the environmental review comments. Thank you for the opportunity to comment on the proposed project.

Sincerely,

Marina R. manal

Marina R. Brand, Assistant Chief Environmental Planning and Management Division

cc: Peter Strait Nanci Smith Eric Gillies

Response to California State Lands Commission

- SLC-1: Comment acknowledged. The California State Lands Commission (SLC) has a leasing interest over the submerged lands of the sloughs within the SBSP Restoration Project Area, and it also has jurisdiction over several small areas of state-owned land within the Project Area. Sections 1.2 and 1.7 of the EIS/R has been revised to acknowledge that SLC has jurisdiction within the Project boundaries, that the Project proponents will need to obtain leases from SLC, and to acknowledge SLC's role as a responsible agency for the Project.
- SLC-2: The EIS/R's program- and project-level components are stated in both the Executive Summary and Chapter 1, Introduction of the EIS/R. Section S.3, Type of EIS/R, in the Executive Summary states the following:

This document is both a programmatic EIS/R covering the 50-year longrange SBSP Restoration Project as well as a project-level EIS/R addressing the specific components and implementation of Phase 1 of the SBSP Restoration Project.

The fourth paragraph in Chapter 1, Introduction, states the following:

This EIS/R includes program-level evaluation of the SBSP Restoration Project long-term alternatives as well as project-level analysis of the first phase of restoration (the Phase 1 actions).

- SLC-3: As stated in Section S.8 of the Executive Summary, the Adaptive Management Plan proposes the applied studies to resolve these eight key uncertainties. As stated in Section S.6, the Adaptive Management Plan would allow the SBSP Restoration Project to move forward and respond to uncertainties. Lessons learned from each phase of the Project would inform future phases and would determine the ultimate outcome. That outcome would be the endpoint which achieves the maximum amount of tidal restoration possible without causing significant adverse effects on environmental resources. As the key uncertainties are resolved, the answers will be incorporated into the designs for future project phases, which will be evaluated in project-level EIS/Rs that would tier from the SBSP Restoration Project EIS/R. All findings from Adaptive Management monitoring, applied studies and modeling will be incorporated into future design documents as well as future project-level EIS/Rs.
- SLC-4: As described in the Executive Summary of the EIS/R, the Phase 1 actions are elements common to both long-term Alternatives B and C. Phase 1 actions would include restoration of a range of habitat types and early experiments for adaptive management.
- SLC-5: Please see the response to Comment SCVWD-9 below for a discussion of the resolution of incompatible tripped triggers.

- SLC-6: Vagrancy is prohibited within the SBSP Restoration Project Area. The prohibition is enforced by the Refuge and CDFG staff.
- SLC-7: As part of the SBSP Restoration Project's predator management program, stray/feral domesticated species such as cats and dogs that pose a threat to special-status or sensitive species in the SBSP Restoration Project Area will be captured and removed from sensitive areas. Feral cats that are far from residential areas and have no collars or other identification will be euthanized. Cats with collars, cats captured near residential areas, and all dogs will be transported to the nearest animal shelter.
- SLC-8: The PG&E substation adjacent to the Ravenswood pond complex is a key substation for serving electric customers in the San Francisco Bay Area. Relocating PG&E's substation and transmission lines would be an expensive and lengthy process and was not considered to be reasonable for inclusion as part of the SBSP Restoration Project.
- SLC-9: USFWS will prepare a compatibility determination in accordance with the requirements of the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd) for all activities (*i.e.*, boating, hiking, wildlife observation) that would occur within the Don Edwards National Wildlife Refuge (*i.e.*, the Alviso and Ravenswood pond complexes). The compatibility determination documents will receive public review and be available for public comment. CDFG has a number of codes that determine what can and cannot be done on lands designated as an Ecological Reserve (e.g., the Eden Landing pond complex), such as California Fish and Game Code (Section 1580 et. Sec.); California Code of Regulations, Title 14 (Public Resources) Section 630; and the policies of the Fish and Game Commission and CDFG. The EIS/R lists potential compatibility limitations such as seasonal restrictions (e.g., no access during breeding season), access restrictions (e.g., non-motorized versus motorized), and type of use (e.g., waterfowl hunting only). A separate compatibility determination process will be completed during subsequent project-level evaluations and planning, rather than at the programmatic level. It is difficult to predict which determinations are likely to be controversial. In general, the Project will be providing increased public access and recreation. A complete discussion of the public access and recreation impacts is presented in Section 3.7 (Recreation Resources).
- SLC-10: The text in Section 3.4.4, Environmental Impacts and Mitigation Measures, under the Threshold for Localized, Seasonal Low DO Levels, has been revised as follows:

The threshold for low DO levels is established by the Basin Plan Water quality objective for DO (See Table 3.4-5). In the regional setting, this corresponds to 5 mg/L DO or greater for tidal waters, although the objective acknowledges that attaining 80 percent oxygen saturation as a three month median is satisfactory for protection of beneficial uses. Low DO can cause mortality in aquatic and benthic organisms (SBSP Impact 3.4-2, below), increased mercury methylation rates (SBSP Impact 3.4-4, below), and

increased rates of disease such as avian botulism (SBSP Impact 3.6-22, below).

- SLC-11: The proposed restoration and improvements are evaluated at both a program and project level of detail. As described in Section 3.1.3, the SBSP long-term alternatives are evaluated at the program level in the EIS/R because they are broadly defined and cover a series of phased actions in a coherent geographic area. Phase 1 (the first phase of both Alternatives B and C) is evaluated at a project level because site-specific information about the proposed actions is available to conduct a detailed analysis. Section 3.5 addresses the potential for adverse impacts associated with geology, soils, and seismic hazards for both the long-term alternatives and Phase 1 actions. Subsequent project-level EIS/Rs will be prepared for each future phase of the Project. The EIS/R will serve as a tiering document for these future environmental documents (see Section 1.7 of the EIS/R).
- SLC-12: Normally, the evaluation of potential impacts associated with seismic events focuses on the effects on people (injury or death) or property (damage). As such, Section 3.5 of the EIS/R, Impacts 3.5-2 and 3.5-4 evaluate the primary earthquake hazards (fault rupture) and secondary (liquefaction and lateral spreading) on life and property. The potential effects on habitats that rely on specific elevations would be addressed through implementation of the Adaptive Management Plan (described in Section 2.3 of the EIS/R). If restoration activities are not effective, they would be identified and actions would be taken to resolve the problem.
- SLC-13: An existing subsurface utility line exists at the Eden Landing pond complex. Phase 1 Impact 3.5-5 has been revised under the No Action Alternative heading to acknowledge this existing condition.

Eden Landing. <u>An existing subsurface utility (sewer line) crosses Pond E6A.</u> No subsurface utilities or surface rail crossings occur within the Phase 1 ponds at the Eden landing pond complex. While limited operations and maintenance (O&M) activities would occur, no new earthen or structural loads would be placed within the Phase 1 ponds under the No Action Alternative.

SLC-14: The significance criteria for potential recreation-oriented impacts to sensitive species and their habitats focus on the species that are most likely to be affected by recreational activities, which include several groups of waterbirds and harbor seals. There is no expectation that recreational activities associated with this Project could result in impacts to other wildlife species, such as fish and small mammals, that would approach the level of significance. Potential project impacts to western pond turtles near Moffett Federal Airfield are not expected to reach a level of significance (see the response to Comment NASA-4 above). As a result, the threshold of significance for this impact focuses on those species, including several species of waterbirds and harbor seals that are most susceptible to disturbance by recreation. These species are susceptible to disturbance due

to the open nature of the habitats they use (*e.g.*, without vegetative cover) and the particular tolerance (or lack thereof) of some individuals of those species.

For the purpose of clarification of this impact, text has been added to the discussion under SBSP Impact 3.6-18 and Phase 1 Impact 3.6-18 regarding potential effects of recreation disturbance on species other than birds and harbor seals, and regarding measures that are incorporated into the Project to minimize impacts to western pond turtles.

- SLC-15: Program-level effects are expected to be beneficial for most piscivorous bird species, but some species (*e.g.*, the American White Pelican) may be adversely affected by the Project. As a result, impacts to piscivorous bird species are considered less than significant overall under CEQA, but are not denoted as beneficial under NEPA.
- SLC-16: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

Figures 2-5a, 2-5b, 2-6a, and 2-6c show trails proposed as part of the Project at the Eden Landing Pond Complex and the Alviso Pond Complex. The Project has been designed to accommodate seasonal closures to protect sensitive biological resources, and as such, could be closed several months at a time. However, because the Project has been designed to accommodate such closures, it would not constitute a potentially significant negative impact on public use and recreation. As shown in these maps, there would be other proposed trails and recreational features provided at these pond complexes that would be available year round. Overall, even with seasonal trail closures, there is still an increase in public access over the No Action Alternative.

SLC-17: The measures to avoid and minimize impacts to nesting pond-associated birds, which are described in detail in SBSP Impact 3.6-11 and Phase 1 Impact 3.6-11, are incorporated into the Project and thus do not need to be listed as mitigation measures. This has been made more explicitly clear via the following text revision to both SBSP Impact 3.6-11 and Phase 1 Impact 3.6-11:

To minimize such impacts, <u>several measures are incorporated into the</u> <u>Project. W</u>work in and adjacent to potential bird nesting habitat would be conducted outside of the avian nesting season to the extent practicable.

- SLC-18: Please see the response to Comment NOAA-1.
- SLC-19: The text in SBSP Impact 3.6-19 in Section 3.6, Biological Resources, under the subheading Potential SBSP Restoration Project Effects has been revised as follows:

In addition, tidal habitat restoration could eventually include the development of mature tidal marsh features (*e.g.*, shell ridges, microtopographic differences, salt panne) that could support special-status

plant species. In the unlikely event that special-status plant species are discovered during surveys, the following mitigation measures would be instated to eliminate any significant impact of the Project on these plant species: 1) special-status plant species will be avoided to the maximum extent feasible and all special-status plant populations will be clearly marked and avoided during construction; 2) if avoidance of special-status plant species populations is not feasible, soil will be collected and re-deposited in the area (for temporary impacts) or placed adjacent to impacted areas in suitable habitat (for annual species) or plants will be relocated to suitable habitat (for perennial species).

SLC-20: Section 3.13, Noise, of the EIS/R addresses the effects of noise on humans. The effects of noise and other construction- and operation-related disturbance on wildlife are addressed in SBSP Impacts 3.6-10 and 3.6-11 and Phase 1 in Section 3.6, Biological Resources.



ARNOLD SCHWARZENEGGER

GOVERNOR.

STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



CYN

CYNTHIA BRYANT DIRECTOR

Fish & Game APR 2 7 2007

Yountville

John Krause Department of Fish and Game, Region 3 P.O. Box 47 Yountville, CA 94599

Subject: South Bay Salt Ponds Restoration Project SCH#: 2004114003

Dear John Krause:

April 24, 2007

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on April 23, 2007, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Jerry Roberto

Terry Roberts Director, State Clearinghouse

SCH-1

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	2004114003 South Bay Salt Ponds Restoration Fish & Game #3	Project		
Туре	EIR Draft EIR			
Description	The SBSP Restoration Project end around the edge of the South San restoration project on the West Co enhance wetlands in South San Fr wildlife-oriented public access and	Francisco Bay, and, if approv ast of the United States. The ancisco Bay while providing f	project is intended to restore and	
Lead Agenc	y Contact			
Name	John Krause			
Agency	Department of Fish and Game, Re	gion 3		
Phone	(707) 944-5500	Fax		
email				
Address	P.O. Box 47			
City	Yountville	State CA	Zip 94599	
Project Loca	ation			
County	Alameda, Santa Clara, San Mateo			
City	San Jose, Fremont, Sunnyvale, Un	ion City, Menlo Park		
Region	1			
Cross Streets				
Parcel No.				
Township	Range	Section	Base	
Proximity to	:			
Highways	237, US 101, US 880			
Airports	Hayward, San Jose Int'l, San Car			
Railways	Amtrak			
Waterways	Mt. Eden Creek, Guadalupe Sloug	h Alviso Slough Covote Cre	ek Alameda Creek Ravenswood	
Schools	Slough	in, refiles biologin, corjois cre	en, Hallieda Gleen, Havellanoou	
Land Use	ereegn			
	Various			
Project Issues	Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Cumulative Effects; Drainage/Absorption: Flood Plain/Flooding; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife			
Reviewing	Resources Agency: Regional Wate	er Quality Control Board, Reg	ion 2; Department of Parks and	
Agencies	Recreation; Native American Heritage Commission; Public Utilities Commission; Office of Historic			
	Preservation; Department of Water Resources; California Highway Patrol; Caltrans, District 4: San			
			partment of Boating and Waterways;	
	Francisco Bay Conservation and D	evelopment commission, De		
			ces Control; State Lands Commission	
Date Received		Department of Toxic Substand	ces Control; State Lands Commission	

Response to State Clearinghouse

SCH-1: Comment acknowledged. This comment does not address the content of the SBSP Restoration Project Draft EIS/R. STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE P. O. BOX 23660 OAKLAND, CA 94623-0660 PHONE (510) 286-5505 FAX (510) 286-5559 TTY (800) 735-2929

May 3, 2007

NOLD SCH	CA	LTR	ANS
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Fish & C

Flex your power! Be energy efficient!

Yountville

AR!

SMGEN046 SCH#2004114003

Mr. John Krause California Department of Fish and Game P.O. Box 47 Yountville, CA 94599

Dear Mr. Krause:

SOUTH BAY SALT PONDS RESTORATION PROJECT – ENVIRONMENTAL IMPACT REPORT

Thank you for including the California Department of Transportation (Department) in the CEQA process for the South Bay Salt Ponds Restoration project. The following comments are based on the Environmental Impact Report (EIR). Further comments may be forth coming pending additional review of the document.

Hydraulics

- The proposed rate of global sea level rise may be understated. The concept has been appropriately raised. However, the magnitude of projected sea level rise should be discussed further during the design phase of the proposal.
- At Ravenswood, the proposed flood protection levee should connect the portion between the Moseley Tract and pond-SF2 (as designated in the proposal) to fully protect the frontage road and State Route (SR) 84.
- At Eden Landing, SR 92 requires an additional height of flood protection.
- At the Alviso location (the portion adjacent to SR 237) an additional height of flood protection may also be required.
- Please allow the Department to review the proposed protection levee improvements during the design phase of the proposed project.
- 6. The EIR does not address how the work will be implemented. Will it be phased as funding becomes available? If so, the Department's preference is that the Dumbarton Bridge approach portion of the Ravenswood location be given priority.

"Calteans improves mobility across California"

Traffic

The document did not provide an estimate of public usage for each recreational site. The Department shall reserve the right to require adequate turning lanes be provided on state highway facilities leading to the recreational sites to ensure safe and efficient operation of the state highway facility.

Construction related truck trips and operation schedules shall be subject to review and concurrence under the encroachment permit process.

Right-of-Way

There are encroachment permits issued by the State for facilities in the vicinity of this project in both Alameda and San Mateo counties. The Department recommends researching encroachment permits on the sixth floor of the Department's District 04 office at 111 Grand Avenue, Oakland to clear any possible impact.

Encroachment Permit

Please be advised that work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans, clearly indicating State ROW, must be submitted to the address below. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information:

http://www.dot.ca.gov/hq/traffops/developserv/permits/

Michael Condie, Office of Permits California DOT, District 4 P.O. Box 23660 Oakland, CA 94623-0660

Please feel free to call or email Sandra Finegan of my staff at (510) 622-1644 or sandra_finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

TIMOTHÝC. SABLE District Branch Chief IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

Response to Caltrans

CALTRANS-1: Comment acknowledged. Estimates of sea level rise typically contain a large degree of uncertainty, and future sea level rise estimates and rates could be greater than the Intergovernmental Panel on Climate Change (2001) mid-range estimate used in the EIS/R technical analyses. The EIS/R acknowledges that estimates of sea level rise are in the process of being updated (and are continually being updated as new information becomes available). During each design phase, the best available sea level information would be utilized, such as the potential updates to the California Climate Change Center Report (CCCC 2006) and the recently updated IPCC (2007) Report.

The EIS/R (Executive Summary and Chapter 2) has been updated to reflect additional discussion of sea level rise related to the Project. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

- CALTRANS-2: Comment acknowledged. The proposed flood protection levee alignment landward of the Ravenswood pond complex (as shown on the alternative figures) represents one potential alignment. The alignment could change through consultation with Caltrans, and as a result of project-level analysis and design. Several factors would be considered when locating the levee alignment, including the location of the frontage road, State Route (SR) 84, and the surrounding habitats.
- CALTRANS-3: Comment acknowledged. The height of the flood protection levee along SR 92 in the vicinity of the Eden Landing pond complex would be evaluated during subsequent detailed design.
- CALTRANS-4: Comment acknowledged. SR 237 is landward of the Alviso pond complex. A portion of SR 237 is adjacent to the Legacy Partners property and the high ground of a closed landfill landward of Pond A8S. The height of the flood protection levee along SR 237 at this location would be evaluated during subsequent detailed design.
- CALTRANS-5: Comment acknowledged. Caltrans would be invited to review proposed levee improvements in the vicinity of SR 84, 92 and 237 during the design phase of each respective section.
- CALTRANS-6: The SBSP Restoration Project would be implemented based on an adaptive management approach. The Adaptive Management Plan is described in detail in Section 2.3.1 of the EIS/R and the progression of the Adaptive Management Plan is highlighted in Figures ES-6, 2-3a and 2-3b of the EIS/R. Restoration activities would be phased based on the lessons learned from each phase and based on the current conditions. As described in Sections 2.4.3 and 2.4.4, specific activities, such as lowering or removal of levees, would occur as funding allows. As described in Section 2.5.1, funding is one of the seven criteria (*i.e.*, funding, likelihood of success,

ease of implementation, visibility and accessibility, opportunities for adaptive management and applied studies, value in building support for the Project, and certainty of investment) used to determine the Phase 1 actions. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Adaptive Management Plan funding. Caltrans' preference for prioritizing restoration activities along the Dumbarton Bridge approach within the Ravenswood pond complex is acknowledged and will be considered during the initial planning for the next phase of the SBSP Restoration Project.

CALTRANS-7: The EIS/R does not provide an estimate of public usage for each proposed recreation site. As discussed in Section 3.12.3 of the EIS/R, under the subheading "Operation," "Alternatives B and C would result in an increase in overall vehicle miles traveled (VMT) associated with the expected increase in vehicle trips by visitors of the new recreational facilities in the pond complexes." However, this increase cannot be determined at this time due to the lack of existing baseline information that is required to estimate the VMT associated with recreational facilities. The increase in VMT that would be generated by the Project would depend on a number of factors, such as the number of recreational facilities in the Project Area, and would likely increase associated with population growth in the South Bay (see SBSP Impact 3.12-2). The increase in VMT associated with population growth would not be directly attributable to the SBSP Restoration Project, and should not be included. The long-term degradation of traffic levels on roadways and intersections is expected to be less than significant given the distribution of vehicular traffic during the week and geographically throughout the South Bay. However, subsequent environmental documentation would be required for each phase of construction to confirm the effects of long-term traffic on the operations of the local roadway and intersections. The subsequent project-level environmental analysis would consider any traffic effects on Caltrans facilities.

Phase 1 Impact 3.12-2 describes the potential long-term degradation of traffic levels in the Project Area vicinity from the installation of recreational facilities as part of the Phase 1 actions. As described, the provision of recreational facilities proposed under the Phase 1 actions is not anticipated to result in a substantial increase in traffic relative to the traffic volume of the local traffic network, as use of these facilities would occur mostly during the weekends, outside the weekday peak hours.

CALTRANS-8: Comment acknowledged. Activities within the Caltrans right-of-way could occur as part of the SBSP Restoration Project. If activities were to occur within the Caltrans right-of-way, the Project proponents would submit appropriate documentation as part of the encroachment permit application process and work with Caltrans to determine the need for any traffic-related mitigation measures.

CALTRANS-9: Comment acknowledged. Section 3.12.2 acknowledges that any encroachment within the right-of-way of a state highway or route would be subject to Caltrans' regulations, including issuance of an encroachment permit and the provision of temporary traffic control systems. For each phase of the Project, the Project proponents would verify whether Project components would encroach the Caltrans right-of-way. If necessary, permits for encroachment in the Caltrans right-of-way will be pursued in the manner outlined in the comment letter.

2.2.2 Regional and Local Agencies

Comments from regional and local agencies and the responses to those comments are presented in this section.

SCVTA

ANTA CLARA Valley Transportation Authority

March 26, 2007

City of Campbell Community Development Department 70 N. First Street Campbell, CA 95008-1423

Attention: Clyde Morris

Subject: South Bay Salt Pond Restoration Project

Dear Ms. Willsey:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft EIS/EIR for the South Bay Salt Pond Restoration Project. We have no comments at this time.

SCVTA-1

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed Senior Environmental Planner

RM:kh

3331 North First Streel + San Jose, CA 95134-1906 + Administration 408.321.5555 + Customer Service 408.321.2300

Response to Santa Clara Valley Transportation Authority

SCVTA-1: Comment acknowledged.



BOARD OF DIRECTORS 2007

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MICHAEL J. SCANLON EXECUTIVE DIRECTOR

Clyde Morris Refuge Manager Don Edwards San Francisco Bay NWR 9500 Thornton Avenue, Newark, CA 94560

April 10, 2007

RE: Draft Environmental Impact Report South Bay Salt Pond Restoration Project

Dear Mr. Morris,

We have reviewed the Draft Environmental Impact Report (DEIR) for the proposed South Bay Salt Pond Restoration Project and offer the following comments:

1. The DEIR incorrectly identifies the railroad as the property of the Southern Pacific Railroad and that it is abandoned. The Dumbarton Rail Corridor was acquired by the San Mateo County Transit District (SamTrans) in the early 1990s with the intent to implement commuter rail service. In March 2004, the voters of the Bay Area counties passed the Regional Traffic Relief Plan, also know as Regional Measure 2 (RM2), to fund a variety of transportation improvements to help relieve traffic congestion and enhance the convenience and reliability of the region's public transit system by raising bridge tolls. RM2 includes funding for the proposed DRC Project.

In November, 2006, the JPB (Caltrain) and the Federal Transit Administration announced their intent to prepare a joint EIS/EIR for the Dumbarton Rail Corridor (DRC) Project, an approximately 21 mile commuter rail extension on existing rail alignment to provide commuter rail service between the Peninsula and the East Bay across the southern part of the San Francisco Bay. The purpose of the proposed DRC Project is to use existing rail infrastructure to provide an east-west rail connection, connecting the communities of the East Bay and the West Bay.

The Notice of Intent was published in the Federal Register and the Notice of Preparation was distributed through the State Clearinghouse or by direct mail to agencies on November 1, 2006. The scoping period concluded on November 30, 2006. Revenue service is scheduled to begin in 2012, with an initial service of six trains originating from Union City in the morning peak period on weekdays and traveling westward across the SF Bay, returning to Union City in the afternoon peak period.

2. Alternatives B and C in the DEIR propose a "Bay trail spine connection to SF2 by City of Menlo Park". This trail appears to originate from the Ravenswood Open Space Preserve Trail and travel northward until it crosses the Dumbarton corridor railroad tracks, where it travels westward paralleling the railroad tracks for several hundred feet and then splits into two trails. One travels northward toward SP2 while the other trail continues westward and crosses the railroad tracks a second time. In view of the proposed Dumbarton Rail Corridor Project, these crossings should be grade-separated for the safety of trail users. In addition, the portion of the trail next to the live railroad tracks should be separated by a fence with adequate distances and proper signage to caution the public on railroad operations.

The JPB fully supports this worthwhile project and would welcome the opportunity to work with your agency and City of Menlo Park planners in developing this portion of the Bay Trail. We also look forward to working with you on the Dumbarton Corridor Rail Project.

If you have any questions regarding these comments, please contact me at 650-508-6338 or at pangm@samtrans.com. Thank you.

Sincerely,

Marie Pang

Marie Pang U Environmental Manager Peninsula Corridor Joint Powers Board

CT-2

Response to Caltrain

- CT-1: Figure 2-21 of the EIS/R incorrectly identified the railroad as the property of the Southern Pacific Railroad and that it is "abandoned." The figure has been revised to identify the railroad as the Dumbarton Rail Corridor.
- CT-2: In response to this comment, the following text change was made to Chapter 2, Section 2.4.3, SBSP Long-Term Alternative B: Managed Pond Emphasis, Recreation and Public Access, Ravenswood, last paragraph:

An additional viewing platform is proposed on the southeastern corner of the pond complex, accessed via an existing spur trail at the northeastern edge of Pond SF2, at the water's edge. Future design of the year-round trail around Pond SF2 would need to take into consideration the proposed Dumbarton Rail Corridor Project. Similarly, the proposed trail (outside of the Project Area) linking Pond SF2 with the Ravenswood Open Space Preserve would need to be designed for compatibility with the existing railroad line in the area to provide for public safety (*e.g.*, signage, fencing and/or grade separation).

It should be noted that the trail is not part of the SBSP Restoration Project, so design and construction of this trail is not considered in this EIS/R.

CT-3: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.

SFBT



April 17, 2007

Fish & Gam APR 1 9 2007 Yountville

Mr. Clyde Morris U.S. Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge P.O. Box 47 Yountville, CA 94599

RE: South Bay Salt Pond Restoration Project: Environmental Impact Statement / Report

Dear Mr. Morris:

On behalf of the Association of Bay Area Government's Bay Trail Project, I would like to thank you for the opportunity to comment on the Draft Environmental Impact Statement / Report for the South Bay Salt Pond Restoration Project. Congratulations to you and the Project Management Team for reaching this important milestone with a comprehensive environmental analysis that will serve as a model for future wetland restoration projects. We have been an active participant on the Stakeholder Forum during the entire project planning process and we applaud these accomplishments.

The Bay Trail Project has a strong interest to see that the needs of restoration and public access are balanced to ensure the long-term success of this project. Existing and proposed segments of the Bay Trail are located in all three project areas: Eden Landing, Ravenswood and Alviso. Our comments fall into three major categories related to the subject of public access:

- Description of how the adaptive management process affects public access in the future
- Identification of potential adverse impacts using clearly defined significance thresholds and mitigation measures to reduce potential impacts to less-thansignificant levels.
- Inconsistency with the Bay Trail Plan at the Eden Landing complex

Description of how the adaptive management process affects public access in the future

The adaptive management concept as described in the EIS/R is presented as an effective method for guiding a long term restoration project towards completion. However, the EIS/R does not clearly explain how adaptive management decisions might impact public access. Throughout the stakeholder input process it was our understanding that the Bay Trail spine, once constructed, would not be removed as restoration progressed because the restoration design would plan for adequate distances and less-sensitive habitats adjacent to proposed spine levee trails. The EIS/R does not fully explain if this is the case – it only states that public access components are interchangable between Alternatives B and C. The Final EIR

SFBT-1

SFBT-2

	1
should: (1) clarify how adaptive management impacts trail alignments, (2) state that the adaptive management process will not result in a net loss of public access or a reduction in the quality of that access, and (3) will not eliminate segments of Bay Trail spine.	SFBT-2 continued
Identification of potential adverse impacts using clearly defined significance thresholds and mitigation measures to reduce potential impacts to less-than-significant levels.	
Several proposed trail segments are shown on the EIS/R alternative maps as dashed orange lines with the disclaimer that reads, "Denotes trails that were identified during the alternatives development as being of particular concern to permitting agencies for potential to disrupt habitat." The EIS/R does not specifically identify the environmental concerns associated with this disclaimer. For these areas, the potential adverse impacts should be identified with clearly defined significance thresholds and mitigation measures to reduce potential impacts to less-than-significant levels. A quantitative analysis of the impacts of public access on habitat should be provided in the Final EIS/R	SFBT-3
Inconsistency with the Bay Trail Plan at the Eden Landing complex	1
The San Francisco Bay Trail Plan, a regional plan adopted by the Association of Bay Area Governments Executive Board in 1989, identifies a spur trail along the edge of Old Alameda Creek extending from the spine alignment to the open waters of the Bay. Alternatives B and C show a proposed spur as an orange dashed line that extends only to the Alvarado Salt Works, approximately one-third the distance. For this reason, the EIS/R is not consistent with the Bay Trail Plan and this should be identified as a significant impact. The Final EIS/R should identify this inconsistency and evaluate alternatives for year-round access to the Bay within the Eden Landing complex or mitigation measures that reduce any impacts to a less than significant level. It should also evaluate alternatives and mitigation measures that might locate sensitive habitat where it would not preclude year-round access to the Bay.	SFBT-4
Thank you for the opportunity to provide these comments.	

Sincerely,

Laura Thompson

Laura Thompson Bay Trail Project Manager

Response to San Francisco Bay Trail

- SFBT-1: Comment acknowledged. This comment does not address the SBSP Restoration Project or the EIS/R.
- SFBT-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- SFBT-3: Trails shown on the alternative maps in orange are shown to indicate that future phases of the program alternatives will require a more detailed project-level analysis under CEQA/NEPA. These trails were highlighted to denote that the USFWS Ecological Services Unit had identified those trail segments to be of particular concern with regard to potential impacts on wildlife. The note on the maps has been revised as follows:

All public access and recreation features will be subject to funding and permitting constraints. Denotes trails that were identified during the alternative development process as being of particular concern to permitting agencies for potential to disrupt habitat.

As described under the subheading Significance Criteria in Section 3.7.3. Environmental Impacts and Mitigation Measures of Section 3.7, Recreation Resources, the discussion of human disturbance on wildlife is evaluated in SBSP Impact 3.6-18 and Phase 1 Impact 3.6-18 in Section 3.6, Biological Resources. Section 3.6 also describes the thresholds of significance for this issue area in Section 3.6.3. Impacts were evaluated against these criteria. The Adaptive Management Plan would ensure that potential impacts would be less than significant, thus no mitigation measures would be required. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

SFBT-4: In response to this comment, Section 3.2 of the EIS/R has been revised to provide discussion about how the proposed public access and recreation plans conform to local and regional plans including the Bay Trail Plan.

KELLY FERGUSSON MAYOR

ANDREW COHEN MAYOR PRO TEM

JOHN BOYLE COUNCIL MEMBER

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HEYWARD ROBINSON COUNCIL MEMBER

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April 18, 2007

Clyde Morris USFWS, Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

SUBJECT: South Bay Salt Pond Restoration Project – Draft Environmental Impact Statement/Report

Dear Mr. Morris:

Thank you for the opportunity to comment on the South Bay Salt Pond Restoration Project (SBSP). I represent the City of Menlo Park, a local community with jurisdiction over a portion of the restoration project area.

The City has reviewed the Draft Environmental Impact Statement/Report (DEIS/R) and has the following comments:

1) Under SBSP Impact 3.3-1, the DEIS/R is not specific in identifying how the potential for increased flood risk will be identified. In addition, the Adaptive Management Plan subsection states, "In the event that flood performance was not as intended, the Project would identify and implement necessary flood reduction measures." This statement is too general and must give specific details of how long-term flood management improvements will be identified, planned, maintained, and funded.

2) The report needs to analyze the funding requirements of the ongoing maintenance, monitoring and operation of recreational and flood management improvements that are being implemented. The financial analysis needs to include the project's overall increased cost impact to the maintenance and operation of Bayfront Park.

3) The DEIS/R states that additional environmental review will be required throughout the project implementation process. The proposed adopted Management Plan does not provide sufficient details or level of standards on when an EIS/R will be triggered after the first phase. It should be clear that the City of Menlo Park would be involved in any planning phase to adequately address City concerns and provided the opportunity to review and consider impacts on future phases.

4) The DEIS/R should state that any construction vehicle trips would comply with the truck routes and requirements for the City of Menlo Park.

MP1-4

5) The DEIS/R should state that the project would obtain any necessary permits from the City of Menlo Park and pay all associated fees as mitigation to impacts caused by the project, such as the building construction impact fee	MP1-5
6) Mitigation 3.12-1 states that construction-related truck trips will occur outside the weekday morning and evening peak hours. The construction trips could create significant traffic impacts during the weekend as well as the night hours. The weekend impacts (traffic, noise, etc.) need to be analyzed as well as impacts and permit requirements associated with night trips.	MP1-6
7) A detailed plan showing the proposed trails (more detailed than Figure ES- 4c) and the impacts to roadways and intersections associated with the increase in pedestrian and bicycle traffic needs to be included in the Draft EIS/R. These would include, but not be limited to, increased delays at intersections due to more pedestrian signal activations, wear and tear on the trail and sidewalk system, noise, etc.	MP1-7
8) The parking analysis does not provide detail regarding the location, number of parking spaces required, number currently utilized, long-term projections, etc. The parking impacts need to be addressed in detail to provide a clear understanding of the parking demands and impacts, as well as potential mitigation measures. The project should include adequate parking on-site to accommodate the users of the project. Off-street parking spaces should not be included in the calculations. Increased use in City-maintained parking areas (Bayfront Park) should be identified and mitigated.	MP1-8
9) The report should address future improvements being considered in the Dumbarton Rail Study and should ensure that any project improvements are compatible with these rail improvements.	MP1-9

Thank you for considering the City of Menlo Park's comments. Please feel free to call me at 650-330-6740 if you have questions.

Sincerely,

art Mounto

Art Morimoto Engineering Services Manager

cc: Yvonne LeTellier, U.S. Army Corps of Engineers John Krause, California Department of Fish and Game

Response to City of Menlo Park

MP1-1: Specific details on the Adaptive Management Plan for flood protection are summarized in Table 2.3 in Section 2.3.2 and described in detail in Appendix D. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.

Detailed flood studies would be performed during the design and permitting stage of each phase of implementation. For example, flood studies were performed for the Phase 1 action at Ponds E8A, E9 and E8X (see Phase 1 Impacts 3.3-3 and Appendix G – Eden Landing Ponds E8A, E9 and E8X Hydrodynamic Modeling and Geomorphic Analysis). The modeling indicates that restoring tidal inundation to Ponds E8A, E9, and E8X would not increase high tide water levels, and the coastal and fluvial flood risks are not expected to be adversely affected. The design of the water control structures for the Phase 1 action at Pond SF2, coupled with intensive water level management and continued levee maintenance of the Pond SF2 levees, would prevent an increased risk of flooding to adjacent properties during high tides (see Phase 1 Impacts 3.3-1 and 3.3-3).

MP1-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.

The Project would provide a viewing platform at Bayfront Park as part of the Phase 1 actions. This new feature at the existing park would primarily benefit City of Menlo Park residents who currently use the park. The proposed viewing platform would enhance an existing park and would not create a new destination in and of itself. Consequently, the new viewing platform is not expected to increase the park's operation and maintenance costs.

MP1-3: As described in Sections S.2 and S.3 of the EIS/R Executive Summary, the EIS/R is a programmatic EIS/R covering the 50-year long-term SBSP Restoration Project as well as a project-level EIS/R addressing the specific components and implementation of the Phase 1 actions. The programmatic EIS/R will serve as the tiering document for future phases of the SBSP Restoration Project.

Since project-level environmental review is required for each phase before it can be implemented, additional Project phases beyond Phase 1 cannot be implemented until subsequent project-level NEPA and CEQA documentation is completed.

Please see the response to Comment Caltrans-6 for a discussion of the Adaptive Management Plan and criteria used in determining the Phase 1 actions (see Section 2.5.1 of the EIS/R). Future phases of the Project would be determined by the Adaptive Management Plan and similar criteria (see Section 2.6 of the EIS/R).

Any environmental documentation prepared for future phases of the SBSP Restoration Project would be circulated to the agencies with jurisdiction over the Project, the Stakeholder Forum, the Local Government Forum, the Regulatory and Trustee Agencies Group, and interested organizations and individuals for review. As such, the City of Menlo Park would be involved in planning for the future phases of the Project and would have the opportunity to review and consider impacts.

MP1-4: Section 3.12.3 of the EIS/R describes the traffic analysis methodology. The EIS/R acknowledges access routes would vary by location and would include the major highways surrounding the SBSP Restoration Project Area and local roadways that pass through a variety of industrial, commercial, and residential uses. Section 3.12.3 of the EIS/R, under the heading Approach to Analysis, has been revised to include the following sentence:

<u>Construction vehicle trips would be expected to comply with the truck routes</u> <u>and requirements for the affected jurisdictions.</u> Due to the availability of space within the pond complexes, staging of material and equipment would be accommodated entirely within these properties.

- MP1-5: As described in Sections 2.4.3 and 2.4.4 of the EIS/R, Alternative B and C would include the installation of a viewing platform at the northeast corner of the City of Menlo Park's Bayfront Park and an interpretive display at the historic Red Barn site, located in the southwest corner of Bayfront Park. The Project proponents would continue to work with the City of Menlo Park on the design and construction of these facilities and would obtain necessary permits from the City of Menlo Park. Because of the scale of the proposed Project, the Project proponents do not anticipate the need to pay mitigation fees. However, as part of the design and implementation of the recreational facilities, the Project proponents would coordinate with the City to make that determination. In addition, Section 1.7, Intended Uses of the EIS/R and Required Approvals, of the EIS/R, which describes the other ministerial permits/approvals has been revised to include the following bulleted item:
 - Encroachment permits from Union Pacific Railroad and PG&E;
 - Permits from cities with jurisdiction over the Project; and
 - Easements or modifications to existing easements from nearby landowners for proposed levees that provide flood protection.
- MP1-6: SBSP Impact 3.12-1 evaluates the potential short-term degradation of traffic levels on a roadway or an intersection due to construction activities at a programmatic level of detail and provides a mitigation measure that would prohibit the transport of material and equipment during the weekday am and pm peak commute traffic hours. As described in Section 3.12.3 of the EIS/R, under the Approach to Analysis section, detailed evaluations of traffic impacts based on more realistic estimates will be conducted as part of project-level environmental review for future phases of the Project. The effects of weekend and

night construction-related truck traffic will be evaluated at the project level during future environmental review.

It should be noted that under SBSP Impact 3.13-1, a mitigation measure specifying the permitted hours of construction for the purposes of noise is identified for the Project pond complexes, including the Ravenswood pond complex adjacent to the City of Menlo Park. As indicated, construction activities are permitted between 8 am and 6 pm Monday through Friday. Required compliance with construction noise standards has the potential to limit construction-related activities to these hours, depending on the location of proposed activities. In this case, weekend and nighttime construction-related traffic would not be expected.

Phase 1 Impact 3.12-1 describes the potential short-term degradation of traffic levels on a roadway or an intersection from implementation of the Phase 1 actions. It concludes that congestion and short-term delays on the access roadway and intersections are not expected because of the limited number of construction-related truck trips. This number of truck trips would not be expected to result in any adverse traffic effects even if construction were to occur on the weekends or evenings.

MP1-7: The Project would provide a viewing platform at Bayfront Park as part of the Phase 1 actions. This new feature at the existing park would benefit City of Menlo Park residents who currently use the park. The proposed viewing platform would enhance an existing park and would not create a new destination in and of itself. Consequently, the new viewing platform is not expected to generate a substantial increase in visitors and traffic to the park.

Figure ES-4c of the EIS/R shows existing and proposed trails within and outside the Ravenswood pond complex. Proposed trails within the pond complex would be developed over the 50-year planning horizon as part of the SBSP Restoration Project. Proposed trails outside the pond complex would likely be implemented by other entities. Figure 2-2 of the EIS/R shows the recreation features for the Phase 1 actions. Phase 1 actions would consist of rehabilitation of an existing trail on the bay side of Pond SF2 until the pond is restored to tidal marsh and the levee is removed. Under the Phase 1 actions, the proposed rehabilitated trail would not interface with any new roadways or intersections. Subsequent environmental review would be conducted for future phases of the Project, and would evaluate, as necessary, any potential impacts to roadways and intersections associated with pedestrian and bicycle traffic.

MP1-8: As described in MP1-2 and MP1-7, the Project would provide a viewing platform at Bayfront Park as part of the Phase 1 actions. This new feature at the existing park would primarily benefit City of Menlo Park residents who currently use the park. The proposed viewing platform would enhance an existing park and would not create a new destination in and of itself. Consequently, the new viewing platform is not expected to generate a substantial increase in visitors and traffic to the park. Table 3 below presents an inventory of parking near the SBSP Restoration Project Area access points. It provides the number of existing off-street parking spaces available at Bayfront Park, including handicapped spaces. As discussed above, because the new viewing platform is an enhancement feature and would not create a new destination in and of itself, a substantial increase in parking demand is not expected. Consequently, impacts would remain less than significant. This table has been added as Table 3.13-1 in SBSP Impact 3.12-3 in Section 3.13, Traffic, of the EIS/R. Discussions regarding the availability of existing parking spaces in the vicinity of Phase 1 actions, including Bayfront Park, based on this table has been incorporated in Phase 1 Impact 3.13-3.

LOCATION	NO. OF SPACES	OWNER
Bayfront Park	30 (4h)	City of Menlo Park
Dumbarton Bridge, western approach, north side	Approx. 35 (2h)	Caltrans
Dumbarton Bridge, western approach, south side	Approx. 35 (2h)	Caltrans
Mt. View Shoreline Park	166 (4h)	City of Mt. View
Shoreline Amphitheater Overflow	> 200	City of Mt. View
City of Sunnyvale WPCP Carl Rd.	Approx. 15	City of Sunnyvale
Sunnyvale Baylands Park	> 200	City of Sunnyvale
Alviso Marina County Park	107 (at least 2h)	Santa Clara Co. Parks and Recreation
Refuge Environmental Education Center	42 (4h)	USFWS
Eden Landing Access Area	58	EBRPD
Note: h = handicapped parking spaces		

Table 3. Off-Street Parking Near SBSP Restoration Project Access Points

MP1-9 Proposed improvements of the Dumbarton Rail Study are described in Section 4.2.2 of the EIS/R as a cumulative project. It should be noted that the Dumbarton Rail Corridor is south of the Ravenswood pond complex, outside of the Project boundaries. Restoration activities proposed within the Ravenswood pond complex are not expected to conflict with the Dumbarton Rail Corridor improvements.

Caltrain also submitted a comment letter on the SBSP Restoration Project EIS/R regarding the proposed extension of the Bay Trail Spine to Pond SF2 along the rail corridor. Please see the response to Comment CT-2.

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TEL 650.330.6620 FAX 650.328.7935	SUBJECT:	South Bay Salt Pond Restoration Project –	
City Council TEL 650.330.6630 FAX 650.328.7935		Draft Environmental Impact Statement/Report	
City Manager's Office TEL 650.330.6610	Dear Ms. LeT	ellier:	
FAX 650.328.7935		r the opportunity to comment on the South Bay Salt Pond	
Community Services TEL 650.330.2200 FAX 650.324.1721	Environmenta	Project. The City of Menlo Park provided comments to the Draft al Impact Statement/Report (DEIS/R) on April 18, 2007 and has additional comments:	
Engineering TEL 650.330.6740 FAX 650.327.5497		R does not analyze in detail if the proposed phase I project in the Pond SF2 will cause an increased likelihood of flooding to	
Environmental TEL 650.330.6763 FAX 650.327.5497	adjacent area that will facilit	MP2-1	
Finance TEL 650.330.6640 FAX 650.327.5391		e additional flow into the pond could create an increased risk of ljacent properties during high tides and large storm events.	
Housing & Redevelopment TEL 650.330.6706 FAX 650.327.1759	reduction in returning the length of e	I proposal for the Ravenswood Pond Complex calls for an overall ecreational trails. This project should, at a minimum, maintain existing trails with the goal of increasing trails for recreational	MP2-2
Library TEL 650.330.2500 FAX 650.327.7030	Use.	r considering the City of Menlo Park's additional comments	

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CITY OF

MENLO

PAR

Thank you for considering the City of Menlo Park's additional comments. Please feel free to call me at 650-330-6740 if you have questions.

Sincerely,

KELLY FERGUSSON MAYOR

ANDREW COHEN

MAYOR PRO TEM JOHN BOYLE

COUNCIL MEMBER

COUNCIL MEMBER

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at Mornoto

Art Morimoto **Engineering Services Manager**

Clyde Morris, USFWS CC: John Krause, California Department of Fish and Game

Response to City of Menlo Park

MP2-1:

The commenter suggests that the EIS/R should address whether the Phase 1 action at Pond SF2 would create an increased risk of flooding to adjacent properties during high tides and large storm events. As discussed in Section 2.5 of the EIS/R, the Phase 1 action at Pond SF2 includes the installation of new water control structures that would facilitate flows between the pond and the Bay. The water control structures would contain flap gates that control the inflow of water into Pond SF2 so that the water levels within the pond can be tightly controlled due to habitat constraints. Water levels within the pond would not be allowed to fluctuate more than a few inches (water levels would not be fully tidal), and would be maintained at an average depth of approximately six inches for optimal shorebird foraging. The design of the water control structures coupled with the tight constraint on water levels and continued levee maintenance of the Pond SF2 levees would prevent an increased risk of coastal flooding to adjacent properties during high tides. Initial modeling results show that high Bay water levels could result in increased within-pond water levels on the order of a few inches. This increase would not result in an increased risk of coastal flooding. If necessary, the water control structures could be closed to prevent the inflow of Bay water during large storm events. Maintaining water levels within Pond SF2 may result in a small reduction in available flood storage within the pond for high coastal water levels that overtop the bayfront levee. The height of the bayfront levee would be increased on the order of 1 to 2 ft for trail construction as part of the Phase 1 Recreation and Public Access action (see Section 2.5.4 in the EIS/R). This increase in levee height will reduce the risk and frequency of overtopping. The net effect of the Phase 1 actions will be no increase in flood risk to the neighboring community at this time.

Additional analyses would be performed prior to any future tidal restoration at Pond SF2 in order to evaluate the appropriate flood protection elements for SR 84 and the adjacent developed areas.

MP2-2: The total amount of existing trail within the Ravenswood pond complex in the Project Area is 3.67 miles. Under Alternative B there would be a total of 5.9 miles of trail at the Ravenswood pond complex, including some existing to remain and some new trails. Under Alternative C, there would be a total 4.8 miles of trails including some existing to remain and some new trails. These figures for Alternatives B and C include 1.25 miles of San Francisco Bay Area Water Trail that would be added to provide a new opportunity for recreational users to experience this part of the Bay via the water. This opportunity does not currently exist in this vicinity and will provide more diverse recreational experiences for a larger group of recreational users. In both cases, the action alternatives provide more trails and public access than what would be provided under current conditions and the No Action Alternative.





April 23, 2007

Yvonne LeTellier US Army Corps of Engineers 1455 Market St. San Francisco, CA 94103 John Krause California Dept.of Fish & Game P.O. Box 47 Yountville, CA 94599

Clyde Morris USFWS, Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, CA 94560

RE: City of Sunnyvale Comments on Draft Environmental Impact Statement/Report (EIS/R) for the South Bay Salt Pond Restoration Project

Dear Ms. LeTellier, Mr. Morris, and Mr. Krause:

Thank you for the opportunity to review and comment on the Draft EIS/R for future restoration efforts in the South Bay Salt Ponds. The document is very comprehensive and the adaptive management approach proposed for the overall project appears to be reasonable and will provide a mechanism to address problems as they occur.

In the City staff's review of the draft document, some minor inaccuracies regarding the location of features in the City of Sunnyvale were noted. Also, there are some concerns regarding the expansion of the Bay Trail in regards to adequate supporting infrastructure for the increased usage of the trail that would have an impact on City services.

We have outlined our questions and concerns in the attached table. We welcome the opportunity to meet and discuss our concerns and amend language for the draft EIS/R document to address them.

Please contact Lorrie Gervin, Environmental Division Manager at (408) 730-7268 to schedule a meeting or discuss any questions regarding the comments made.

Sincerely larvin A. Rose Director, Public Works

ADDRESS ALL MAIL TO: P.O. BOX 3707 SUNNYVALE, CALIFORNIA 94088-3707 TDD (408) 730-7501 OPrinted on Recycled Paper SUN-1

Sunnyvale Comments on South Bay Salt Pond Draft Environmental Impact Statement/Environmental Impact Report

Page/Location	Comment	
In general – all references to	The facility should be referred to as either the City of Sunnyvale Water Pollution Control Plant or Sunnyvale	SUN-2
Sunnyvale Sewage Treatment Plant	Water Pollution Control Plant.	
Executive Summary, Page ES-29 SBSP Mitigation Measure 3.4-5c	A statement is made regarding the implementation of Trash TMDL for the Guadalupe River and Coyote Creek. This statement is premature. The Santa Clara Valley Urban Runoff Pollution Prevention Program, in cooperation with the cities, Santa Clara County and the Santa Clara Valley Water District has been working toward reducing the need for a TMDL. There will likely be language/requirements in the Baywide Municipal Regional Storm Water Permit that is under development with the 76 cities/agencies in the Bay Area regarding the implementation of trash/litter reduction measures for water bodies. Trash/litter may be listed on the upcoming 303D listing. However, measures to reduce trash and litter from entering waterways will likely be implemented through the Municipal Regional Permit before a TMDL for trash can be developed.	SUN-3
Executive Summary, Page ES-30 SBSP Mitigation Measure 3.4-5f	The way this mitigation measure is currently worded is ambiguous. It is not clear whether the recommendation to monitor for avian botulism is being accepted, and if so, what form the monitoring would take. The causes of avian botulism are not well understood, and monitoring for the bacteria that cause it is not an effective way to control outbreaks of the disease. The Sunnyvale Water Pollution Control Plant and other POTW dischargers into the South Bay have been monitoring for avian botulism outbreaks with the help of the San Francisco Bay Bird Observatory for over 20 years. The most effective way to control the outbreaks is to regularly search for birds that exhibit the characteristics of the disease and remove any dead or diseased birds from the pond areas where they congregate from July through October (the months when water conditions are optimal for developing outbreaks of the disease). Posting warning signs will not be an effective mitigation measure for Avian Botulism. A monitoring program to remove sick or dead birds on a regular basis is needed.	SUN-4

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Sunnyvale Comments on South Bay Salt Pond Draft Environmental Impact Statement/Environmental Impact Report

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Executive Summary Page ES-34 SBSP Impact 3.12-3 Parking at recreational facilities	This mitigation measure may not be adequate to deal with issues related to the opening of the Bay Trail section along Moffett Field, between Mountain View and Sunnyvale. The City of Sunnyvale has actively supported the completion of the Bay Trail and wishes to continue to do so. However, the financial implications to the City to expand parking and other facilities (e.g., rest rooms, litter collection) for the increased number of users anticipated for this area are yet to be determined and the ability to fund would be dependent on the availability of financial resources. There is a very small parking lot area adjacent to the Sunnyvale Water Pollution Control Plant where users of the Bay Trail can park. With the anticipated increased use of the trail with the opening of these sections, the City of Sunnyvale will likely see impacts on this existing small parking area that have not been addressed here. Space is very limited in this area currently (14 public parking spaces, which occasionally see full capacity use already) and finding room for further expansion will be difficult due to adjacent municipal facilities including the landfill and the water pollution control plant.	SUN-5
2.0 Description of Alternatives Page 2-61 Table 2-5 Alternative B Alviso Fluvial Drainage Elements – Guadalupe Slough- West Valley section	The description of the flood management approaches for infrastructure in the vicinity of the Sunnyvale Treatment Ponds, the Sunnyvale Water Pollution Control Plant, and other Sunnyvale properties (e.g., SMaRT Station and closed Landfill areas) is somewhat unclear. It appears that improvements for flood protection are considered for the treatment ponds, but the text is not clear that other levees along the northern border of Sunnyvale facilities needed for flood protection are considered in the development of the approach described here.	SUN-6
2.0 Description of Alternatives Page 2-64 Table 2-8 Trails – Vehicular Access	A statement is made that indicates that the southerly side of the Sunnyvale Treatment Ponds and the area along the southeast edge of Pond A3W would be promoted for vehicular access. This could be problematic for the Sunnyvale WPCP as the only access point to this area is currently over the narrow Sunnyvale West culvert/bridge and along the one-lane access road to the Sunnyvale Treatment Ponds. This area is currently open on a limited – permit basis for hunters during the duck hunting season. However, a significant increase in vehicular traffic in this area could be problematic for the City, both in access to City infrastructure and increases in public services (e.g., Public Safety) to control or address the problems that	SUN-7

	often occur at accessible but out-of-the-way locations at the ends of roads such as illegal dumping or under-age drinking.	SUN-7 continued
2.0 Description of Alternatives Page 2-64 Table 2-8 Trails –Access Points and Staging Area	The description of the proposed activities (kayak, waterfowl, or fishing access) along the eastern side of Pond A3W adds more concerns for the Vehicular Access conditions described in the section above. With the increase in public use of this area, increases in public support structures will be needed (e.g., restrooms, garbage collection, public safety). This increased infrastructure will need to be addressed in the future as to requirements and who will provide the financial resources.	SUN-8
2.0 Description of Alternatives Page 2-65 – second paragraph	This section provides a further description of a staging area to provide fishing, kayaking, or waterfowl hunting access along the south side of the Sunnyvale Treatment ponds. Won't the access actually be along the northern side of the Lockheed Storm Water Channels? There is a statement here about the vehicular access trails to be completed in cooperation with the City of Sunnyvale. Currently, the City does not have any plans to improve vehicular access to meet ABAG Bay Trail Design guidelines or CalTrans Class 1 Bikeway standards along the southern portions of our Sunnyvale WPCP Treatment Ponds. The need for increased infrastructure and support services to operate and maintain this type of vehicular access is not addressed and will need to be addressed in the future as to requirements and who will provide the financial resources.	SUN-9
	There is a note on Figure 2-20 Alviso Bay Trail Phase 1 Actions that indicates there will be access to the Bay Trail Spine through a new gate in cooperation with NASA at Moffett Field. Is this proposed access point going to be the staging/parking area for vehicular access along the pond A3W eastern edge and out to the Guadalupe Slough? If so, this may be a better vehicular access route than the one being proposed that goes through the Sunnyvale Water Pollution Control Plant parking lot and along Sunnyvale West Channel until it reaches the Moffett Storm Water Channel access road.	SUN-10

PAGE 6/ 8

2.0 Description of Alternatives Page 2-135 – last paragraph before section 2.5.4	The description of the spine trail between Stevens Creek to Sunnyvale indicates that it will take many years to develop a trail designed to meet the ABAG and Caltrans standards. However, plans are described to open this segment of the Bay Trail for immediate access until a more permanent trail can be constructed. This situation is desirable in some ways, but there are concerns that adequate maintenance of existing infrastructure and necessary public services be provided. Sanitation services such as trash collection and restrooms need to be considered, as well as the increased costs for Public Safety to the communities at either end of this extension.	SUN-11
Flood Management and Infrastructure Existing Conditions Page 37 – first paragraph	The statement regarding the City of Sunnyvale storm drainage system is not entirely accurate. The majority of the City's storm drainage system flows by gravity to either Calabazas Creek, the Sunnyvale East or West Channels, or Stevens Creek. Only the storm drain collection system in the Moffett Industrial Park area (north of Highway 237, between the Sunnyvale East Channel and Mathilda Ave flows to Pump Station #1, located between the Sunnyvale Water Pollution Control Plant and the SMaRT Station Materials Recovery Facility off of Carl Road. Pump Station #1 discharges storm water into a side channel that joins Sunnyvale West/Moffett Channel and not directly into the Guadalupe Slough, as stated here.	SUN-12
	Also, the City's Pump Station #2 collects storm water from the area north of Highway 101 and between Calabazas Creek and the Sunnyvale East Channel. This pump station discharges into Calabazas Creek, on the eastern edge of the Sunnyvale Baylands Park. It does not discharge directly into the Guadalupe Slough.	SUN-13
Figure 3.3-7 Alviso Pond A8 Existing Conditions	The lower left hand corner of this aerial photo incorrectly labels the features as the "Sunnyvale Sewage" Treatment Plant. The features present in this area of the photo are a portion of the closed Sunnyvale Landfill (west of the Sunnyvale East Channel) and the Global Sports- Twin Creeks Sports Complex which is a facility of the Santa Clara County Regional Parks System (east of the Sunnyvale East Channel).	SUN-14

Figure 3.7-2 Existing Recreation and Public Access	Please revise the name to the City of Sunnyvale Water Pollution Control Plant. In addition, as shown, the shaded area on the figure identified as Sunnyvale Baylands Park also includes the Global Sports – Twin Creeks Sports Complex, which is a facility of the Santa Clara County Regional Parks System and portions of the closed Sunnyvale Landfill which has access trails.	SUN-15
Pages 3.16-15 to 3.16-17 SBSP Impact 3.16-4: Changes in water level, tidal flow and sedimentation near storm drain systems	The City of Sunnyvale supports the selection of Alternative B or C. The "no action" Alternative A is not acceptable and could have significant impacts (financially and environmentally) for the City if no mitigation measures are included to deal with potential impacts to storm drain outfalls and associated flooding. Restoration actions to address drainage issues affected by changes in water level or sedimentation are essential.	SUN-16
Page 3.3-27, first paragraph, next to last sentence.	The Sunnyvale Storm Water Pump station that pumps into the Sunnyvale West/Moffett Channel area only collects storm water from a relatively small area north of Highway 237, between the Sunnyvale East Channel and Matilda Avenue. No mention is made here of the Lockheed Storm Water Pump Station that discharges into the Sunnyvale West channel and drains the eastern portion of Moffett Field. Also, a relatively small pump station is operated by the Twin Creeks Sports Complex that discharges into the Sunnyvale East Channel, on the northern border of the Sports Complex, near Pond A-4.	SUN-17
Page 3.3-27, fourth paragraph, last sentence.	The statement that much of Stevens Creek is channelized and armored is not exactly correct. The most northern portions of the Creek (North of Highway 237) are channelized. However much of Stevens Creek, below the dam to Highway 101 contains wooded riparian habitat as well as the remnant of a Steelhead Trout run. The area above the dam is the mostly undeveloped park areas and range land. The area of the Permanente Diversion Structure is heavily armored and channelized.	SUN-18
Page 3.3-53 Alternative A – No Action – last sentence	A statement is made that channel erosion from unplanned long-term breaches of ponds A3W and others would potentially cause breaches of the Sunnyvale Treatment Pond levee. Breaching of the Sunnyvale oxidation ponds is not an acceptable outcome due to regulatory and financial consequences to the City for violation of its treatment plant effluent permit. To avoid significant impacts, mitigation in the form of maintenance sufficient to prevent breaches would be required.	SUN-19

Page 4-95 – Alternative A – first paragraph	This makes an assumption that parking will be available at the WPCP during weekend daytime hours and that most of the recreational activities will occur during that time frame. Parking could be a significant impact in some localized areas and there is not any supporting evidence regarding user times. Use patterns may change with population demographics of increasing numbers of people over 60 (and retired) in the next 20 years or so, and the potential for significant use increase during the week, as opposed to weekends. There are occasions where the parking available at the Sunnyvale WPCP during the week (where current Bay Trail users access the trail) is barely adequate. Increasing use of this area with the extension of the Bay Trail spine to Mountain View may have more of an impact on existing facilities than is stated here. No documentation is provided to support the estimates of the impacts, or lack of significant impacts, from increased traffic and parking by Bay Trail users	SUN-20
Page 4-95 – Alternatives B and C	by Bay Trail users. The statement that "demand for parking" would be scattered throughout the South Bay" is somewhat misleading. It may be that parking will be a more significant issue in selected areas where public access is more easily available or if certain features (e.g., fishing, kayak, or vehicular access) are present. No evidence is provided that supports that use of these areas would occur primarily on the weekend. There may be conflicts with existing uses of these areas with increases in the desire of the public to access them.	SUN-21
Page 4-117 Phase 1 Actions at Alviso – last paragraph on page	"Sewer main outfall" should be corrected to "Sunnyvale WPCP outfall" as it is not a sewer main outfall. The statement is made that none of the currently identified projects would affect hydrodynamics or sediment dynamics near sewer force mains in the Alviso ponds. Impacts to the Sunnyvale POTW outfall are discussed. However, no where is there a description of potential impacts to the piping infrastructure that carries primary effluent to the treatment ponds over Sunnyvale West/Moffett Channel and then transports secondary treated pond water back to the Sunnyvale WPCP for tertiary treatment prior to discharge at the City's outfall. The continued operation and maintenance of these pipes are essential for the operation of the Sunnyvale Water Pollution Control Plant. Any effects on their structure, bridges, or accessibility should be considered significant. However no mention is made of them in this document.	SUN-22

Response to City of Sunnyvale

SUN-1: Comment acknowledged.

- SUN-2: The name of the facility has been revised to "City of Sunnyvale Water Pollution Control Plant" or "City of Sunnyvale WPCP" throughout the EIS/R.
- SUN-3: Comment acknowledged. SCVWD also raised the issue of TMDLs for trash and pathogens. Neither of these pollutants has been formally listed for impairment, so discussion of a TMDL is premature. The text in Section 3.4.3 of Section 3.4 (Surface Water, Sediment, and Groundwater Quality), under the heading Emerging Programs of Water Quality Standards, has been revised as follows:
 - <u>TMDLs for trash Trash could be listed as an impairing pollutant in</u> <u>many urban creeks, including will likely be developed for the</u> Guadalupe River and Coyote Creek during the lifetime of this Project. <u>Measures to reduce trash will likely be implemented</u> <u>through the Municipal Regional Permit for stormwater; if these do</u> <u>not succeed, a trash TMDL is a potential next regulatory step.</u> <u>Pathogens could follow a similar trajectory.</u>

New objectives resulting from these programs should also be considered with respect to evaluation of impacts. Details on these emerging programs (except for the trash <u>and pathogens</u> TMDLs) are provided below.

SUN-4:Comment acknowledged. Avian botulism is discussed under SBSP Mitigation Measure
3.6-22. SBSP Mitigation Measure 3.4-5f in Section 3.4, Surface Water, Sediment, and
Groundwater Quality, has been revised as follows:

This mitigat<u>iones addresses</u> for potential impacts due to bacterial growth in restored areas. The monitoring plan associated with the Project will include bacteria in water and shellfish. The <u>SBSP Restoration Project's</u> National Science Panel recommended <u>that</u> monitoring <u>be conducted</u> for avian botulism and bivalve disease and toxicity to humans. <u>Mitigation measures for avian</u> botulism are discussed under SBSP Impact 3.6-22. The Project will consider the need for additional monitoring of shellfish as each phase is implemented. For protection of public health, a program of public outreach and communication will be developed and implemented. The program will include posting of warning signs in multiple languages where monitoring data indicate the need to advise the public of exposure risks.

SUN-5: Phase 1 Impact 3.12-3 of the EIS/R acknowledges the limited parking at the Sunnyvale end of the proposed trail connection. Please see the response to Comment MP1-8 for a summary of available parking near SBSP Restoration Project access points. Although not mentioned in the EIS/R, in addition to the 15 off-street parking spaces at the City of Sunnyvale WPCP, additional parking is available at the paid parking lot at the Sunnyvale Baylands Park. Although parking spaces are limited at the Sunnyvale end of the proposed trail connection, the function of the trail as a connector is not anticipated to attract new users who would access the trail at that particular connection point. The proposed trail segment, which completes the Bay Trail in the area, would facilitate the movement of people and bicycles to a location on the trail that extends further than the existing trail. As stated in Phase 1 Impact 3.12-3, the extension of the Alviso Bay Trail would provide a continuation of an existing amenity rather than a new recreational destination or new type of activity. Because the proposed trail would function to facilitate movement rather than create a new destination point, access by pedestrian and bicycle traffic under the Phase 1 actions would likely be similar to that occurring currently in the absence of this connection. As such, the potential increase in parking demand associated with Phase 1 actions at the new connection trail would remain less than significant.

- SUN-6: The commenter requests clarification regarding the description of the flood management approach in the vicinity of the City of Sunnyvale WPCP and other Sunnyvale properties. The primary coastal flood protection levee would be located along the bayward edge of the City of Sunnyvale WPCP (*i.e.*, between the City of Sunnyvale WPCP and Pond A3W to the west, along Moffett Channel to the east, and Guadalupe Slough to the north). An additional flood protection levee would be located on the landward side of Pond A4 and connect to the existing fluvial levees along the Moffett Channel/Sunnyvale West Channel to the west and the Sunnyvale East Channel to the east. Sunnyvale's inland properties (*i.e.*, the City of Sunnyvale WPCP, the closed landfill and the SMART station) are located inland of the coastal flood protection levees and would therefore be afforded coastal flood protection. The flood protection elements along Guadalupe Slough in Table 2-5 of the EIS/R have been revised for clarity. The description of the coastal flood protection levee in the vicinity of the Sunnyvale properties has also been modified for clarity.
- SUN-7: Proposed vehicular access near the City of Sunnyvale WPCP in the Alviso pond complex is considered in the EIS/R at the program/conceptual level. The issues raised by the commenter would be dealt with more appropriately at the Project design level in the future. The City of Sunnyvale will have input during the Project design process.
- SUN-8: Please see the response to Comment SUN-7 above.
- SUN-9: Please see the response to Comment SUN-7 above.
- SUN-10: The proposed gate to the Bay Trail is in a different location than the one described in the comment. Currently there is no plan to have a gate at this location.
- SUN-11: Please see the response to Comment SUN-7 above.

SUN-12:The City of Sunnyvale's storm drainage system has been clarified in the SBSP
Restoration Project Flood Management and Infrastructure Existing Conditions Report,
which is incorporated by reference in the EIS/R. The Report has been revised as follows:

The City of Sunnyvale is also served by independent storm-drainage systems. that intercept significant drainage areas and prevent flows from entering Sunnyvale East and West Channels. These flows are pumped directly into Guadalupe Slough. The majority of the City of Sunnyvale's storm drainage flows by gravity to Calabazas Creek, Moffett Channel, the Sunnyvale East Channel or Stevens Creek. A storm drain collection system in the Moffett Industrial Park area (north of SR 237 between the Sunnyvale East Channel and the Lockheed Martin Facility) flows to a pump station that discharges storm water into a side channel that discharges to Moffett Channel which joins Guadalupe Slough. A second system collects storm water north of U.S. SR 101 (between Calabazas Creek and the Sunnyvale East Channel) and pumps the storm water into Calabazas Creek. The Sunnyvale WPCP municipal wastewater treatment plant discharges (approximately 14–15 mgd) into Moffett Channel/Sunnyvale West Channel providing the primary source of freshwater during the summer and fall (Life Science! 2004).

- SUN-13:The City of Sunnyvale's storm drainage system has been clarified in the SBSP
Restoration Project Flood Management and Infrastructure Existing Conditions Report.
The modified text is shown in the response to Comment SUN-12 above.
- SUN-14: Comment acknowledged. The labels for the Sunnyvale properties on Figure 3.3-7 have been corrected and the revised figure is presented in the Final EIS/R.
- SUN-15 Figure 3.7-2 has been revised as suggested by the commenter. Table 3.7-1 has been revised to identify the sports complex in Sunnyvale Baylands Park.
- SUN-16: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project (supporting either Alternative B and C, and not the No Action Alternative A) and does not address the adequacy of the EIS/R.
- SUN-17: The City of Sunnyvale's storm drainage system has been clarified in the EIS/R, Section 3.3.1 of the EIS/R (Project Setting for the Alviso pond complex). The modified text has been revised as follows:

Presently, Guadalupe Slough conveys flow from San Tomas Aquino Creek, Calabazas Creek, Sunnyvale East and West Channels and pumped flow from the independent storm-drainage systems of the City of Sunnyvale (the Sunnyvale Stormwater Pump Station that pumps into Calabazas Creek, the Lockheed Stormwater Pump Station that pumps into Moffett Channel, and a small pump station operated by the Twin Creeks Sports Complex that pumps into the Sunnyvale East Channel). The flows from all three pump stations eventually flow into Guadalupe Slough. The channel-Guadalupe Slough continues to lose capacity as salt marsh vegetation and sediment deposits accumulate in the channel.

SUN-18:The channelized portion of SR 237 has been clarified in the EIS/R, Section 3.3.1 (Project
Setting for the Alviso pond complex). The modified text has been revised as follows:

Stevens Creek flows northerly from the City of Mountain View and drains an area of 27 square miles. Additional overflow discharge is delivered from Permanente Creek through a diversion. The watershed contains a high percentage of natural area and its upper zone is largely undeveloped forest or rangeland. Much of the creek <u>downstream of SR 237</u> is channelized and armored for bank stabilization and flood protection (PWA and others 2005a).

SUN-19: Unplanned breaches to the City of Sunnyvale WPCP and Pond A4 under Alternative A would constitute a significant impact, as stated in the EIS/R (SBSP Impact 3.3-4).
 Unplanned breaches to these ponds would be unacceptable due to the regulatory permit and financial consequences; the EIS/R has therefore been revised to read as follows:

In addition, channel erosion would potentially cause unplanned breaches of the <u>City of</u> Sunnyvale <u>WPCP</u> Treatment Pond-levee and Pond A4 levee would potentially be subject to greater channel erosion due to downstream unplanned breaches. Levee maintenance which would be repaired needed to prevent unplanned breaches of the City of Sunnyvale WPCP and Pond A4 levees.

SUN-20: Please refer to the inventory of parking provided in the response to Comment MP1-8 above. Cumulative Impact 3.12-3 evaluates the potential increase in parking demand from the proposed SBSP Restoration Project combined with other cumulative projects. Under Alternative A, no recreational facilities would be proposed, and as such this alternative would not contribute to any cumulative parking effects. The cumulative parking impacts for all other cumulative projects (described under Alternative A) was considered less than significant due to the availability of parking spaces in and around existing and future recreational facilities, in designated and undesignated parking/staging areas and in the surrounding industrial areas, including on-street parking. The analysis is based on the assumption that most recreation activities occur during the weekends, as higher use (peak use) levels typically occur on weekends or holidays (Vogel, pers. comm. 2007). Based on this assumption, it is likely that surrounding on-street parking, particularly in surrounding industrial areas, would provide additional parking spaces. As such, the analysis does not assume that the City of Sunnyvale WPCP would provide all parking needs in the area.

- SUN-21: Please see the response to Comment SUN-20 regarding the typical peak use period for recreational facilities and cumulative parking impacts resulting from other cumulative projects. Please see the response to Comment SUN-5 for a discussion of the Bay Trail spine extension and the reasons why adverse parking effects are not expected. As described in Cumulative Impact 3.12-3 under Alternative B, because the increase in parking demand has not yet been determined, there is a possibility that there would be insufficient supply in the long term under Alternative B (also applicable to Alternative C). However, SBSP Mitigation Measure 3.12-13 (which requires design of recreational facilities with sufficient parking spaces to accommodate the projected increase in vehicles that access the site) would reduce potential parking effects resulting from Alternative B (and Alternative C) to less than significant. The mitigation measure would ensure that the Project's contribution would be less than significant. As such, cumulative impacts overall (combination of Alternatives B or C and other cumulative projects) would be less than significant.
- SUN-22: The planned tidal restoration at Pond A6 would result in negligible changes to the hydrodynamics in Moffett Channel where the City of Sunnyvale WPCP infrastructure is located. The discussion for Cumulative Impact 3.16-6 has been revised to read as follows:

Phase 1 Actions at Alviso. None of the currently identified projects would be expected to affect the hydrodynamics or sediment dynamics near sewer force mains in the Alviso pond complex. The planned tidal restoration at Pond A6 would result in negligible effects on <u>water levels, tidal flows and</u> sedimentation in Moffett Channel where the sewer main outfall from the Sunnyvale WPCP <u>outfall and infrastructure are located</u>. to Moffett Channel. Therefore, the Phase 1 actions in the Alviso pond complex would not contribute to significant cumulative impacts. The cumulative impacts of the Phase 1 actions and other <u>cumulative</u> projects would be less than significant.

Message-Id: <<u>20070424230355.AE11C2400DB3@mail.sfei.org</u>> Date: Tue, 24 Apr 2007 16:03:55 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Yves Last Name: Zsutty Organization: City of San Jose - Dept of Parks Street Address: 200 East Santa Clara Street Street Address2: 9th Floor City: San Jose State: CA Zip Code: 95113 Country: USA Email: <u>yves.zsutty@sanjoseca.gov</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

1. The document inaccurately shows the part of Bay Trail Reach 9 (the portion paralleling RR tracks near Gold Street) as open to the public. This trail is not yet developed and should b	
 shown as âEURoefutureâEUR or âEURoeplannedâEUR. 2. For Alternative C, the document shows removal of the existing Bay Trail loop segment from Alviso Marina (it would be tideland under that alternative). This may impact the CityâEUR(tm)s master planned trail alignment which follows the existing shoreline. The City requests additional data on the limits and extent of this proposed work. At a minimum, we work 	
 want the EIS document to indicate that any improvements/alterations in this area should be designed to accommodate a future trail alignment along the resulting shore. The document shows a trail alignment adjacent to Pond A8S. Please be aware that the C of San Jose is initiating this project (preparation of construction documents) in the 07/08 fiscal year. The document should clearly identify that continous public access is required around the perimeter of the landfill site so that a trail system can some day connect the San Tomas Aquin Trail to Reach 7 of the Bay Trail (via future pedestrian bridge âEUR" see http://www.sjparks.org/Trails/Bay/BayTrail.asp for a conceptual image). 	

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to City of San Jose Department of Parks

- SJPARKS-1: The program alternative maps for the Alviso pond complex has been revised to clarify that this segment of Bay Trail is proposed. The line type for a "proposed" trail will be shown for this segment.
- SJPARKS-2: The work being proposed around the Alviso Marina County Park will be better defined and detailed during subsequent design phases for the Project. However, if Alternative C is implemented, the Bay Trail spine in the vicinity of Pond A8 and A12 will follow the future flood control levees that will parallel the future shoreline, hence this should accommodate the City's proposed plans in this area. Implementation of alternatives in or near the City of San Jose or sites noted in the City's master plans will be coordinated with City staff.
- SJPARK-3: A note has been added to the program alternatives description to clarify that the proposed trail segment adjacent to Pond A8S is being initiated by the City of San Jose. The SBSP Restoration Project does not anticipate any actions that will interrupt the plans for a long-term continuous trail connection around the landfill.



Department of Planning, Building and Code Enforcement

JOSEPH HORWEDEL, DIRECTOR

May 1, 2007

Clyde Morris, USFWS, Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, CA 94560

SUBJECT: DRAFT EIS/R FOR SOUTH BAY SALT POND RESTORATION PROJECT (FILE NO. OA07-004)

Dear Mr. Morris:

The City of San Jose has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (EIS/R) for the South Bay Salt Pond Restoration Project, a portion of which lies within the City of San Jose. The City of San Jose supports the restoration project and we encourage continuation of current efforts to complete the project by 2016.	SJPLAN-1
Based upon our review of the Draft EIS/R, we have comments that are intended to identify opportunities to reduce environmental impacts, enhance the project benefits, address areas of potential community concern, and/or present current information or better clarification. Our comments in this regard are as follows:	
Objectives (Executive Summary and Introduction): Objective number 6 should include specific reference to wastewater treatment plants in the parentheses.	SJPLAN-2
 Shoreline Study Area (page 1-22) The entire San Jose/Santa Clara Water Pollution Control Plant lands should be included in the Shoreline Study area to ensure that this vital service is protected from flooding. The description of the levee alignment on page 2-59 indicates that there is a separate process to plan the alignment along A18. The maps should reflect this uncertainty over the final levee alignment by using a different symbol for the levee along A18's southern edge. This stair-shaped levee should not be designated "existing flood protection" on any of the maps throughout the document. 	SJPLAN-3
Adaptive Management: Table 2.3 does not address the project objective relating to protecting existing infrastructure. This	

Table 2.3 does not address the project objective relating to protecting existing infrastructure. This project objective should be included in the adaptive management plan to ensure that no adverse effects on such infrastructure occur. Even though most of the stakeholder group agreed to focus on the three stated objectives, the entire set of guiding objectives should be clearly stated and referenced throughout the documents.

SJPLAN-4

Clyde Morris May 1, 2007 RE: DRAFT EIS/R SOUTH BAY SALT POND RESTORATION (FILE NO. OA07-004) Page 2

Figure 2-22 labels the Moseley Tract as Moseley "trust." The goal of the City of San Jose is to have the Moseley Tract included in the project area.SJPLAN-5Page 3.3-6 describes effect of Plant flow on Artesian, Mud and Coyote Slough While Plant flows have likely had an effect on Mud and Coyote sloughs, there are other factors which have also had a significant impact on these factures. For example, the Warm Springs Restoration Project, begun in 1986, has had a significant change in the hydrology of these two systems with an increase in both tidal prism from the Bay and freshwater from Coyote Creek.SJPLAN-6Fage 3.3-23, first paragraph. Change the following wording: "The plant is permitted by the RWQCB for an average dry weather effluent flow trigger of 120 mgd and has been discharging about 100 mgd during the dry weather season." The only value the Plant is permitted for is 167 mgd. Board Order W090-5 includes a dry-weather flow trigger of 120 mgd. The City has met or exceeded all the targets and goals of it's Action Plan, with average dry-weather flows to the Bay of 100 mgd over the last five years. The average Plant effluent flows over the same period have been 112 mgd, with peak winter flows of 140 mgd. The 160 mgd number in this section is incorrect.SJPLAN-8Page 3.4-13. City of San Jose Copper and Nickel Surface Water Results The following statement (next to last sentence of this paragraph). "Therefore, dissolved nickel concentrations infrequently exceed the applicable water quality objective," is inaccurate. The continuous South Bay SO for nickel (1.9 ug/L) has never been exceeded, nor has the maximum (62.4 ug/L). Statement should be revised to read as follows: "Dissolved nickel concentrations did not exceed these values."SJPLAN-10Page 3.4-33. Emerging Programs of Water Quality Standards sediments. Indis could clause cl		
have likely had an effect on Mud and Coyote sloughs, there are other factors which have also had a significant impact on these features. For example, the Warn Springs Restoration Project, begun in 1986, has had a significant change in the hydrology of these two systems with an increase in both tidal prism from the Bay and freshwater from Coyote Creek.SJPLAN-6Page 3.3-23, first paragraph. Change the following wording: "The plant is permitted by the RWQCB for an average dry weather effluent flow of 120 mgd" to read as follows: "The plant has an average dry weather effluent flow trigger of 120 mgd. The City has met or exceeded all the targets and goals of it's Action Plan, with average dry-weather flows to the Bay of 100 mgd over the last five years. The average Plant effluent flows over the same period have been 112 mgd, with peak winter flows of 140 mgd. The 160 mgd number in this section is incorrect.SJPLAN-7Page 3.3-35 first paragraph. Tidal flooding in the area is a complex issue that is not related only to Moseley Tract flooding. Water overtops adjacent to the Moseley Tract near the bridge as well as on the southern side of the bridge.SJPLAN-8Page 3.4-13. City of San Jose Copper and Nickel Surface Water Results The following statement (next to last sentence of this paragraph): "Therefore, dissolved nickel concentrations infrequently exceed the applicable water quality objective," is inaccurate. The continuous South Bay SOI for nickel (11.9 ugL) has never been exceeded, no has the maximum (62.4 ugL). Statement should be revised to read as follows: "Dissolved nickel concentrations did not exceed these values."SJPLAN-9Page 3.4-35. Emerging Programs of Water Quality Standards PCBs TMDL behould be added to this list. This project is in development and will likely include a sediment taget value based on fish tissue concentrat		SJPLAN-5
RWQCB for an average dry weather effluent flow of 120 mgd" to read as follows: "The plant has an average dry weather effluent flow trigger of 120 mgd and has been discharging about 100 mgd during the dry weather season." The only value the Plant is permitted for is 167 mgd. Board Order WQ90-5 includes a dry-weather flow trigger of 120 mgd. The City has met or exceeded all the targets and goals of it's Action Plan, with average dry-weather flows to the Bay of 100 mgd over the last five years. The average Plant effluent flows over the same period have been 112 mgd, with peak winter flows of 140 mgd. The 160 mgd number in this section is incorrect. SJPLAN-7 Page 3.3-35 first paragraph. Tidal flooding in the area is a complex issue that is not related only to Moseley Tract flooding. Water overtops adjacent to the Moseley Tract near the bridge as well as on the southern side of the bridge. SJPLAN-8 Page 3.4-13. City of San Jose Copper and Nickel Surface Water Results SJPLAN-8 The following statement (next to last sentence of this paragraph): "Therefore, dissolved nickel concentrations infrequently exceed the applicable water quality objective," is inaccurate. The continuous South Bay SSO for nickel (11.9 ug/L) has never been exceeded, nor has the maximum (62.4 ug/L). Statement should be revised to read as follows: "Dissolved nickel concentrations did not exceed these values." SJPLAN-9 SJPLAN-10 sediment target value based on fish issue concentrations that will be used to determine attainment of beneficial uses. If there are PCBs contaminated sediments in the ponds that are transported out into the Bay, this could delay recovery. Likewise, if PCBs are transported into the ponds via Bay sediments, this could case pereare Did sediments be cortaminated. The introductory sentence to	have likely had an effect on Mud and Coyote sloughs, there are other factors which have also had a significant impact on these features. For example, the Warm Springs Restoration Project, begun in 1986, has had a significant change in the hydrology of these two systems with an increase in both	SJPLAN-6
Moseley Tract flooding. Water overtops adjacent to the Moseley Tract near the bridge as well as on the southern side of the bridge.SJPLAN-8Page 3.4-13. City of San Jose Copper and Nickel Surface Water Results The following statement (next to last sentence of this paragraph): "Therefore, dissolved nickel concentrations infrequently exceed the applicable water quality objective," is inaccurate. The continuous South Bay SSO for nickel (11.9 ug/L) has never been exceeded, nor has the maximum (62.4 ug/L). Statement should be revised to read as follows: "Dissolved nickel concentrations did not exceed these values."SJPLAN-9Page 3.4-53. Emerging Programs of Water Quality Standards PCBs TMDL should be added to this list. This project is in development and will likely include a sediment target value based on fish tissue concentrations that will be used to determine attainment of beneficial uses. If there are PCBs contaminated sediments in the ponds that are transported out into the Bay, this could delay recovery. Likewise, if PCBs are transported into the ponds via Bay sediments, this could cause cleaner pond sediments to be contaminated. The introductory sentence to this section should be modified as appropriate if the PCBs TMDL project is added to this list.SJPLAN-10General comment regarding PBDEs. This class of flame retardants is referred to throughout this report as PDBEs (Poly dibrominated ethers). This should be corrected to PBDEs (polybrominated diphenyl ethers). The report most frequently referenced (Oros et al., 2005) regarding PBDEs is Levels and Distribution of Polybrominated Diphenyl Ethers in Water, Surface Sediments and Bivalves from the San Francisco Estuary.SJPLAN-12	RWQCB for an average dry weather effluent flow of 120 mgd" to read as follows: "The plant has an average dry weather effluent flow trigger of 120 mgd and has been discharging about 100 mgd during the dry weather season." The only value the Plant is permitted for is 167 mgd. Board Order WQ90-5 includes a dry-weather flow trigger of 120 mgd. The City has met or exceeded all the targets and goals of it's Action Plan, with average dry-weather flows to the Bay of 100 mgd over the last five years. The average Plant effluent flows over the same period have been 112 mgd, with peak	SJPLAN-7
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	to make a determination of the potential for impact from these contaminants without data on	SJPLAN-12

Clyde Morris May 1, 2007 RE: DRAFT EIS/R SOUTH BAY SALT POND RESTORATION (FILE NO. OA07-004) Page 3

that some of these contaminants (PBDEs) are not in pond sediments due to isolation of ponds from the Bay since before PBDEs were in use, the legacy pollutants, especially PCBs could be in pond sediments. In the case of PCBs, this is especially true for ponds that have historical or continued uses and infrastructure (example, railway lines, old railroad stops such as Drawbridge and power lines) in them that have used PCBs in the past and in some cases, have evidence linking these uses to elevated levels of PCBs even today. Data on PCBs and legacy pesticides from in-pond sediments is critical and should be compared to the most appropriate Objectives, Criteria or Sediment Guidelines (ER-L, ER-M) as well as ambient concentrations as reported.

Pages 3.4-51 – 3.4-52. Without data on in-pond sediment concentrations for PCBs, chlordane and dieldrin, it is impossible to know whether pond sediments are cleaner than ambient or not.

Page 3.4-59 Mobilization and Transport of Other Contaminants. See general comment regarding PCBs, PBDEs and legacy pesticides above. Mobilization and transport of contaminated sediments is recognized as a potential impact (affecting mercury and these other sediment-bound contaminants). The risk cannot be evaluated and impacts mitigated for without the data to compare to the ER-L, ER-M or criteria. Some baseline or ambient pond condition is needed beyond what is proposed in SBSP Mitigation Measure 3.4-5d (p 3.4-86), which only monitors sediments when activities are undertaken to move sediments through dredging and excavation. These sediments may be mobilized and transported due simply to changes in hydrology of the project area.

Page 3.6-1, first paragraph should mention City of San Jose as one of the entities that have collected information on the biological resources in the South Bay (Marsh studies, endangered species studies, etc.).

Figure 3.6.1 labels A18 as an existing managed pond, while the ponds in the study area have no specific designation. It should instead be labeled as a pond with separate planning process.

Figure 3.6.2: Double-crested Cormorants nesting in A18

The City is not aware of a documented occurrence of Double-crested Cormorants (DCCO) nesting in the PG&E towers in Pond A18. The towers provide suitable breeding habitat for DCCO; however nesting on these towers by DCCO has not been observed to date. Cormorants were not seen nesting on these towers at Pond A18 during H.T. Harvey's spring 2006 site visits and they haven't been observed nesting in the towers by San Jose Biologists. Double-crested Cormorants are commonly seen foraging in Pond A18.

Page 3.6-138 SBSP Impact 3.6-22: Potential increase in exposure of wildlife to avian botulism and other diseases.

In the first sentence of the last paragraph, suggest rewriting as follows: "In general, outbreaks of avian botulism have been linked to wastewater discharges into marshes, unusually warm temperatures, unusually low rainfall and flooding events, presence of the botulinum bacteria, and several other environmental variables." There has not been a positive linkage established between our effluent and any past botulism outbreak. It is accepted that in some cases, wastewater discharges into marshes can increase the likelihood or severity of an outbreak, but there have been outbreaks in the South Bay that do not seem to be related to our discharges. The above revision more accurately reflects our current state of knowledge.

Clyde Morris May 1, 2007 RE: DRAFT EIS/R SOUTH BAY SALT POND RESTORATION (FILE NO. OA07-004) Page 4

Page 3.6-141, second paragraph toward the end states that recent changes in salinity "(e.g.
wastewater treatment plants) may have altered the distribution of bay shrimp ... The reference to
wastewater treatment plants should be deleted as many factors affect salinity in the South Bay.SJPLAN-19Figure 3.9-3 shows the Plant as commercial/industrial existing land use, however, it should be
shown as "industrial" only. Zoning designation is public/quasi-public.SJPLAN-20

Page 3.16-4 incorrectly refers to City of San Jose Environmental Services "Division", please change | SJPLAN-21 to "Department."

Table 4-5 in the cumulative impact section lists the Moseley Tract as a planned wetland project. The
City of San Jose continues to be interested in negotiating with USFWS to include the Moseley tract
in the study area.SJPLAN-22

The City appreciates the opportunity to provide comments on the Draft EIS/R and looks forward to reviewing the Final EIS/R for this important project when it becomes available for review. When available, please provide me with a hard copy and a CD version of the complete Final EIS/R, including all technical reports/volumes of the document. You may send the document directly to my attention, since I have been coordinating with other City departments in the review of the Draft EIS/R. If you need to discuss these comments, you may contact me at (408) 535-7815.

Sincerely,

Janis Moore Acting Senior Planner

c:

Yvonne LeTellier, US Army Corps of Engineers John Krause, California Department of Fish and Game Kirsten Struve, ESD

OA07-004 DEIS-R So Bay Salt Pond Rest. Pjct Ltr.doc/JAM

Response to City of San Jose Department of Planning, Building and Code Enforcement

- SJPLAN-1: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.
- SJPLAN-2: As noted in the Section 1.3.1 of the EIS/R, the objectives were formally adopted by the stakeholder forum on February 18, 2004. While not explicitly identified in the objective, infrastructure other than power lines and railroads (including wastewater treatment plants) would be protected.
- SJPLAN-3: The figures in the EIS/R which depict the levees (*i.e.*, Figures ES-2, ES-3, ES-4, 2-4, 2-5, 2-6, 2-7) show existing, not proposed, offsite levees. The existing levee along the outboard side of Pond A18 has been added to the figures. A note has been added to Figures ES-2, 2-4, and 2-6 to indicate that planning is underway for the future flood protection levee alignment along Pond A18. Figures ES-3, ES-4, 2-5, and 2-7 already include such a note. In addition, the figures in the EIS/R which depict the levees have been revised so that the non-engineered pond levees would not be misconstrued as publicly maintained flood protection levees. Please see the response to Comment CARG-3 for additional discussion.

The text in Section 2.4.3 of the EIS/R has been revised to include a description of the existing levee alignment at Pond A18 and to note that the SBSP Restoration Project levee alignment will coordinate with the City of San Jose's planning process for the proposed levee tie in at Artesian Slough.

A levee that provides flood protection would be constructed around New Chicago Marsh (along the eastern side of Pond A12 and south side of Pond A16, then along the western side of Artesian Slough), providing flood protection for the community of Alviso. The western end of the proposed newly constructed levee would link into the existing levees that provide flood protection along lower Guadalupe River/Alviso Slough, and this connection would be coordinated with the Santa Clara Valley Water District's (SCVWD's) ongoing flood protection effort along the lower Guadalupe River. The eastern end of the proposed SBSP Restoration Project levee, along Artesian Slough, would be coordinated with the City of San Jose's separate planning process for the San Jose-Santa Clara Water Pollution Control Plant (WPCP) lands. The exact location of the eastern end of the SBSP Restoration Project levee would be determined in future project-level planning for a subsequent phase of implementation. Existing levees at Pond A18 consist of salt pond levees and engineered flood protection levees along the outboard side of Pond A18 (along Coyote Creek and Artesian Slough) and salt pond levees along the inboard side of Pond A18 (the stair-shaped levee). From Artesian Slough to Coyote Creek, north of San Jose/Santa

Clara Water Pollution Control Plant (WPCP), the perimeter levee would traverse Pond A18 along an alignment presently being planned through a separate process by the City of San Jose.

- SJPLAN-4: The commenter suggests adding Project Objective #6 (protection of infrastructure) to Table 2.3, the Adaptive Management Summary Table. While this objective drives development of restoration alternatives, the Adaptive Management Plan focuses on reducing key scientific uncertainties that may affect progression along the 'staircase'. Protection of infrastructure mostly involves an engineering and economic feasibility assessment and does not involve scientific uncertainties. For this reason, infrastructure is not included in Table 2.3.
- SJPLAN-5: "Moseley Trust" has been revised to "Moseley Tract" in Figure 2-22. However the Moseley Tract is not part of the official Project Area included in the boundary that defines the Project. This parcel was considered when planning and developing alternatives and project implementation will require coordination with the City of San Jose as may be needed.
- SJPLAN-6: The commenter suggests that additional factors, such as the Warm Springs Lagoon Restoration Project initiated in 1986, have also had a significant effect on the hydrology of Mud and Coyote Sloughs with an increase in tidal prism from the Bay and freshwater from Coyote Creek. Upstream tidal restoration does indeed increase the tidal prism in Coyote Slough, pushing the salinity gradient upstream. Tidal restoration would not increase the freshwater inflows into Coyote Creek. The EIS/R text in Section 3.3.1 has been modified, as shown below, to reflect that additional factors have influenced the hydrodynamics and salinity dynamics in the Coyote Slough system:

In the sloughs near the outfall of the San Jose-Santa Clara WPCP (Artesian Slough, Mud Slough and Coyote Slough), the water is becoming fresher, allowing freshwater- and brackish-tolerant plants to colonize areas previously vegetated by salt marsh species. Additional factors, such as the restoration of Warm Springs Lagoon upstream on Coyote Slough, have also had an effect on the hydrodynamics and salinity dynamics in the Coyote Slough system. However, tThe volume of inflow from the treatment plants to the South Bay in general is essentially equivalent to that lost through evaporation, and therefore, salinities remain close to those of the ocean (33 parts per thousand, [ppt]) (Cheng and Gartner 1985).

SJPLAN-7: The EIS/R has been revised as follows to reflect the correct San Jose-Santa Clara WPCP dry weather and winter discharge rates in Section 3.3:

The plant <u>has a capacity of 167 mgd</u>, although the amount of treated effluent that can be discharged to the far South Bay is limited by regulation. The plant's discharge permit allows 120 mgd average dry weather effluent flow (the average of the 3 lowest months between May and October) in order to protect sensitive and endangered species habitat. The plant has been discharging approximately 100 mgd during the dry weather season over the last five years. If the 120 mgd average dry weather effluent flow is exceeded, the plant must engage in specific mitigation activities, such as increases in recycled water. is permitted by the RWQCB for an average dry weather effluent flow of 120 mgd. The peak Wwinter discharges from the San Jose/ Santa Clara WPCP has been approximately average 160 140 mgd over the last five years. although they recently have been less.

- SJPLAN-8: Tidal flooding in the vicinity of the Ravenswood pond complex and SR 84 is a complicated issue as suggested by the commenter. The EIS/R text does specify that high waters overtop the Moseley Tract as well as the Caltrans collection ditches and the pond levees along the SR 84 frontage road. The text does not imply that all flooding in the area is solely related to Moseley Tract flooding.
- SJPLAN-9: In response to this comment, the text in Section 3.4.1 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the subheading City of San Jose Copper and Nickel Surface Water Results, has been revised as follows:

Dissolved copper data did not exceed these values. Dissolved nickel values typically ranged from 2 to 8 μ g/L, with some higher values. Nickel water quality objectives for the far South Bay, are 11.9 μ g/L continuous and 62.4 μ g/L maximum. Therefore, dissolved nickel values infrequently exceed the applicable water quality objective. Dissolved nickel concentrations did not exceed these values. The Water and Sediment Quality Existing Conditions Report summarizes the data (Brown and Caldwell and others 2005).

- SJPLAN-10: In response to this comment, the first bullet in Section 3.4.3 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Emerging Programs of Water Quality Standards, has been revised as follows:
 - <u>The</u> San Francisco Bay Mercury Total Maximum Daily Load (TMDL) is in the process of adoption-was approved by the State Water Resources Control Board on July 17, 2007. Approval by the State Office of Administrative Law and the United States Environmental Protection Agency is necessary to complete the formal process for adopting the TMDL Basin Plan amendments, typically within six to twelve months;

The following bullet has been added to the same section above as follows:

 <u>The draft Basin Plan Amendments and supporting documents for the</u> <u>San Francisco Bay PCB TMDL were released for public comment</u> on June 22, 2007. The Board Heard testimony on September 12, 2007. The date of the adoption hearing is uncertain as of the time of this draft. Following Board adoption, approval by the State Water Resources Control Board, the State Office of Administrative Law, and the United States Environmental Protection Agency is necessary to complete the formal process for adopting the TMDL Basin Plan amendments;

San Francisco Bay PCBs TMDL

As noted above, this TMDL recently entered the adoption phase, with a the draft policy release in a public workshop held June 28, 2007. The proposed policy will include a sediment target based on fish tissue concentration that will be used to determine attainment of beneficial uses. If there are PCB-contaminated sediments in the ponds or depositional areas that are transported to the Bay as a result of Project activities, this could delay recovery with respect to TMDL goals. Likewise, if PCBs are transported into the ponds via Bay sediments, this could cause cleaner pond sediments to be contaminated.

SJPLAN-11: In response to this comment, the text in Section 3.4.1, under the heading Other Organic Constituents of Concern, has been revised as follows:

Polydibrominated ethers-Polybrominated diphenyl ethers (PDBEs-PBDEs) are flame-retardant compounds that have recently been detected in fish.

This change has been made throughout the text of Section 3.4, and all references to PDBE have been revised to PBDE.

- SJPLAN-12: More monitoring data are needed within pond areas. The issue of additional monitoring for legacy pollutants in ponds will be addressed through the monitoring plan associated with the Waste Discharge Requirements.
- SJPLAN-13: Please see the response to Comment SJPLAN-12.
- SJPLAN-14: The recent Water and Sediment Quality Analysis Report prepared for the Alviso Slough Restoration Project found that PCB and organochlorine concentrations in Alviso Slough increase with depth, in some places up to levels deemed unacceptable for placement in wetland foundations. These contaminated sediments may be exposed due to increased hydraulic scour as a result of the Phase 1 action in Pond A8. Whether or not this needs mitigation, and how, should be discussed as part of the permitting process to move forward.

SJPLAN-15: The text in Section 3.6.1 of Section 3.6, Biological Resources, has been revised to include the City of San Jose as one of the entities collecting information on biological resources in the South Bay, as follows:

A substantial amount of data on wildlife use of the South Bay has been collected by resource agencies such as USFWS, CDFG, and USGS, non-profit organization and research groups such as PRBO Conservation Science (PRBO) and the San Francisco Bay Bird Observatory (SFBBO), government entities such as the City of San Jose, consultants, researchers, and private individuals.

- SJPLAN-16: Figure 3.6-1 is intended to show the existing habitats. As such, the designation of Pond A18 in Figure 3.6-1 has been revised to show existing habitats.
- SJPLAN-17: Double-crested Cormorants nested on the PG&E towers in Pond A18 every year from 1994 to 1999, with a peak of 27 active nests on 6 July 1997 (S. Rottenborn, H.T. Harvey & Associates, pers. obs.; Santa Clara County Bird Notebooks).
- SJPLAN-18: SBSP Impact 3.6-22 in Section 3.6, Biological Resources, under the subheading Potential SBSP Restoration Project Effects has been revised as follows:

In the South Bay, outbreaks of avian botulism have generally been <u>linked to</u> wastewater discharges into marshes, unusually warm temperatures, unusually low rainfall, flooding events, presence of the botulinum bacteria, and several other environmental variables associated with effluent discharge from water treatment plants, unusually warm temperatures coupled with low rainfall, and flooding events (SFBBO 1987, City of San Jose 2002, 2005).

SJPLAN-19: SBSP Impact 3.6-23 in Section 3.6, Biological Resources, under the subheading Potential SBSP Restoration Project Effects has been revised as follows:

Recent changes in salinity (*e.g.*, effluent from wastewater treatment plants) may have altered the distribution of bay shrimp, as this species has declined in abundance in the far South Bay in recent decades (Tom Laine, pers. comm.).

- SJPLAN-20: Comment acknowledged. For the purposes of mapping, both industrial and commercial land uses are combined into one destination, even though they are different types of uses. The Project recognizes that the San Jose-Santa Clara WPCP is an industrial facility only. However, Figure 3.9-3 will not be revised to differentiate the two uses.
- SJPLAN-21: In response to this comment, the text in Section 3.16, Utilities, under the subheadings Project Setting, Alviso, Water and Wastewater, has been revised as follows:

The San Jose-Santa Clara Water Pollution Control Plant (WPCP) is located between Artesian Slough and Coyote Creek just outside of the Alviso pond complex. It is operated by the City of San Jose Environmental Services <u>Department Division</u> and provides treatment services to the cities of San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.

SJPLAN-22: Comment acknowledged. This comment does not address the adequacy of the EIS/R.





34009 ALVARADO-NILES ROAD UNION CITY, CALIFORNIA 94587 (510) 471-3232

April 24, 2007

Yvonne LeTellier US Army Corps of Engineers 1455 Market Street San Francisco, CA 94103

Clyde Morris USFWS Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

John Krause California Department of Fish and Game PO Box 47 Yountville, CA 94599

Re: South Bay Salt Pond Restoration Project EIS/EIR

Dear Sirs and Madam:

The City of Union City supports the South Bay Salt Pond Restoration Project. The City also supports public access through the project area with a multi-use, year-round trail, commonly referred to as the San Francisco Bay Trail. Union City has worked with the East Bay Regional Park District to continue the planning and environmental review process for the first phase of this trail that is in the Hayward/Union City area. The Bay Trail project is an important asset to the residents of Union City for recreational use and for regional circulation.

As a regional connector, this trail will serve Fremont, Union City and Hayward in this immediate project area. This trail is designated as a pedestrian trail in the Alameda Countywide Strategic Pedestrian Plan, and as regional bicycle corridor in the Alameda County Congestion Management Agency Countywide Bicycle Plan. Additionally, the Association of Bay Area Government's Bay Trail Plan identifies this segment as part of the adopted Bay Trail alignment. Union City also supports aligning the trail where it can cross Alameda County Flood Control Channel to Coyote Hills Regional Park and connect to other regional trails and transportation corridors.

UC-1

South Bay Salt Pond Restoration Project EIR April 24, 2007 Page 2

Lastly, staff noted that in Alternatives B and C, the year-round trail is located immediately adjacent to the Union Sanitary District Facility. We suggest that you contact the District to be sure there are no safety or security issues with locating a public trail immediately adjacent to the facility.

Thank you for the opportunity to comment on the South Bay Salt Pond Restoration Project.

Sincerely, al Jøan Malloy

Planning Manager

Cc: Larry Cheeves, City Manager

Response to City of Union City

- UC-1: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project and public access provided by the Project and does not address the adequacy of the EIS/R.
- UC-2: Comment acknowledged. Union Sanitary District will be contacted as part of final design.

MV1



CITY OF MOUNTAIN VIEW

Office of the Mayor and City Council • 500 Castro Street • Post Office Box 7540 • Mountain View, California 94039-7540 650-903-6305 • FAX 650-903-6039

April 25, 2007

Mr. Clyde Morris, Refuge Manager Don Edwards San Francisco Bay NWR Complex 9500 Thornton Avenue Newark, CA 94560

CITY OF MOUNTAIN VIEW COMMENTS ON SOUTH BAY SALT POND RESTORATION PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/REPORT (EIS/R)

Dear Mr. Morris:

On behalf of the Mountain View City Council, I am submitting this letter of comment on the South Bay Salt Pond Restoration Project Environmental Impact Statement/Report. The City of Mountain View is vitally interested in the restoration project and looks forward to continuing its involvement in the Stakeholder Forum and Local Work Group meetings. 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.

After reviewing the Draft EIS/R, the City understands that the success of the restoration project relies heavily on the Adaptive Management Plan. To ensure the success of the Adaptive Management Plan, it is critical that there is effective communication between City staff and the USFWS and the Army Corps of Engineers in regard to the ongoing monitoring of Ponds A1 and A2W and any issues that arise that might affect Shoreline at Mountain View, its users and the closed Mountain View landfill. While the City is supportive of tidal restoration for Ponds A1 and A2W, appropriate flood protection and protection of the City's landfill gas and leachate systems are critical. The City's specific comments are as follows:

- 1. Effective and timely communication with local government staff and elected officials and ongoing opportunities for public input are critical to the success of the Adaptive Management Plan. While the proposed Adaptive Management Organizational Structure and Functions acknowledges this, it is important that this function not be overshadowed or lessened in importance during implementation.
- 2. Prior to opening Ponds A1 and A2W up to tidal flows where water elevation will vary with the tides, the northern landfill levees adjacent to both ponds will need to be strengthened to withstand wave action. They will need to be raised to an appropriate design elevation and strengthened and thickened with an armor coating of rock and concrete. This should be something like that used for the lake bank protection for the Shoreline Sailing Lake, but certainly larger rock will be required. In fact, adequate

MV1-1

MV1-2

Mr. Clyde Morris April 25, 2007 Page 2

MV1-2 protection may require large ocean breakwater-type rock depending on wave action continued determination. 3. An uncertainty regarding the restoration, potentially requiring an applied study, is that the effects of fluctuating water elevations in Ponds A1 and A2W need to be evaluated for MV1-3 potential impacts to landfill leachate levels to ensure landfill gas will continue flowing to gas well perforations and into the gas collection system. If gas flow is negatively affected, the project will need to mitigate this impact with landfill gas system improvements in critical areas to collect landfill gas in some or all cells adjacent to the ponds. 4. Currently, landfill groundwater is captured to ensure contaminated landfill groundwater is not released from the landfill. An uncertainty regarding the restoration, potentially MV1-4 requiring an applied study, is that by changing the ponds to tidal flow, the surge and withdrawal of tides may impact landfill groundwater capture capabilities. Mitigation measures may be required if landfill groundwater capture capabilities cannot be maintained. 5. The levee between Salt Pond A1 and Inner Charleston Slough is too low to survive tidal MV1-5 action and is one of the reasons the tide gates were installed by the City between Outer and Inner Charleston Slough. The levee needs to be raised, strengthened and protected

Thank you for the opportunity to review and comment on the Draft EIS/R. The City looks forward to hearing the responses to the above comments and to continuing to participate in the restoration project. Please feel free to contact Kevin Woodhouse, Assistant to the City Manager, at (650) 903-6301 if you have questions regarding this letter of comment.

Sincerely

In Macian

Adakyon for your consideration of these issues.

Laura Macias Mayor

LM/KW/9/MGR 610-04-16-07L-E^

cc: Mr. John Krause, California Department of Fish and Game

against potential wave action from the salt pond.

Ms. Yvonne LeTellier, U.S. Army Corps of Engineers

City Council

CM, ACM, CSD, ACSD, PWD, BISM, PCE-Le

Response to City of Mountain View

MV1-1: The Project proponents recognize the necessity of effective and timely communication with the City of Mountain View and other local government staff and elected officials as well as ongoing opportunities for public input. The NEPA/CEQA process provides one pathway for such communication, in terms of the early planning of the SBSP Restoration Project. The Adaptive Management Plan is designed to facilitate communication between various stakeholders. Appendix D of the EIS/R identifies the adaptive management organizational structure and functions. There is a constant feedback loop between the Executive Leadership Group, Project Management Team, Stakeholder Forum, Local Work Groups, and Information Management staff. As described in Appendix D, under Stakeholder Forum and Local Work Groups,

> "Substantial public involvement is essential for support and stewardship of long-term restoration projects and is one of the four functions of the Adaptive Management Plan institutional structure. The Stakeholder Forum and Work Groups are designed to provide ongoing, publicly-derived input to the PMT on major components of the restoration plan and adaptive management actions. This input will be used by the PMT to help guide management direction . . . Local government staff and elected officials will be invited to join the Stakeholder Forum."

- MV1-2: The Project proponents acknowledge the need to avoid erosion of landfills adjacent to the SBSP Restoration Project Area. Detailed design and analyses would be performed prior to opening Ponds A1 and A2W to tidal action. This would occur during a subsequent phase and would involve additional project-level environmental review.
- MV1-3: The commenter brings up a valid issue to consider during the design phase of projects that are near the landfill gas venting activities. Ponds A1 and A2W were specifically named in the comment. The Project proponents will work with the City of Mountain View during the design of future Project phases to address this issue as part of the Project design.
- MV1-4: The commenter brings up a valid issue to consider during the design phase of future project phases that are near the landfill groundwater capture activities. The Project proponents will work with the City of Mountain View during the design phase to address this issue as part of the Project design.
- MV1-5: The Project acknowledges the need to maintain the function of the Charleston Slough flood protection basin, including levee improvements between Pond A1 and Charleston Slough, as needed. Detailed design and analysis would be performed prior to opening Pond A1 to tidal action. This would occur during a subsequent phase and would involve additional project-level environmental review.

Mayor Barbara Pierce Vice Mayor Rosanne Foust Council Members Alicia Aguirre Ian Bain Jim Hartnett Diane Howard Jeff Ira



City Hall 1017 Middlefield Road Redwood City, CA 94063 Voice: (650) 780-7220 Fax: (650) 261-9102 mail@redwoodcity.org www.redwoodcity.org

RWC

April 27, 2007 Mr. Clyde Morris Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Ave. Newark, CA 94560

Dear Mr. Morris,

Thank you for the opportunity to comment on the EIR/EIS for the South Bay Salt Pond Restoration Project. It is exciting to see the steps being made in such a huge restoration planning effort. My comments are directed to the future restoration and an opportunity that may exist for the City and Port to be involved at the appropriate time.

As you are aware, the City of Redwood City and the Port of Redwood City are active partners with the Fish and Wildlife Service, the Corp of Engineers, Save the Bay, the Bay Planning Coalition and numerous community groups in the restoration efforts for Bair Island. Through this effort it has become increasingly clear that there is an important role that port dredge materials can play in the restoration of sensitive wetlands. The City and Port are proud to be part of such a pioneering collaboration that will benefit the environment and secure the economic wellbeing of the community. The environmental benefits include the restoration of the wetlands areas and beneficial re-use of appropriate dredge materials instead of their disposal off of Alcatraz. The Long Term Management Strategy of the Corp of Engineers furthers the need to use dredge materials in an environmentally sensitive way and the collaboration on Bair Island is a proving ground for this type of effort.

The South Bay Salt Ponds Restoration Project can offer a similar opportunity for partnering to restore the tidal wetlands with the materials from dredging. Knowing how interrelated so many of our actions and their impacts are, it is important that we all work together to improve our environment. Our City and Port would be pleased to be partners in the South Bay restoration as you move forward.

Thank you for your efforts, we look forward to continuing to work together in such a positive manner.

Sincerely,

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

Barbara Pierce Mayor RWC-1

Response to City of Redwood City

RWC-1: Comment acknowledged. The Project proponents have not determined the sources of fill that will be used for the Project, although the EIS/R identifies potential sources such as the excavated material from SCVWD's Stream Maintenance Program and the proposed tunnel for the Hetch Hetchy Aqueduct near SR 84 (see Section 2.4.5 of the EIS/R). The Project proponents will consider the use of dredged material from the City of Redwood City, although the quality of the fill must meet the criteria for levee construction, filling or blocking of borrow ditches, and the creation of upland transitional habitat. As described in Section 2.4.5 of the EIS/R, approximately 10 to 15 million cy of fill would be needed for construction and restoration activities.



PORT OF REDWOOD CITY San Francisco Bay

PRWC

675 Seaport Boulevard Redwood City, California 94063-5568 650 306 4150 FAX 650 369 7636 E-mail: portofrc@redwoodcityport.com

April 27, 2007

Clyde Morris, Refuge Manager U.S. Fish & Wildlife Service San Francisco Bay National Wildlife Refuge 9500 Thornton Avenue Newark, CA 94560

Re: Comments on the Draft EIS/EIR for South Bay Salt Pond Restoration Project

Dear Mr. Morris:

The Port of Redwood City and the City of Redwood City have been working with the U.S. Army Corps of Engineers and the USFWS on the Bair Island Restoration Project. The Bair Island Project will improve habitat on 1,400 acres of former salt ponds that were previously diked off from the Bay and used for salt production. The restoration at Bair Island will improve the Bay ecosystem by providing tidal wetlands that support fish and wildlife and offer wildlife viewing and open space to the public.

A portion of the restoration project on Inner Bair Island will utilize material from the maintenance dredging of the Port of Redwood City Navigation Channel, which is conducted by the Corps. The Bay mud from the dredging project will be deposited on Inner Bair Island in order to raise the elevations so that they are at levels suitable for creation of tidal marsh.

With regard to the South Bay Salt Pond Restoration Project, the Port and the City of Redwood City would comment that, in the restoration of tidal habitat under Alternatives B and C, consideration be given to the use of dredged material where areas have subsided and the elevations can be raised to promote the restoration of tidal marsh. The use of dredged material from the Channel would, under certain conditions, restore the tidal marsh more quickly than if sedimentation from the Bay were to accumulate over time to raise the elevation of sub tidal areas.

The use of dredged material from the Channel would also help meet the goals of the regional Long Term Management Strategy for dredged material disposal. The goals of this program, which was developed by a number of public agencies, include finding environmentally and economically feasible solutions for the disposal of dredged material in the San Francisco Bay region. LTMS Program seeks ways to beneficially reuse dredged material for wetland habitat restoration.

PRWC-1

Port Commissioners Larry R. Aikins Jack Castle Richard "Dick" Dodge Ralph A. Garcia, Jr. Lewis D. Miller



April 27, 2007

Clyde Morris, Refuge Manager U.S. Fish & Wildlife Service

Page 2.

The cooperative efforts of the Port, City, Corps, and USFWS on the Bair Island project demonstrate that these regional goals can be met and wetlands habitat can be benefically restored using dredged material. We would hope that the example set by the Bair Island project be given serious consideration in restoring tidal habitat under the SBSP Project.

PRWC-1 continued

Thank you for the opportunity to comment on the EIS/EIR for this project.

Sincerely, 1 Slivii,

Michael J. Giari / Executive Director

Cc: B. Pierce, Mayor

Response to Port of Redwood City

PRWC-1: Please see the response to Comment RWC-1.

HASPA



HAYWARD AREA SHORELINE PLANNING AGENCY

Hayward Area Recreation and Park District East Bay Regional Park District City of Hayward

April 30, 2007

Mr. John Krause California Department of Fish and Game P.O. Box 47 Yountville, CA 94599

RE: Comments on the South Bay Salt Pond Restoration Project EIS/EIR

Dear Mr. Kause,

The Hayward Area Shoreline Planning Agency (HASPA) met on April 12, 2007 to discuss the South Bay Salt Pond Restoration Project EIS/EIR and to prepare comments on this document. The members of HASPA truly appreciate the vast scale and scope of this undertaking and do support the careful restoration of this area. As a Joint Powers Agency concerned with the planning of the East Bay shoreline between Roberts Landing in San Leandro and the Alameda Creek Channel in Fremont, only a portion of this project falls within our direct area of concern. However, within this area, HASPA desires to see a plan that creates a balance between the restoration and protection of wildlife habitat areas with a significant opportunity for public access and education. It is our sense that within the 5,500 acres included in this part of the project area, this balance can be achieved. Many of the following comments reflect this goal, a goal that is consistent with the stated objectives of the South Bay Salt Pond Restoration project.

COMMENTS:

1.	FIGURE ES-3a ALTERNATIVE B: The proposed flood protection levee as noted on the map will isolate the 74 acre Weber property that has 52 acres of wetlands. This upland wetland would be a serious loss.	HASPA-2
2.	Table 2-7 (Page 2-63): correct "year-round levee trail location" to read, <i>Northern</i> edge of Pond E12…	HASPA-3
3.	Table 2-7 (Page 2-63): Note that shore fishing will not be possible in areas where fencing is installed.	HASPA-4
4.	Page 2-75 (last paragraph): Proposed year-round loop trail alignment for Alternative C should be included in Alternative B or C whether or not the northern ACFCC levee is removed. If this trail alignment would be acceptable under that circumstance, it should be acceptable under any circumstance.	HASPA-5

HASPA-1

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5.	Page 2-101 (third paragraph): Preservation of the remnants of the historic salt works may be dependent upon them being inundated with salt water to preserve them. The text indicates that they would be allowed to be wet and dry seasonally, due to rain and evaporation. This could lead to the deterioration of the wood.	HASPA-6
6.	Page 2-103 (last paragraph): Trails proposed for Eden Landing Phase 1 should be a minimum of eight (8) feet wide to allow for maintenance access.	HASPA-7
7.	Page 2-104 (first paragraph): Fencing installed along trails will conflict with shore fishing. See comment #3 above.	HASPA-8
8.	Page 2-104 (third paragraph) and Figure 2-11: Current staging area parking is for twenty-four (24) vehicles.	HASPA-9
9.	Figure 2-7a: Access lost from the proposed removal of the existing trail along the north ACFCC levee should be replaced with trail access to the Bay of equal utility and proximity, such as use of the south levee of OAC.	HASPA-10
10.	Is there funding to pay for bridging the breaches in the north levee of ACFCC and the bridge over ACFCC?	HASPA-11
11.	Are there breaches proposed on the levees of OAC?	HASPA-12
12.	There must be assurances that adequate funding will be available for the management, and monitoring of this important restoration project. Recreation and public access features will require large sums of money to build, manage and maintain.	HASPA-13

Sincerely,

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Ms. Carol Severin, Chair Hayward Area Shoreline Protection Agency

CC: Yvonne LeTellier, US Army Corps of Engineers, 1455 Market St., S.F., CA 94103 Clyde Morris, USFWS, Don Edwards S.F. Bay NWR, 9500 Thornton Ave., Newark CA 94560

Response to Hayward Area Shoreline Protection Agency

- HASPA-1: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.
- HASPA-2: The commenter suggests that the proposed flood protection levee landward of the Eden Landing pond complex (as shown on the alternative figures) would isolate the 74-acre Weber property that contains 52 acres of wetlands. The proposed flood protection levee alignment represents one potential alignment. The alignment could change through consultation with the Alameda County Flood Control and Water Conservation District, and as a result of future project-level analysis and design. Several factors will be considered when locating the levee alignment, including the surrounding habitats. Currently, the Weber property is privately held and is outside of the SBSP Restoration Project Area. A levee alignment bayward of the Weber property would not preclude future restoration efforts associate with these lands, if they become available for future acquisition.
- HASPA-3: Per this comment, the following text revision was made to Chapter 2, Table 2-7 Proposed Eden Landing Recreation and Public Access Features under Alternative B, Trails, Yearround Levee Trail:

Eastern <u>Northern</u> edge of Pond E12 provides year-round access to Oliver Salt Works Historical Site

- HASPA-4: A note has been added to Table 2-7 indicating that shore fishing would not be possible in areas where fencing would be installed.
- HASPA-5: Comment acknowledged. It is assumed that the commenter is referring to the proposed loop trail as shown on Alternative C around Ponds E2C, E5C and E6C. The reason that an alternate route was shown on Alternative B in this vicinity (still a loop trail but around E3C) is in the event that access across Pond E1C and the associated parcel that is not part of the Project Area is not possible. This ensures that an alternative alignment providing a loop trail in the southern part of the pond complex is analyzed in the EIS/R.
- HASPA-6: As described in Section 2.5.1 of the EIS/R, the historic salt work remnants would maintain higher salinities because it will wet and dry seasonally due to rainfall and evaporation under Alternatives B and C. Furthermore, the Pond E12/E13 reconfiguration would include water control structures for intake and discharge to the salt works "cell" which is a process similar to that which currently occurs at the pond under ISP management. The accumulation of salts on the pond beds and historic remnants from the evaporation process would continue to preserve the wood. As such, the remnants are not anticipated to deteriorate from the continued management of the ponds.
- HASPA-7: Per this comment, the following text revision was made to Chapter 2, Section 2.5.2 Eden Landing Pond Complex, Phase 1 Recreation and Public Access Actions, third paragraph:

<u>Most-All</u> of the trails proposed at Eden Landing for the Phase 1 plan would be six to eight <u>6</u> ft wide on an existing managed pond levee, and would have firm and stable, hardened surfacing to allow for hikers, wheelchairs, and cyclists.

- HASPA-8: Comment acknowledged.
- HASPA-9: Comment acknowledged.
- HASPA-10: Comment acknowledged. In Alternative C, if the ACFCC is removed and the equestrian trail along the levee is removed, there would be alternative locations within and outside the Project Area for hiking and cycling access to the Bay. The loss of use for equestrians has been identified as a potential significant impact (see Impact 3.7-2) in Section 3.7 of the EIS/R.
- HASPA-11: The lead agencies do not currently have funding to pay for creating the proposed breaches, let alone bridging them. The lead agencies will seek funding as appropriate for all aspects of the proposed Project. Also, please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.
- HASPA-12: Breaches are proposed through the northern levees of Old Alameda Creek for the Phase 1 action at Ponds 8, 9, and 8X, as described in Chapter 2 of the EIS/R. Additional breaches would be located on the southern levees of Old Alameda Creek under Alternatives B and C, and on the northern levee under Alternative C. Levee breaches along Old Alameda Creek would be coordinated with the Alameda County Flood Control and Water Conservation District. Flood improvement and restoration actions for the area between Old Alameda Creek and the Alameda Creek Flood Control Channel are currently in the planning process and would likely be implemented as a future phase that would be subject to separate project-level environmental review.
- HASPA-13: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.



ACWD

ACWD

DIRECTORS ARTHUR LAMPERT President JOHN H. WEED Vice President JAMES G. GUNTHER JUDY C. HUANG MARTIN L. KOLLER 43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110, FREMONT, CALIFORNIA 94537-5110 (510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

MANAGEMENT PAUL PIRAINÓ General Manager WILBERT LIGH Finance Manager/Treasurer ROBERT SHAVER Englneering Manager KARL B. STINSÓN Operations Manager

May 1, 2007

Mr. Clyde Morris USFWS, Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560-0222

Dear Mr. Morris:

Subject: South Bay Salt Pond Restoration Project Draft Environmental Impact Statement/Environmental Impact Report

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the "Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR)" for the South Bay Salt Pond Restoration (SBSP) Project.

ACWD supplies water to a population of over 320,000 in the Cities of Fremont, Newark, and Union City. A major portion of this water supply is obtained from the Niles Cone Groundwater Basin that approximately coincides with ACWD's boundaries. The Niles Cone Groundwater Basin extends beneath the Alameda County portion of the SBSP Project area.

ACWD has recognized for decades that abandoned wells could serve as vertical conduits for contaminants and has gained considerable experience in locating abandoned wells and overseeing their proper destruction. As a result of previous and ongoing cooperative studies between the Department of Water Resources (DWR) and ACWD, it has been determined that improperly destroyed wells were (and may continue to be) a significant contributing factor in the degrading of water quality in the Niles Cone Groundwater Basin by salt water intrusion. Abandoned wells provide an interconnection between aquifers and may allow salt water from the surface or from a shallow aquifer to migrate vertically and impact the groundwater basin's deeper aquifers. Therefore, the proper destruction of abandoned wells within the SBSP Project area is critical for protecting water quality and ensuring the continued use of the groundwater basin both as a water supply for ACWD and as an emergency water supply for the City of Hayward.

Since 2002, ACWD has worked with Cargill Salt, the California Department of Fish and Game (DFG), and the United States Fish and Wildlife Service (U.S. FWS) to locate abandoned wells within the SBSP Project area. To date, a total of seventy-four (74) abandoned wells within

ACWD-1

Mr. Clyde Morris Page 2 of 5 May 1, 2007

ACWD's boundaries have been identified within the SPSP Project area (see Figure 1 and Table 1). The purpose of this letter is to: 1) give an update on the status of the abandoned wells in the SPSP Project area, and 2) provide comments on the Draft EIS/EIR for the SBSP Project.

Status of Abandoned Wells

A summary of the status of abandoned wells is described below and shown in Table 1. In addition, ACWD has provided Figures 1 and 2 which show the well locations within the SBSP project area.

Upper Eden Landing

Historical records indicate the existence of twelve (12) abandoned wells in the upper Eden Landing area of the restoration project. ACWD worked with the DFG to successfully locate ten (10) of the twelve (12) abandoned wells. As of October 2006, all ten (10) located abandoned wells have been destroyed. Attempts to locate the two remaining wells have been unsuccessful. Unless additional well location information is discovered or the wells are encountered during restoration or other future activities, locating the two remaining wells is unlikely.

Baumberg Ponds

ACWD worked with Cargill Salt to locate abandoned wells within the Eden Landing Restoration Project area, also known as the Baumberg Ponds. To date, fifty-six (56) wells have been identified in the Baumberg Ponds. Currently, thirty-three (33) of the fifty-six (56) wells have been located and destroyed.

Our records indicate that twenty-one (21) of the twenty-three (23) wells that have not been located are within the Alameda County Flood Control channel between Alvarado and San Francisco Bay or beneath channel levees. Cargill provided ACWD with specifications and drawings for an Alameda County Flood Control and Water Conservation District (ACFC) project entitled "The Improvement of the Main Outlet Channel Between San Francisco Bay and Alvarado, Zone No. 3A Project," dated May 1955. Drawings included with the ACFC document confirm that these wells were located within the project area, either within the channel or under the levees. For this reason, ACWD sent a letter to ACFC on May 12, 2006, requesting that ACFC notify ACWD of any future channel improvements in this area, so that any wells discovered during such improvements are properly destroyed.

Considerable attempts were made by Cargill and ACWD to locate the remaining two abandoned wells. Searching for the two wells was particularly difficult because they are located in ponds that contain water year round. Therefore, unless additional well location information is discovered or the wells are encountered during restoration or other future activities, locating the two remaining wells is unlikely.

ACWD-1 continued Mr. Clyde Morris Page 3 of 5 May 1, 2007

Alameda County Alviso Ponds

ACWD appreciates the U.S. FWS cooperation in locating abandoned wells in the Alameda County Alviso Pond area. Historical records and other evidence indicate the existence of six (6) abandoned wells in the Alviso Ponds. ACWD staff used survey equipment to determine the historical well locations and was able to successfully locate five (5) abandoned wells. ACWD believes another abandoned well may exist near 5S/1W-21R001 since the area around the well is saturated and overgrown with tules. ACWD believes the fresh water supply is from another abandoned well, since well 5S/1W-21R001 has a concrete pedestal and shows no signs of seepage.

ACWD has also located abandoned well 5S/1W-28Q001 in an area known as Drawbridge, between ponds A 20 and A 21. Based on historical documents, ACWD believes that additional wells may be located within the Drawbridge area. As of the date of this letter, none of the abandoned wells in the Alviso pond area have been destroyed.

Table 1

Number of abandoned wells located within ACWD's boundaries identified within the South Bay Salt Pond Restoration Project area.

Area within the SBSP Restoration	Number of Identificd Wells	Number of located wells	Number of "Not Found" Wells	Number of Wells Destroyed to Date
Upper Eden Landing		10		10
Baumberg Ponds	56	33		33
Alviso Ponds in Alameda County		5		0
Total Wells		48	26	43

* = Additional Wells are Suspected.

Comments for the Draft EIS/EIR

ACWD has reviewed the Draft EIS/EIR and would appreciate your consideration of the following comments:

1) 3.4.2 Physical Setting - Groundwater Quality (pg 3.4-38)

"An area of elevated salinity (up to .97 ppt in the Centerville/Fremont Aquifer and 3.2 ppt in the Deep Aquifer in fall 2005) is present just south of SR 92 in the general vicinity of ponds E12 and 13 (ACWD, 2006). The origin of this anomaly is unknown, but CDFG has coordinated with Cargill to ensure that wells in the area have been properly identified and abandoned."

ACWD-2

ACWD-1 continued

ACWD

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Mr. Clyde Morris Page 4 of 5 May 1, 2007

The water beneath the Eden Landing area is a valuable groundwater resource. The City of Hayward's emergency supply wells and the former Alvarado Wellfield are located immediately to the east of the ponds. In addition, the Eden Landing ponds have been an area of recent concentrated study due to its location between East Bay Municipal Utilities District's (EBMUD) Bayside Groundwater Project and the Niles Cone Groundwater Basin. EBMUD is proposing to produce groundwater north of the Eden Landing ponds during droughts and it has been established that this area is hydraulically connected to the Niles Cone Groundwater Basin.

In 2006, ACWD constructed monitoring wells in the Eden Landing Project area (see Northwest Niles Cone Monitoring Wells on Figure 1) and it appears that abandoned wells may have contributed to salt water intrusion in this area. The two remaining abandoned wells that have not been located in the upper Eden Landing area are believed to be located in the vicinity of the ACWD monitoring well locations where the elevated salinity was reported. If the abandoned wells are encountered during restoration or other future activities, the wells are required to be destroyed in accordance to ACWD specifications.

3.4.2 Physical Setting - Groundwater Quality (pg 3.4-43) "Improperly abandoned wells may also be present in the Ravenswood and Alviso pond complexes."

As previously mentioned, ACWD has successfully located five (5) abandoned wells located within the Alameda County portion of the Alviso pond complex and suspects an additional abandoned well may be located in the vicinity of 5S/1W-21R001. As a result of changing field conditions within the overall restoration project area: 1) field work is required to determine if a second well exists at 5S/1W-21R001; 2) access to the abandoned wells must be maintained until they are properly destroyed; and 3) the located abandoned wells must be destroyed prior to any restoration or other future activities.

3.4.4 Environmental Impacts and Mitigation Measures (pg 3.4-89) "An additional benefit of this alternative (Alternative B) compared to the No Action Alternative is construction of new flood protection levees."

Since a number of wells have not been located, ACWD requests that the EIR/EIS include the provision of notifying ACWD of any proposed new flood protection levee construction in the SBSP Project area, so that: 1) ACWD can assist in identifying abandoned wells; and 2) any wells discovered during such improvements are properly destroyed in accordance to ACWD specifications.

4) 3.4.4 Environmental Impacts and Mitigation Measures (pg 3.4-89) "Project proponents will ensure that any well identification and abandonment work within flooded areas is completed before breaching levees. A well abandonment program typically includes the identification of wells through a records search, location

ACWD-2 continued

ACWD-3

ACWD-4

Mr. Clyde Morris Page 5 of 5 May 1, 2007

through field visits, aerial photographs and/or geophysical surveys, and proper sealing (typically through pressure grouting)."

ACWD strongly concurs that the well location and destruction work be completed prior to breaching levees. In addition, ACWD concurs with the "well abandonment program" with the exception of "proper sealing (typically through pressure grouting)." Most of the fortythree (43) wells that have been destroyed within the project area have not been shallow wells, but were deeper wells that penetrated more then one aquifer. Therefore, sealing the well without cleaning it out or perforating the casing could leave an interconnection between aquifers. DWR Bulletin 74-2 (Water Well Standards: Alameda County, June 1964), specifies that the procedures to follow to insure an adequate seal are those required by ACWD: 1) redrill or clean out the well; 2) perforate the well casing in lengths of at least 10 feet opposite the clay layers; 3) fill the casing with sealing material; and 4) remove the casing from the ground surface to a depth of five feet.

5) 3.4.4 Environmental Impacts and Mitigation Measures (pg 3.4-89)

"Project proponents will coordinate with the ACWD and SCVWD to ensure that adequate programs for monitoring groundwater levels and quality and quantity have been developed and adequately funded and that monitoring data is being analyzed and reported."

ACWD requests additional information regarding this proposed mitigation measure, specifically how project proponents plan to achieve ensuring monitoring programs have been developed and funded, as well as analyzed and reported.

Thank you for the opportunity to comment on the Draft EIS/EIR at this time. If you have any questions, please contact Michelle Myers, Well Ordinance Program Coordinator, at (510) 668-4454.

Sincerely

Robert Shaver Engineering Manager

mm/tf Enclosures

cc: Mendel Stewart, United States Fish and Wildlife Service Robert Floerke, California Department of Fish and Game Carl Wilcox, California Department of Fish and Game Pat Mapelli, Cargill Salt Steven Inn, ACWD Michelle Myers, ACWD ACWD-5 continued

Response to Alameda County Water District

ACWD-1: The ACWD update on the status of abandoned wells is valuable and appreciated. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the subheading Artificial Pathways, has been revised to include the following additional text:

> In a coordinated effort between ACWD, Cargill, DFG, and USFWS, recent progress has been made on locating and destroying abandoned wells within the SBSP Restoration Project Area. ACWD provided extensive detail regarding the current status of abandoned wells within overlapping ACWD boundaries and the SBSP Restoration Project Area in EIS/R comments. ACWD identified a total of 74 abandoned wells within the overlapping area, and had located 48 and destroyed 43 of them as of May 1, 2007.

ACWD-2: The additional information provided by ACWD regarding the salinity anomaly is useful. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Groundwater Quality has been revised as follows:

The origin of this anomaly is unknown, but CDFG has coordinated with Cargill to ensure that wells in the area have been properly identified and abandoned. ACWD is continuing to monitor the anomaly. <u>Two remaining abandoned wells are suspected in this area but have not yet been located. If abandoned wells are located during restoration or other future activities within the ACWD boundaries, a well destruction work plan will be prepared in consultation with ACWD to ensure accordance to ACWD specifications.</u>

ACWD-3: As noted in the comment, additional fieldwork and well destruction work remains to be completed by ACWD prior to restoration activities, and access to the abandoned wells will be maintained until they are properly destroyed. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Project Setting has been revised as follows:

> Improperly abandoned wells may also be present in the Ravenswood and Alviso pond complexes. Historical wells located in the Ravenswood pond complex were not immediately sealed after abandonment, and the eventual method (effectiveness) of sealing was questioned by the SCVWD (1980). <u>ACWD stated that five abandoned wells within the Alameda County portion of the Alviso complex were located and that an additional abandoned well is suspected (Shaver 2007). Additional ACWD field work is required to determine if the additional well exists, and access to the wells will be maintained by the Project proponents to allow for ACWD well destruction activities prior to restoration actions. Additional ACWD field work is required to determine if the additional well exists, and access to the wells</u>

will be maintained by the Project proponents to allow for ACWD well destruction activities prior to restoration actions. A program to locate improperly abandoned wells in the Alviso pond complex is currently being considered by SCVWD.

ACWD-4: As stated in the response to Comment ACWD-2, if abandoned wells are located during restoration or other future activities within the ACWD boundaries, a well destruction work plan will be prepared in consultation with ACWD to ensure compliance with ACWD specifications. SBSP Impact 3.4-6 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the subheading Alternative B Managed Pond Emphasis, has been revised as follows:

The flooding of the ponds would provide beneficial changes in the pond salinity with respect to the potential for salinity intrusion. Salinity in tidally inundated ponds would continue to decline to concentrations comparable to the Bay. An additional benefit of this alternative compared to the No Action Alternative is construction of new flood protection levees. (ACWD will be notified prior to proposed new levee construction so that ACWD can assist in identifying and properly destroying abandoned wells.)

ACWD-5: As noted in the response to Comment ACWD-2, proper well destruction is essential. The first bullet of SBSP Mitigation Measure 3.4-6 in Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

Project proponents will ensure that any well identification and abandonment work within flooded areas is completed before breaching levees. A well abandonment program typically includes the identification of wells through a records search, location through field visits, aerial photographs and/or geophysical surveys, and proper sealing (typically through pressure grouting); If any abandoned wells are found before or during construction they will be properly destroyed by the Project as per local and State regulations by coordinating such activities with the local water district. If abandoned wells are located during restoration or other future activities within ACWD or SCVWD boundaries, a well destruction work plan will be prepared in consultation with ACWD or SCVWD (as appropriate) to ensure conformance to ACWD or SCVWD specifications. The work plan will include consulting the databases of well locations already provided by ACWD and SCVWD. The Project will identify and properly destroy both improperly abandoned wells and existing wells within the Project Area that are subject to inundation by breaching levees. Well destruction methods will meet local, county and state regulations. The Project proponents will also lend support and cooperation with any well identification and destruction

program that may be undertaken as part of the Shoreline Study or other projects.

ACWD-6: Ongoing groundwater monitoring programs by ACWD and SCVWD are an integral part of each water district's mission and responsibility, and the Project will not change that. The Project proponents will simply coordinate and assist the districts in obtaining adequate funding, development, implementation, analysis, and reporting of their ongoing monitoring programs. The second bullet of SBSP Mitigation Measure 3.4-6 in Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

> Project proponents will coordinate with the ACWD and SCVWD to ensure that adequate programs for monitoring groundwater levels and quality and quantity have been developed and adequately funded and that monitoring data is being analyzed and reported <u>The Project proponents will assist</u> ACWD and SCVWD to obtain funding for the development, implementation, analysis and reporting of groundwater levels and groundwater quality adjacent to the Project boundaries. If groundwater monitoring detects seawater intrusion, the Project proponents will participate and assist ACWD and SCVWD in identifying the sources and causes, and in selecting and implementing an appropriate mitigation measure;

COUNTY OF ALAMEDA PUBLIC WORKS AGENCY 399 Elmhurst Street • Hayward, CA 94544-1395 (510) 670-5480

May 3, 2007



Mr. John Krause California Department of Fish & Game P. O. Box 47 Yountville, CA 94599

Subject: Alameda County Flood Control District comments on the South Bay Salt Pond Restoration Project Draft Environmental Impact Statement/ Report (EIS/R)

Dear Mr. Krause:

On behalf of the Alameda County Flood Control District (District), I have the following comments on the South Bay Salt Pond Restoration Project EIR/S:

General comments

The District, as a project partner, is vitally interested in the restoration project and looks forward to continuing our involvement with the Project Management Team and cooperation with the project partners on implementation of the restoration plan in Alameda County.

Specific comments

Lands owned by the District within the project areas have not been specifically identified for restoration in the figures illustrating the project alternatives. We would like to clarify that it is our intention to integrate these lands into the project. The nature of this integration is currently being studied by District consulting engineers and when these studies are completed, we will be able to identify the nature of this integration.

The Alameda Creek Flood Control Channel (Alameda Creek) is owned by the District and licensed to the East Bay Regional Park District (EBRPD) for recreational trail use. This recreational trail use is subordinate to the primary public use of the land, flood protection. Our consulting engineers are currently studying alternatives on how to best continue to provide flood protection by integration of Alameda Creek with the Salt Pond Restoration Project. It is our intention to work with our licensee and our project partners to provide the public with a reasonable combination of flood protection, habitat restoration and trail use.

ACFCD-1

ACFCD-2

We are concerned that Pond 3C in the Eden Landing complex has not been included as part of the project planning. We understand that this pond was retained by Cargill when the sale was completed in 2003. It is currently being operated in coordination with the Interim Stewardship Plan (ISP) and should eventually be included as part of the restoration plan. Its location provides an important link to upland transition areas east of the project and could play an important role in the ongoing effort to restore steelhead in the Alameda Creek Watershed.

We are concerned that funds for project implementation and operation and maintenance have not been identified. We would encourage you to consider working with the Alameda Creek Watershed Management Program in developing a habitat preservation/restoration program in the watershed. This could allow project mitigation funds from other areas of the watershed to be used in the salt pond restoration project.

ACFCD-4

ACFCD-3

If you have any questions, please contact Ralph Johnson at (510) 670-6012.

Yours truly,

J.

Daniel Woldesenbet, Ph.D., P.E. Director of Public Works

Response to Alameda County Flood Control District

- ACFCD-1: Comment acknowledged. The Project proponents will continue to work with its partners, including Alameda County Flood Control District, throughout the planning and implementation of the SBSP Restoration Project. This comment does not address the adequacy of the SBSP Restoration Project or the EIS/R.
- ACFCD-2: Comment acknowledged. The Project proponents are aware of Alameda County Flood Control District's plan to integrate their lands into the SBSP Restoration Project and will continue to work with the District, one of the Project partners, as these plans move forward.

The Project proponents appreciate the District's intention to work with the East Bay Regional Park District and the Project partners to provide the public with a reasonable combination of flood protection, habitat restoration and trail use.

- ACFCD-3: Although the restoration of Eden Landing Pond E3C could provide important upland transition habitat, and could also benefit steelhead in Alameda Creek, this pond was not included in the sale by Cargill, and thus is not part of the SBSP Restoration Project Area. The Project proponents are interested in acquiring Pond E3C and incorporating it into the Project and will explore opportunities to acquire the pond from Cargill.
- ACFCD-4: Please see the response to Comment HASPA-11 above for a discussion of Project funding. The Project proponents are interested in working with the Alameda Creek Watershed Management Program to identify potential funding sources for Project implementation.

County of Santa Clara

Parks and Recreation Department

298 Garden Hill Drive Los Gatos, California 95032-7669 (408) 355-2200 FAX 355-2290 Reservations (408) 355-2201 www.parkhere.org



May 1, 2007

Clyde Morris U.S. Fish and Wildlife Services Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Avenue Newark, CA 94560

SUBJECT: Comments to the Draft EIS/EIR for South Bay Salt Pond Restoration Project

Dear Mr. Morris:

The Santa Clara County Parks and Recreation Department (SCCPRD) has reviewed the Draft EIS/EIR for the South Bay Salt Pond Restoration (SBSP) Project and submits the following comments for consideration by USFWS, US Army Corps of Engineers (Corps) and California Department of Fish and Game (DFG). The County Parks Department is focused on potential impacts resulting from the SBSP project actions on Alviso Marina County Park which is located within the 8,700-acre Alviso Pond complex. Since Alviso Marina County Park is located between Ponds A8 and A12, our focus is directed to maintaining opportunities for recreation and public access and protecting the natural resources that support the Alviso Marina ecosystem. In addition, our intent is to ensure that the adaptive management options formulated for the project are compatible with County parklands and recreational facilities, such as the regional trails.

Recreation Resources

Within the Recreation Resources section (Section 3.7) of the Draft EIS/EIR, the Alviso Pond Complex is identified as an access point and staging area for waterfowl hunting and service to Pond A8 which is adjacent to Alviso Marina County Park. The Draft EIS/EIR states, "under this amendment, which would continue to apply under the SBSP Restoration Project, the ponds identified above are open to hunters on Saturdays, Sundays, and Wednesdays; a Refuge Special Use Permit is required. During the season, waterfowl hunting is permitted daily from one halfhour before sunrise until sunset."

In accordance to the County's Park Ordinances, the parking lot at the Alviso Marina is open to the public from sunrise to sunset. Although hunting is not allowed on any County parkland, the SCCPRD has historically allowed hunters to pass through the park to reach the refuge. The



Board of Supervisors: Donald F. Gage, Blanca Alvarado, Peter McHugh, Ken Yeager, Liz Kniss County Executive: Peter Kutras, Jr. SCCPR-1

SCCPRD requests that this use be evaluated in the DEIS/EIR in terms of potential impacts to the Alviso Marina parking lot.

SCCPR-2

SCCPR-3

SCCPR-4

SCCPR-5

SCCPR-6

The DEIS/EIR also states that "use of retrieving dogs is permitted and encouraged in all areas open to waterfowl hunting." The SCCPRD recently updated the dog policies for the regional parks and recreation system that permits dogs on leash within Alviso Marina County Park. Thus retrieving dogs are now allowed within the park as long as they are kept on leash.

Within the Recreation-related City/County General Plans section on page 3.7-20, the DEIS/EIR states that "public access and recreational development in the SBSP Restoration Project area would need to coordinate with the goals and policies prescribed in the county/city general plans." The DEIS/EIR adequately acknowledges the County's General Plan policies related to parks and recreation in Table 3.7-8. However, this table should also include adopted trail policies from the *Santa Clara County Countywide Trails Master Plan Update* (November, 1995) that identify the SFBNWR as an implementor:

PR-TS (i) 4.E: Provide information and technical services to neighborhoods surrounding trails on how to establish adopt-a-trail groups. (Implementors: County, Cities, MROSD, SCCOSA, SCVWD, CDPR, SFBNWR, non-profit organizations)

PR-TS (i) 4.H: Clearly sign trails. Provide trail users with information regarding property rights in order to minimize public/private use conflicts and trespassing. (Implementors: County, MROSD, SCCOSA, CDPR, SFBNWR, non-profit organizations)

PR-TS (i) 4.I: Publish and periodically update maps and guides to existing public trails and pathways. (Implementors: County, Cities, MROSD, SCCOSA, CDPR, SFBNWR, non-profit organizations)

PR-TS (i) 6.C: Organize periodic meetings with adjacent cities and counties to coordinate the completion and management of regional trails which extend beyond County lines. (Implementors: County, Cities, MROSD, SCCOSA, SFBNWR).

Additionally, the County Board of Supervisors approved the Alviso Marina County Park Master Plan in October, 1997 which the SCCPRD is currently completing master plan improvements. This Board-approved master plan should be included as a related recreation and public access plan.

Table 3.7-9 should be also corrected to reflect the SCCPRD as the agency in charge for the implementation of the *Santa Clara County Countywide Trails Master Plan Update* since the Santa Clara County Trails Master Plan Advisory Committee no longer exists because it had served its role and function solely for the development of the Trails Master Plan. Also, the Santa Clara County Interjurisdictional Trails Committee no longer exists, and the SCCPRD should be identified as the agency in charge for the implementation of the *Santa Clara County Uniform Interjurisdictional Trail Design, Use and Management Guidelines.*

Description of Alternatives

Under Section 2.0 Description of Alternatives, the DEIS/EIR describes the proposed Alviso recreation and public access features under Alternative B on page 2-65. The SCCPRD requests



Board of Supervisors: Donald F. Gage, Blanca Alvarado, Peter McHugh, Ken Yeager, Liz Kniss County Executive: Peter Kutras, Jr.

to be consulted when developing waterfowl hunting access to ensure compatibility and conformance with County park ordinances. Additionally, coordination with SCCPRD is requested for any planning and design of proposed trails that would connect to the existing Bay Trail and levee trails within Alviso Marina County Park.

Construction and Operations and Maintenance

Under Section 2.4-5, the DEIS/EIR identifies construction activities and staging of material and equipment within the pond complexes on page 2-79. Access into the Alviso pond complex is noted from SR 237, I-880 or US 101 via various arterial, collector and local streets that would provide access from these highways. Since Alviso Marina County Park is adjacent to several ponds, access through the park may be needed for construction activities. Since the locations and phasing of projects have not yet been determined, the SCCPRD requests that we be consulted in future discussions related to the location of construction staging areas and the proper access of construction equipment and materials.

Additionally, the DEIS/EIR should address any construction-related activities to upland areas such as Alviso Marina County Park, specifically in regards to site grading impacts, placement of fill, dredging of channels, breaching of levees and construction of water control structures.

Mitigation Measures identified in SBSP Restoration Project EIS/R SBSP Impact 3.13-1: Short-term construction noise effects

The DEIS/EIR notes that "Santa Clara County: construction activities shall occur during the daytime hours of 7 am to 10 pm." The SCCPRD requests that construction activities be limited to 6 pm Monday through Friday. Additionally we request that construction activities not occur during Saturdays, Sundays or holidays unless prior written approval is granted by the SCCPRD Director.

Hydrology, Flood Management and Infrastructure

Under Phase I Impact 3.3-5, the DEIS/EIR notes potential interference with navigation within Pond A8 and possibly within the vicinity of Alviso Marina which is located on the eastern side of Alviso Slough. As noted on page 3.3-71, "implementation of the Phase I action at Pond A8 would temporarily increase velocities downstream of the Pond A8 notch. Although hydraulic modeling results show that there would not be significant increases in the cross-sectionally averaged in-channel velocity, localized velocity increases in the immediate vicinity of the proposed notch were note computed and could be high enough to affect small craft navigation." High velocities and turbulent flow present a boating safety hazard for small crafts that will utilize Alviso Marina for recreation and thus presents a significant concern for the SCCPRD. Additionally, the SCCPRD is completing millions of dollars of improvements to the boat launch ramp at Alviso Marina as part of implementation of the master plan, which also presents a concern to the SCCPRD if localized velocities and turbulence may potentially result in increased impacts to nearby built structures. The SCCPRD requests consultation for the development of the hydraulic design elements as mitigation features to reduce the extent of local turbulence in Alviso Slough and minimize impacts to boating activities in Alviso Marina County Park.

Additionally, the DEIS/EIR notes that, "benefits to navigation would be further enhanced if the Phase I action at Pond A8 were coordinated with other planned activity, such as improvements to or relocation of the marina structures associated with vegetation removal along Alviso Slough" on page 3.3-72. Once again, the SCCPRD requests consultation as Phase I actions are planned in

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Peter McHugh, Ken Yeager, Liz Kniss **County Executive:** Peter Kutras, Jr.

SCCPR-6 continued

SCCPR-7

SCCPR-8

SCCPR-10

greater detail to ensure that the Department's ongoing master plan improvements to Alviso Marina County Park are minimally impacted by the hydraulic mitigation measures.

Surface Water, Sediment and Groundwater Quality

Under Phase I Action descriptions on page 3.4-95, the DEIS/EIR discusses the contemplation of an adjustable notch at Pond A8 that would allow for tidal exchange between Alviso Slough and Pond A8. "This action would allow accumulation of sediments in Pond A8 that originate more directly from the Guadalupe River watershed....tidal exchange can be cut off if data indicate that methylmercury production and bioaccumulation are being exacerbated by the tidal exchange." Additionally, the DEIS/EIR states that "this Phase I action is where the Adaptive Management Plan should focus on evaluating the risk of mercury-contaminated sediments leading to increased net mercury methylation and bioaccumulation" on page 3.4-97. The SCCPRD encourages a more in-depth analysis of specific remedial actions for addressing this potential issue to be included in the DEIS/EIR.

In conclusion, the SCCPRD requests that the USFWS, Corps and DFG continue collaborations with the SCCPRD in the development of Phase I actions and future SBSP project objectives and restoration activities. Since February 2004, the SCCPRD has been participating in the SBSP Restoration Project as a member of the Public Access Working Group, Habitat Working Groups and Local Government Forum. We have previously submitted comments related to defining quality access points for the alternatives evaluation. We value this cooperative approach to ensuring public access and recreation opportunities are maintained within the SBSP Restoration project area, to the extent possible.

If you have any questions regarding our comments, please call Jane Mark, Senior Planner, at (408) 355-2237 or Antoinette Romeo, Park Planner, at (408) 355-2235. We can also be contacted via e-mail at jane.mark@prk.sccgov.org and Antoinette.romeo@prk.sccgov.org. We appreciate the opportunity to review the DEIS/EIR for the SBSP Restoration Project and look forward to participating in future discussions for the development of the long-term alternatives for the Alviso Ponds complex.

Sincerely,

Jane F. Mark, AICP Senior Planner

CC:

Lisa Killough, Director, Santa Clara County Parks & Recreation Department Antoinette Romeo, Park Planner, Santa Clara County Parks & Recreation Department



Board of Supervisors: Donald F. Gage, Blanca Alvarado, Peter McHugh, Ken Yeager, Liz Kniss **County Executive:** Peter Kutras, Jr.

SCCPR-10 continued

SCCPR-11

SCCPR-12

Response to County of Santa Clara Parks and Recreation Department

- SCCPR-1: The historical use of the Alviso Marina County Park parking lot for hunters accessing Refuge lands in the vicinity is not expressly proposed in the program or project-level alternatives of the SBSP Restoration Project so is not analyzed in the EIS/R. If, for future project-level analysis, this action is proposed to be formalized as part of the adjacent restoration projects, then it would be fully analyzed in the context of a more detailed Project description.
- SCCPR-2: Comment acknowledged.
- SCCPR-3:In response to this comment, the following text addition was made to EIS/R Section 3.7,
Table 3.7-8 Recreation-related City/County General Plans, Alviso pond complex:

Santa Clara County Countywide Trails Master Plan Update (trail policies PR-TS (i) 4.E, 4.H, 4.I, and 6.C).

SCCPR-4: In response to this comment, the following text addition was made to EIS/R Section 3.7, Table 3.7-8 Recreation-related City/County General Plans, Alviso pond complex:

> Santa Clara County Parks and Recreation Department Board-approved 1997 Master Plan for Alviso Marina County Park includes improvements to the Park that are being implemented.

- SCCPR-5: In response to this comment, Table 3.7-9 has been updated to reflect the <u>Santa Clara</u> <u>County Parks and Recreation Department</u> as the "Agency in Charge" of the *Santa Clara County Trails Master Plan Update (1995)* and the *Santa Clara County Uniform Interjurisdictional Trail Design, Use, and Management Guidelines (1999).*
- SCCPR-6:Comment acknowledged; the Project proponents will consult and coordinate with Santa
Clara County Parks and Recreation Department (SCCPRD) as requested.
- SCCPR-7: The Project proponents will consult with SCCPRD in future discussions related to the location of construction staging areas and proper access of construction equipment and materials.
- SCCPR-8: Construction related impacts are described in Chapter 3 of the EIS/R. No earthmoving activities are proposed in the park as it is located outside the project area.
- SCCPR-9: Section 3.13.2 of the EIS/R identifies the noise limitations for the various cities and county within the SBSP Restoration Project Area, including Santa Clara County. Chapter VIII, Section B-11 of the Santa Clara County Code describes the restrictions for noise levels and timing. The maximum noise levels for repetitively scheduled and relatively long-term operation station equipment ranges from 60 to 70 A-weighted decibels (dBA) between the hours of 7 am to 7 pm. SBSP Mitigation Measure 3.13-1 of

the EIS/R erroneously identifies the hours from 7 am to 10 pm. The measure has been revised to reflect the correct timing and the limitation as shown below.

 Santa Clara County: construction activities shall occur during the daytime hours of 7 am to 10 7 pm, Monday through Saturday, except legal holidays; and

The Project proponents acknowledge SCCPRD's request for shorter construction hours, limited to 7 am to 6 pm Monday to Friday only, excluding legal holidays. The Project proponents will coordinate with SCCPRD to consider shortening the timing of construction for such activities.

SCCPR-10: The commenter states that increased velocities and turbulence in the vicinity of the Pond A8 Phase 1 notch may adversely affect navigation (as stated in Phase 1 Impact 3.3-5) and possibly affect soon-to-be constructed boat launch facilities in Alviso. The commenter requests consultation with the SBSP Restoration Project to minimize impacts to boating activities and infrastructure in the Alviso Marina County Park.

> Peak tidal current velocities described in Phase 1 Impact 3.3-5 are expected to approach 5 to 7 ft per second (fps) thru the Pond A8 notch and in its immediate vicinity under a 20or 40-ft opening. However, these increases to existing tidal current speeds are expected to be substantially less in the vicinity of the proposed boat launch (approximately 2,000 ft downstream of the Phase 1 notch at Pond A8) and only approach peak values of approximately 1 fps under a 40-ft opening. (Modeled tidal current velocities under baseline conditions are generally less than 1 fps along Alviso Slough). Additionally, the adaptive management operation of the Pond A8 notch will be such that only one bay will be opened initially (see text revision below). Subsequent opening of additional bays would be contingent on avoiding hazards to boat safety in the vicinity of the Alviso Marina. The Project proponents will consult with SCCPRD on the operation of the Pond notch to ensure a net cumulative benefit to navigation along Alviso Slough. Phase 1 Impact 3.3-5 in Section 3.3, Hydrology, Flood Management and Infrastructure, under the subheading Alviso, has been revised as follows:

High <u>tidal current</u> velocities <u>(*i.e.* peak values up to approximately 5 to 7 fps)</u> and turbulent flow are expected in the <u>immediate</u> vicinity of the notch. For boating safety, the Phase 1 action would include features to restrict access to the Pond A8 notch. Features could include structures to dissipate energy, multiple "bays" that could be opened/closed independently such that tidal currents change more gradually, or other design elements intended to limit the extent of high tidal currents. <u>Additionally, the Pond A8 notch would</u> <u>initially be operated with only one bay open</u>. <u>Subsequent opening of</u> <u>additional bays would be contingent on avoiding hazards to boat safety in the</u> <u>vicinity of the Alviso Marina and ensuring that tidal scour does not threaten</u> <u>erosion or downstream levees that provide flood protection to the town of</u> Alviso, as discussed in Impact 3.3-4. At the junction of the outboard pilot channel and slough, mitigation features could include fendering to restrict vessel access and hydraulic design elements to reduce the extent of local turbulence in Alviso Slough. Fendering could consist of vertical piles with horizontal floating racks to keep boat traffic from entering the channel. The outboard pilot channel could be placed at an oblique angle to the slough to maintain an efficient hydraulic junction. Design elements reducing localized velocities and turbulence would also reduce the potential for excessive erosion of the marsh area directly across from the junction. If unacceptable impacts to navigation along Alviso Slough could not be avoided by reducing the notch opening to a single bay, the Project would consider closing all bays. Navigation would not be allowed within Pond A8. Numerical modeling suggests that increases to existing tidal current speeds are expected to be substantially less downstream of the Pond A8 notch, with peak values of approximately 1 fps for a 40-ft notch opening (see Figure 9 in Appendix G-5)

- SCCPR-11: The South Baylands Mercury Project addresses this issue by developing food web information needed to propose triggers for remedial actions. The remedial action contemplated by the EIS/R is closing the notch if it appears tidal action is problematic for mercury methylation and bioaccumulation.
- SCCPR-12: Comment acknowledged. The Project will continue to work with SCCPRD on the SBSP Restoration Project activities.

SMCMAD



SAN MATEO COUNTY MOSQUITO ABATEMENT DISTRICT 1351 Rollins Road Burlingame, California 94010-2409 (650) 344-8592 FAX (650) 344-3843 <u>WWW.SMCMAD.ORG</u>

Response to the Environmental Impact Report on the South Bay Salt Ponds Project

In general, the report does a good job considering mosquito issues at the project site. The	
inclusion of an Adaptive Management Plan and Management Triggers should help to alleviate problems if they	SMCMAD-
arise, provided sufficient funding is secured to carry out these actions.	

The District has three main concerns:

- First the project must secure funding sufficient to maintain the water control structures and carry out the SMCMAD-2 adaptive management plan.
- Secondly, the project should be built in such a way that water levels and flow can be controlled and adjusted without a great deal of re-engineering.
- Finally, the project must secure funding to pay for mosquito control when it becomes necessary. The SMCMAD currently conducts mosquito control on Bair Island. Approximately 2,500 acres of salt marsh at that site can produce mosquitoes and the annual cost is between 50,000 and 90,000 per year. The SBSP project in contrast, covers 15,000 acres and the cost of mosquito control at this site would be much greater. Because this project has such a large potential impact on vector control agencies, it is our opinion that Vector Control should also be considered under the section considering impacts on public services.

The San Matco County Mosquito Abatement District (SMCMAD) appreciates being included in the process of developing the alternatives. Salt marsh mosquitoes are one of the most significant issues facing vector control districts around San Francisco Bay. Many cities are well within their flight range of saltmarsh mosquitoes and this project could have a very significant impact on local residents. The District looks forward to continuing its participation in the planning process.

Thank you,

Chindi Peavey, PhD Vector Ecologist, San Mateo County Mosquito Abatement DIstrict

Response to San Mateo County Mosquito Abatement District

- SMCMAD-1: Comment acknowledged. This comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.
- SMCMAD-2: The lead agencies currently have funding to maintain the water control structures. It is part of the base budget for the Don Edwards San Francisco Bay National Wildlife Refuge. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.
- SMCMAD-3: The commenter suggests that the Project be built in such a way that water levels and flow can be controlled and adjusted without a great deal of re-engineering. This is a design objective of the SBSP Restoration Project. The managed pond restoration actions would be designed for flexibility of water management so that water levels can be controlled and adjusted to meet a variety of objectives (*i.e.*, habitat goals, water quality requirements). The tidal restoration actions would be designed to ensure full drainage of tidal areas and would be phased such that re-engineering (*e.g.*, strengthening a levee that would be breached in a subsequent restoration phase) is minimized.
- SMCMAD-4: The lead agencies will work with the San Mateo County Mosquito Abatement District to secure funding for additional mosquito control as it becomes necessary. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.
- SMCMAD-5: Comment acknowledged, and the EIS/R discusses this issue in Section 3.10. This comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R.

May 2, 2007

Yvonne LeTellier

MROSD

Regional Open Space

US

US Army Corps of Engineers 1455 Market Street San Francisco, CA 94103

Clyde Morris USFWS Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, CA 94560

RE: Environmental Impact Statement/Report (EIS/R) for the South Bay Salt Pond Restoration Project (Project)

Dear Ms. LeTellier and Mr. Morris:

Thank you for providing Midpeninsula Regional Open Space District (District) with an opportunity to review and comment on the EIS/R for the South Bay Salt Pond Restoration Project (Project). The District is a public agency that was formed by the voters in 1972, pursuant to the State of California Public Resources Code section 5500 *et seq.*, to preserve and enhance open space land and provide low-intensity recreational uses in Santa Clara County. Subsequently, parts of San Mateo and Santa Cruz Counties were also annexed and included within the District boundary. The District now manages over 55,000 acres in 26 preserves, including Ravenswood Open Space Preserve and Stevens Creek Shoreline Nature Study Area which are both bayland properties located adjacent to the Project Area. As a neighbor of the Project, the District is keenly interested in the future use and management of the former salt ponds that are now owned and managed by the USFWS, particularly since they provide: (1) important public recreational access opportunities to the bay including potential additions to the Bay Trail; (2) the potential for enhancing the scenic value of the bay, and; (3) expected benefits of greater bayland habitat diversity unique to the San Francisco Region.

The District hereby submits the following comments and recommendations regarding the environmental document and the proposed Phase I Actions for the Project, which constitute the first group of planned actions scheduled for implementation beginning in 2008.

Public Access and Recreation

The District is very pleased that the Phase I Actions and both Alternatives B and C for the Project include a wide array of public access and recreational opportunities. The proposed Bay Trail segments in the Ravenswood area south of the Dumbarton Bridge (Pond SF2) and in the Alviso pond complex north of Moffett Field (Ponds A2E, AB2, and A3W) are of the greatest importance to the District. Since its inception, the District has been actively helping to complete the Bay Trail corridor in the South Bay by acquiring key properties and easements along the bayfront, becoming an active member of the Board of Directors for the Association of Bay Area

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info@openspace.org www.openspace.org BOARD OF DIRECTORS: Pete Siemens, Mary Davey, Jed Cyr, Curt Riffle, Nonette Hanko, Larry Hassett, Kenneth C. Nitz GENERAL MANAGER: L. Craig Britton

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MROSD-1

MROSD

MIDPENINSULA REGIONAL OPEN SPACE DISTRICT

MROSD

Yvonne LeTellicr, US Army Corps of Engineers Clyde Morris, USFWS May 1, 2007

Governments Bay Trail Project, joining Bay Trail feasibility study task forces, and routinely commenting on projects that may impact or influence the Bay Trail alignment.

Given the District's land ownership within the Project Area and history with Bay Trail implementation, we recommend that the Project Team work closely with the District through the final design and implementation of the Phase I Actions and subsequent phased actions for Ponds SF2, A2E, AB2, and A3W. We ask that you also work closely with the San Francisco Bay Trail Project staff during final design and implementation of all public access projects to help anticipate any potential issues early as they relate to the Bay Trail. Through these collaborations, each agency will be able to keep the others informed. New developments that might affect trail use are in process as they relate to the Moffett Field Site 25 remediation project, future tidal wetlands restoration work within the Stevens Creek Shoreline Nature Study Area, and trail access and connectivity opportunities between Pond SF2 with the Ravenswood Open Space Preserve.

Public Outreach and Involvement

The District would also like to stress the importance of keeping the public and the Stakeholders Forum, of which the District is a participant, informed throughout the implementation of the Adaptive Management Plan. Outreach and involvement will be particularly important where the restoration may result in the removal of existing public trails. Through continued public outreach and education, the Project will continue to receive strong public support as more people become invested and eager to achieve Project success. Please keep interested people informed on the progress in meeting Project Objectives and on the monitoring results as they become available.

Coordination with the District at Pond SF2

Implementation of the proposed Phase I Actions (including the installation of the two viewing platforms) and any subsequent actions for Pond SF2 will require close coordination with the District as a landowner. Immediately adjacent to Pond SF2, the District owns fee title to approximately 7.83 acres and leases an additional 98.55 acres of land from the State Lands Commission. These fee and lease parcels include a significant portion of the remnant marsh and tidal fringe, the extant levce, and a portion of the access and parking areas adjacent to the Dumbarton Bridge. The outboard levee of Pond SF2 currently serves as a trail to allow the public and our staff access onto District property, for this reason maintaining the levee in its current or improved condition is a District priority. An appropriate agreement with the District will be necessary to carry out some of the identified Phase I improvements. Such an agreement should be negotiated and executed early enough in the process so as to not interfere with project schedules. Please contact Michael Williams, Real Property Manager, to discuss further this Agreement. Please also keep us abreast of any potential changes to the levee that might in any way impact public access on District property.

To clarify property ownership and specify the need to enter into an interagency agreement, please add language acknowledging the District's ownership and the need to coordinate and obtain District approval to establish the trail and viewing platforms that are proposed at the east edge of Pond SF2 to page 2-66, Table 2.9, Table 2-17, the second paragraph on page 2-136, paragraph 5 MROSD-3

MROSD-4

Page 2

MROSD-1 continued

MROSD-2

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MROSD

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Yvonne LcTellier, US Army Corps of Engineers Clyde Morris, USFWS May 1, 2007

Page 3

of page 2-140, Figure 2-22, the first paragraph of page 2-150, and numerous appropriate locations within Section 3.

Please also add reference to the need for District approval in Section 1.7 as may be appropriate under CEQA, so it is clear that your environmental review can apply to future actions by our Board in approving an interagency agreement.

Other District Lands

In addition to the property interests described above, the District requests appropriate recognition within the text about several other parcels of land in and near the Project Area. These include the rest of the District's Ravenswood Open Space Preserve at Cooley Landing, which amounts to approximately 263 acres, and the District's 54-acre Stevens Creek Shoreline Nature Study Area adjacent to Moffett Field. This latter property is currently undergoing contamination remediation sufficient to allow the restoration of tidal flow to a portion of the area. The final Bay Trail alignment along the edge of the District's Stevens Creek Shoreline Nature Study Area (as conceptually shown on Alternatives B and C) will potentially be determined by the outcome of an agreement between the District and NASA on the location of the dividing line between the areas subject to tidal action, marsh adaptation and refugia, and the area utilized by NASA for stormwater purposes that will likely be managed as fresh water habitat.

Requested Additions

Under Table 3.7-9, please include two additional planning documents that also identify planned recreational goals and key public access improvements for bayfront properties (these documents are attached for your reference):

Related Plans	Agency In Charge	Plan Essence and Relevance to Recreation	
Stevens Creek: A Plan of Opportunities (1980)	Midpeninsula Regional Open Space District (prepared in collaboration with City of Mountain View and Santa Clara Valley Water District)	Identifies a comprehensive use and management vision for Stevens Creek from San Francisco Bay to Homestead Road, including public access goals	MROSD-6
Regional Open Space Study (1998)	Midp enin sula Regional Open Space District	Planning tool for implementing the District's mission; identifies existing and desired public access opportunities	

Potential Long-Term Public Access Issues

The District understands that the proposed restoration and public access plan will apply adaptive management to guide future use and management decisions that will ultimately determine the final design of the project. As you implement each Phase, including the Phase I Actions, it is important to consider whether existing and planned public facilities, such as parking and miles of trail, will be able to meet future recreational demands and whether undue strain will be placed on nearby city and other agency facilities. This is especially true for Pond SF2, which may be highlighted as a premiere pond for waterfowl and wildlife observation in part given its visibility and great accessibility from Highway 84. Project Objective 3 under Table 2.3, Adaptive Management Summary Table, page 2-23, specifies the restoration target of: (1) maintaining a high quality visitor experience; and, (2) ensuring that facilities are not degraded by over usage.

MROSD-7

MROSD-4 continued

MROSD-5

Yvonne LeTellier, US Army Corps of Engineers Clyde Morris, USFWS May 1, 2007

Page 4

One of the triggers listed to determine whether the objective is not being met is a noticeable overcrowding of staging areas. Under the list of "Potential Management Actions" that would be pursued to correct visitor use issues includes limiting the number of visitors allowed and alternating use times for different activities. Under Potential management Action, please also include as part of this list the potential expansion of staging areas, trails, and other amenities, where physically and ecologically appropriate, to meet increased visitor use and thus maintain a high quality visitor experience.

We appreciate the opportunity to review and comment on the EIS/R and look forward to future discussions and collaboration with the USFWS as you proceed with the Project. If you have any questions regarding our comments, please contact Ana Ruiz, Senior Planner, at (650) 691-1200.

Sincerely L. Craig Britton.

General Manager

LCB: amr:dms:sgs

cc: MROSD Board of Directors

Attachments:

Stevens Creek: A Plan of Opportunities (1980) Regional Open Space Study (1998) Map, Ravenswood Open Space Preserve Map, Stevens Creek Shoreline Nature Study Area MROSD-7 continued

Response to Midpeninsula Regional Open Space District

- MROSD-1: Comment acknowledged.
- MROSD-2: The Project proponents are committed to working with the Midpeninsula Regional Open Space District (MROSD) during the current phase (Phase 1) and future phases of the SBSP Restoration Project. The Project proponents are also working with the San Francisco Bay Trail Project staff and will continue to work with them on the design of recreational features for this and future phases of the project.

Please note that the trail connection between Pond SF2 and Ravenswood Slough is already shown on Figure 2-20. Per this comment, the following text change was made to Chapter 2, Section 2.5.3 Alviso Pond Complex, Phase 1 Recreation and Public Access Actions, second to last paragraph:

The proposed trail would provide year-round access for pedestrians and bicyclists and other users and would meet California Department of Transportation (Caltrans) Class 1 bikeway standards. <u>Trail design would</u> need to be coordinated and compatible with future tidal wetland restoration work within the Stevens Creek Shoreline Nature Study Area and the Moffett Federal Airfield Site 25 remediation project.

- MROSD-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife. The Project proponents will continue to keep all stakeholders informed of project components that may result in the removal of trails and public access features. The EIS/R identifies what is currently known about the Project; however, as the Adaptive Management Plan is implemented changes to the public access plan, if any, would be adequately publicized.
- MROSD-4: The Project proponents will work with MROSD (as landowner of the parcel immediately adjacent to Pond SF2) to negotiate any agreements that may be needed for implementation of the Phase 1 and subsequent actions on lands owned by or adjacent to MROSD-owned property. Chapter 2 has been revised to reflect this change.
- MROSD-5: Table 3.7-1 in Section 3.7 of the EIS/R acknowledges MROSD's Ravenswood Open Space Preserve and the Stevens Creek Shoreline Nature Study Area. The requested text about the latter site's remediation has been included as a footnote to Table 3.7-1. The comment regarding the final Bay Trail alignment along the edge of MROSD's Steven Creek Shoreline Nature Study Area is acknowledged.
- MROSD-6: In response to this comment, two MROSD planning documents were added to Table 3.7-9, SBSP Restoration Project Area Recreation and Public Access Related Plans in the EIS/R.

MROSD-7: Comment acknowledged. Additional management actions have been added to the Adaptive Management Plan that include expanding public access as may be needed to address high demand and to reduce negative ecological impacts.





SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

EAST PALO ALTO 🛎 MENLO PARK 📽 PALO ALTO 📽 SAN MATEO COUNTY FLOOD CONTROL DISTRICT 🕷 SANTA CLARA VALLEY WATER DISTRICT

Clyde Morris

USFWS, Don Edwards San Francisco Bay NWR

9500 Thornton Avenue

Newark, CA 94560

May 2, 2007

Dear Mr. Morris,

Thank you for the opportunity to provide comments on the Draft South Bay Salt Ponds Environmental Impact Statement/Report.

My comment is in regards to a portion of Section 1-21 of the Draft EIS/R.

Ravenswood Ponds and San Mateo County

"This Interim Feasibility Study area generally consists of Redwood City, Menlo Park, portions of East Palo Alto and the Ravenswood Ponds. The Ravenswood Ponds are owned by USFWS. This Interim Feasibility Study area is separated from the remainder of the Shoreline Study area in terms of hydrology and political jurisdictions. This Interim Feasibility study area includes all of the Shoreline Study area in San Mateo County, and is focused on ecosystem restoration and tidal flood protection for the Ravenswood Ponds, as well as flood protection for Flood Slough and Ravenswood Slough drainages. Flood protection for San Francisquito Creek is being studied under a separate Congressional authorization. San Francisquito Creek serves as the southern edge of this Interim Feasibility Study area, dividing the Santa Clara County and Alviso Ponds Interim Feasibility Study area from the Ravenswood Ponds and San Mateo County Interim Feasibility Study area."

Congressional Authorization for the Flood Damage Reduction and Ecosystem Restoration Feasibility Study currently being conducted by the Army Corps of Engineers and the San Francisquito Creek Joint Powers Authority (SFCJPA) on San Francisquito Creek includes authorization to study and recommend projects to reduce the risk of tidal flooding from San Francisco Bay in the tidal reaches of the San Francisquito Creek floodplain. Under this authorization, the Corps and the SFCJPA are currently conducting a feasibility study for this reach of Bay-front, which includes all tidal areas of Menlo Park, East Palo Alto and Palo Alto, including Ravenswood Slough and Flood Slough. A small portion of Redwood City is located within the San Francisquito Creek floodplain and is eligible to be included in the feasibility study, but the City of Redwood City declined an invitation to participate in the study.

SFCJPA-1

AN AGENCY EMPOWERED TO PROTECT AND MAINTAIN SAN FRANCISQUITO CREEK AND ITS ENVIRONS

The SBSP Draft EIS/R references the Congressional authorization and study of San Francisquito Creek, but does not accurately reflect the tidal components of the San Francisquito Feasibility Study. Documents produced by the Sponsors of the SBSP Study and/or the Shoreline Study, when referencing the San Francisquito Study, should be amended to accurately represent the scope of the San Francisquito Study by including the tidal components.

The San Francisquito feasibility study is anticipated to be complete in 2011, pending federal appropriations. It is my understanding that the Shoreline Study timeline for the tidal areas at and around Ravenswood Ponds calls for initiating feasibility in a later Phase 2. It will be important for the proponents of all three studies to closely coordinate so as not to repeat work or to request congressional authorization of funding for the same work in separate studies. In addition to the Corps coordinating internally, SFCJPA would like to work in close coordination with the USFWS and Coastal Conservancy with regards to all activities at and around the Ravenswood Ponds.

SFCJPA-1

continued

Sincerely,

Kevin Murray, Project Manager San Francisquito Creek Joint Powers Authority (650) 330-6767; kmurray@menlopark.org

Cc: Yvonne LeTellier, US Army Corps of Engineers Janice Lera-Chan, US Army Corps of Engineers Cynthia D'Agosta, SFCJPA Executive Director

Response to San Francisquito Creek Joint Powers Authority

SFCJPA-1: Section 1.6.1 in Chapter 1, Introduction, under the heading Shoreline Study Interim Feasibility Studies, has been revised to include the following footnote regarding the San Francisquito Creek Study, as follows.

> The Corps and the San Francisquito Creek Joint Powers Authority (SFCJPA) are currently conducting a Flood Damage Reduction and Ecosystem Restoration Feasibility Study on San Francisquito Creek. The study includes Congressional authorization to study and recommend projects to reduce the risk of tidal flooding from San Francisco Bay in the tidal reaches of the San Francisquito Creek floodplain. Under this authorization, the Corps and the SFCJPA are currently conducting a feasibility study for this reach of Bay front, which includes all tidal areas of Menlo Park, East Palo Alto and Palo Alto, including Ravenswood Slough and Flood Slough. A small portion of Redwood City is located within the San Francisquito Creek floodplain and is eligible to be included in the feasibility study, but the City of Redwood City declined an invitation to participate in the study.

SFCJPA-2: Comment acknowledged. The Project proponents agree that close coordination is needed.

MAY-03-2007 THU 11:33 AM EB REGIONAL PARKS

FAX NO. 5105691417





2950 PERALTA OAKS COURT P.O. BOX 5381 OAKLAND CALIFORNIA 94605-0381 7. 510 635 0135 E 510 569 4319 TDD. 510 633 0460 WWW.EBPARKS.ORG

April 28, 2007

John Krause California Department of Fish and Game P.O. Box 47 Yountville, CA 94599

RE: South Bay Salt Pond Restoration Project Environmental Impact Statement / Report

Dear Mr. Krause:

East Bay Regional Park District ("EBRPD") appreciates the opportunity to provide these comments on the Draft Environmental Impact Statement / Report (DEIS/R) for the South Bay Salt Pond Restoration Project ("Project") released in March 2007. As active participants in the South Bay Salt Pond (SBSP) planning process, and having designed and managed the construction of the restoration and public access features included within the original 835-acre Eden Landing Ecological Reserve site, we have a strong interest in the long-term success of this ambitious restoration project. These comments refer primarily to the public access features that are proposed or proposed to be removed within the Eden Landing Pond Complex owned and managed by the California Department of Fish and Game. EBRPD extends its compliments to the project management team and consultants in preparing this informative and comprehensive document. EBRPD comments are divided into two parts: general comments on the proposed and existing public access features within Eden Landing, and specific comments on information provided in the DEIS/R.

The EBRPD is considered to be a 'responsible agency' as defined by the California Environmental Quality Act (CEQA) for the South Bay Salt Pond Restoration Project. CEQA defines a responsible agency as a public agency, other than the lead agency, which has responsibility for carrying out or approving a project (California Environmental Quality Act, §21069). EBRPD has been intimately involved throughout the planning process and is the agency being considered for operation and management of public access facilities in the Eden Landing portion of the project and would, therefore, be considered a responsible agency.

Section 1.3 of the DEIS/R describes the purpose and need of the project. The goal of the project is to provide for "restoration and enhancement of wetlands in South San Francisco Bay while providing for flood management and <u>wildlife-oriented public access and recreation</u>". The section identifies the objective of providing for "public access and recreational opportunities compatible with wildlife and habitat goals." Furthermore, the "limited opportunities in South San Francisco Bay for wildlife-oriented recreation" is identified as a need for action within Section 1.3.

Throughout this planning process, EBRPD has worked to ensure that quality public access features are incorporated into the Project. A careful review of the DEIS/R, however, reveals little

Board of Directors						I	
John Sutter President Ward Z	Ayn Wieskamp Vice-President Ward 5	Ted Radke Treasurer Ward 7	Doug Siden Secretary Ward 4	Beverly Lane Ward 6	Carol Severin Ward 3	Nancy Skinner Ward I	Par O'Brien General Manager

EBRPD-1

EBRPD-2

EBRPD-3

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Mr. J. Krause April 28, 2007 Page 2	
progress towards that goal. EBRPD's recommendations for public access features within Eden Landing, a 5,500-acre property that is over twice the size of Tilden Park, included the following:	
• A year-round access to the bay shoreline somewhere within the Eden Landing Complex	
• A loop trail, accessible year round	
• A Bay Trail spine alignment that provides users the opportunity to experience the restored wetlands away from the urban edge	EBRPD-3 continued
• A commitment that the adaptive management process would result in no net loss of public access, or a reduction in the quality of that access	oontinucu
• The preservation of the existing year-round, multi-use Alameda Creek Trail with its access to the bay	
• The provision of a launch site for non-motorized watercraft	
With the exception of the watercraft launch site, none of EBRPD's proposals have been included in the DEIS/R.	
Page 2-149 of the DEIS/R states, "O&M (operations and maintenance at the Eden Landing Complex) would be a cooperative effort between CDFG and another entity such as the EBRPD." EBRPD estimates the cost to properly operate and maintain Phase I public access features, including the enforcement of seasonal trail closures during the busy spring and summer seasons, fall and winter trail closures required to facilitate waterfowl hunting, the maintenance of trail surfaces and the extensive fencing that may be required, and public safety impacts associated with the watercraft launch site, to be in the range of \$200,000 per year. EBRPD understands that while the project team estimates annual monitoring expenses for the Project to be in the \$2-3 million range, they have no plans to fund the operation of any of the public access features. Furthermore, the inability to properly maintain recreation and public access facilities has the potential to result in significant adverse physical effects to the environment through erosion of improperly maintained trails, accumulation of trash, and improper human activities, amongst others. Failure to fund the operation and management needed to address such concerns associated with the public access and recreation elements would result in a significant environmental impact pursuant to CEQA.	EBRPD-4
The restrictions to the proposed loop and shoreline trails present both operational and public policy challenges for EBRPD. The Park District's primary mission is provide recreational access to parks and open space, not to enforce spring and summer trail closures or to close trails to facilitate waterfowl hunting. The Park District is also concerned about managing public access to standards set by others, and their potential financial impact on EBRPD. Without the ability to set operational and maintenance standards, or even any assurance that the adaptive management process would not result in even more restrictive public access policies, EBRPD would be unable to provide the level of service and the quality recreational experience that the Park District is accustomed to providing. The DEIS/R should also make it clear that the owners and managers of the Eden Landing Complex have informed EBRPD that they have neither the staffing nor the funding to operate even the modest public access features that have been proposed.	EBRPD-5
While EBRPD will continue to work to complete the San Francisco Bay Trail spine through the project, and has already committed significant staff time and funding towards that effort, the Park District is disappointed that the areas available for even limited public access appears to be	EBRPD-6

FAX NO. 5105691417

Mr. J. Krause April 28, 2007 Page 3

increasingly constrained. This will degrade the public's experience of the restored ponds and wetlands and conflict with the goal of providing wildlife-oriented public access and recreation. EBRPD-6 continued

EBRPD would also like to make the following specific comments on Section 3.7, Recreation Resources, of the DEIS/R:

On Figures ES-3a and ES-4a, the proposed trail alignments delineated in orange carry the notation, "Denotes trails that were identified during the alternatives development as being of particular concern to the permitting agencies for potential to disrupt habitat." Where are these concerns identified and how will the final EIR resolve them? Potential adverse impacts must be identified in relation to clearly defined significance thresholds, and mitigation measures to reduce potential impacts to less-than-significant levels must be identified in the final EIR.	EBRPD-7
Table 3.1-1, Regional Public Access and Recreational Facilities, should be corrected as follows. The Oliver Salt Plant and its associated historic buildings, is a privately-owned parcel that may be developed in the future. It is not a recreational facility. Facilities listed under the Alameda Creek Regional Trail include horse stables. The stables, located on land owned by Alameda County, have been closed for over a year. Correspondence from the County indicates that they have no plans to reopen the stables. Under the heading of Bicycle Facilities, the nearest multi-use trails permitting bicycles are indicated to be located at Coyote Hills Regional Park. Bicycling is actually permitted on both the north and south bank alignments of the Alameda Creek Trail, located within the Project area.	EBRPD-8
Table ES-3, Cumulative impact 3.7.2, Permanent removal of existing recreational features(trails) in locations that visitors are accustomed to using and would not be replaced is noted as "LTS" (less than significant) for Phase 1 actions at Eden Landing. The removal of two miles of the year-round Alameda Creek Trail, accessible to all user groups including dog owners, would not be mitigated by the proposed seasonal trails, which will be closed during the spring and summer and will be closed to dogs (with the exception of off-leash hunting dogs in season). Additional segments of the existing Alameda Creek Trail may be impacted by the concurrently-planned Alameda County Flood Control project proposed for that location. The cumulative impacts of the two projects should be considered potentially significant under CEQA.	EBRPD-9
On page 3.7-8, the facility described as Hayward Shoreline Park should be referred to as Hayward Regional Shoreline.	EBRPD-10
Table 3.7-3, Eden Landing Pond Complex Existing Public Access and Recreation, shows there to be no existing access points or staging areas. The Alameda Creek Stables Staging Area, which remains open to the public, provides staging and direct access to the Alameda Creek Trail, located within the Project area.	EBRPD-11
On page 3.7-17, one of the bullet points under (b) Areas and Special Regulations for Use states, "Fishing is permitted from boats and from shore, but only at <i>such times</i> and in designated areas." This statement is unclear.	EBRPD-12
Page 3.7-30, under "Alternative C Tidal Habitat Emphasis" the statement "A new trail is proposed at the Eden Landing complex that would provide shoreline access to hikers and cyclists" should be modified to make it clear that the proposed new trail is seasonal, and would be closed to the public for much of the year.	EBRPD-13

FAX NO. 5105691417

Mr. J. Krause April 28, 2007 Page 4

The potential loss of several miles of the existing Alameda Creek Trail, as shown on Figure ES-4a, Alternative C, conflicts with previously adopted planning documents including the 1989 ABAG Bay Trail Plan, the 1997 EBRPD Master Plan, and the 2006 Alameda Countywide Bicycle Plan. This should be noted in the final EIS/R, and is a significant impact.

We want to make it quite clear that East Bay Regional Park District remains committed to the success of this ambitious and important project. However, the limited quality and seasonality of the proposed public access features at Eden Landing, along with the potential for the Adaptive Management process to even further restrict public access, present significant obstacles to the Park District's involvement in the Project and is not consistent with the commitments made by the public funding of this project. Should the project management team choose to address the issues raised in this comment letter, EBRPD is prepared to assist in developing and managing quality, year-round public access features at Eden Landing.

The implementation of the vision contained in this DEIS / R will take decades of effort and millions of dollars in public funding. It is unlikely that the public support necessary to fund this effort will be maintained if the project maintains such severe restrictions on public access. At the very least, the South Bay Salt Pond Project Team should rethink some of its recommendations and commit to the implementation and funding of the modest public access features proposed in this document.

Thank you for the opportunity to provide these comments.

Yours truly,

General Manager

EBRPD-14

EBRPD-15

cc:

The Honorable Dianne Feinstein, United States Senate Sam Schuchat, California Coastal Conservancy Will Travis, S. F. Bay Conservation and Development Commission Laura Thompson, ABAG - San Francisco Bay Trail Project Carl Wilcox, California Department of Fish & Game Steve Ritchie, California Coastal Conservancy

Board of Directors, East Bay Regional Park District Robert E. Doyle, Assistant General Manager, East Bay Regional Park District

Response to East Bay Regional Park District

- EBRPD-1: Comment acknowledged.
- EBRPD-2: Comment acknowledged.
- EBRPD-3: The Project proponents have worked closely with stakeholders on developing a Project that achieves a balance of recreation and restoration. The Project proponents appreciate East Bay Regional Park District's (EBRPD's) recommendations for the Eden landing pond complex, and have incorporated many of the suggested recreational features in the SBSP Restoration Project. Figures 2-5a and 2-7a shows the proposed recreational features at the Eden Landing pond complex for Alternatives B and C, respectively. Both alternatives provide a launch site for non-motorized watercraft. In response to EBRPD's comment, the Project proponents have revised the Eden Landing program and Phase 1 actions to provide for a year-round accessible trail to the shoreline. Figures 2-5a, 2-7a, and 2-11 in the EIS/R have been updated to reflect this change.

As shown on Figure 2-4a, under the No Action Alternative, public access would remain as current conditions in the Eden Landing pond complex (limited access along Alameda Creek Flood Control Channel and within the ELER only). However, the long-term alternatives would provide access to an area otherwise not open to the public, and thus would result in a net gain in public access. All proposed trails in the interior of the pond complex are intended to provide users the opportunity to experience the restored wetlands away from the urban edge, in keeping with EBRPD's recommendations. In addition, the proposed features (kayak/boat launch, interpretation station, trails, and shoreline access) would provide a range of quality experiences not currently provided in the pond complex.

- EBRPD-4: Funding for the future operation and maintenance of public access and recreation facilities at Eden Landing is not yet appropriated. This comment is noted and the Project proponents understand the importance of having funding for future operations in order to have successful public facilities
- EBRPD-5: Comment acknowledged.
- EBRPD-6: Comment acknowledged.
- EBRPD-7: Trails shown on the alternative maps in orange denote trails that were identified during the alternative development process as being of particular concern to permitting agencies for potential to disrupt habitat. These program-level actions are general in nature and may be subject to change as detailed design proceeds in future construction phases of the Project. Additional information has been added to the EIS/R on the impacts to wildlife associated with public access and recreation. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

- EBRPD-8: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-9: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-10: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-11: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-12: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-13: Comments are noted and corrections have been made to Section 3.7 of the EIS/R.
- EBRPD-14: It is not clear from this comment if the commenter is referring to a proposed Bay Trail Plan alignment along Old Alameda Creek or the existing Alameda Creek Regional trail. Hence this response covers both issues. Early alternatives explored the idea of placing a trail along the levee adjacent to Old Alameda Creek as proposed in the Bay Trail Plan. The restoration plans propose a large expanse of tidal marsh through most of this area and to optimize restoration of the historic slough network and create a large uninterrupted expanse of marsh, a potion of the levees are proposed to be removed as are shown on the Alternatives B and C. In lieu of having the proposed trail proceed all the way to the Bay, a proposed shoreline access trail is planned in the northern portion of the Eden Landing pond complex to better complement the range of current factors affecting this complex including habitat restoration, flood control and public access. However, a shorter spur trail is proposed in each of the Alternatives B and C which would still follow Old Alameda Creek and allow visitors to explore the old Union City salt works. In response to this comment Section 3.2 of the EIS/R has been revised to add new discussion of the Project's conformance with the Bay Trail Plan at Eden Landing.

Alternative C shows an option to remove the Alameda Creek Flood control levee, which would result in the removal of 1.76 miles of existing Alameda Creek Regional Trail. This was identified as a potentially significant impact in Section 3.7 of the EIS/R, SBSP Impact 3.7-2.

EBRPD-15: Comment acknowledged.

MAY-03-2007 13:02

SFPUC

415 934 5770

SFPUC



WATER WASTEWATER POWER

GAVIN NEWSOM MAYOR

RYAN L. BROOKS PRESIDENT

ANN MOLLER CAEN

E. DENNIS NORMANDY ADAM WERBACH RICHARD SKLAR

SUSAN LEAL GENERAL MANAGER SAN FRANCISCO PUBLIC UTILITIES COMMISSION

1155 Market St., 11th Floor, San Francisco, CA 94103 - Tel. (415) 554-3155 - Fax (415) 554-3181 - TTY (415) 554.3488



P.002

May 2, 2007

Yvonne LeTellier US Army Corps of Engineers 1455 Market Street San Francisco, Ca 94103

Clyde Morris US Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thomton Avenue Newark, CA 94560

John Krause California Department of Fish and Game P.O. Bos 47 Yountville, CA 94599

Re: Draft Environmental Impact Statement/Report (DEIS/R) for the South Bay Salt Pond Restoration Project

Dear Ms. Le Tellier, Mr. Morris, and Mr. Krause:

The purpose of this letter is to provide the San Francisco Public Utilities Commission's (SFPUC) comments on the above EIS/R. The SFPUC provides high-quality drinking water to 2.4 million residential, commercial, and industrial customers in San Francisco and the Bay Area. The project description and maps provided in the DEIS/R demonstrate that a portion of the South Bay Salt Pond (SBSP) Restoration Project would be located on property owned by the City and County of San Francisco and managed by the SFPUC. Specifically, the SFPUC operates and maintains water pipelines that run through real property ("Right of Way") in the Ravenswood pond complex and has plans to upgrade pipeline in that area (see <u>www.sfwater.org</u> for current "Right of Way Encroachment Policy"). Our comments address issues regarding the SFPUC's Hetch Hetchy Aqueduct (Aqueduct) and related Bay Division Pipeline Reliability Upgrade Project (Pipeline Project), excavated material from the proposed tunnel associated with the Pipeline Project, and security concerns about proposed public access.

Bay Division Pipeline Reliability Upgrade Pipeline Project

As mentioned in the DEIS/R, the Aqueduct runs from east to west just south of California State Highway 84 and the Dumbarton Bridge. The Aqueduct emerges on the western shore within the Ravenswood pond complex

SFPUC-1

immediately south of Pond SF2. The associated Pipeline Project involves plans for constructing a fifth Bay Division Pipeline along the existing SFPUC Right of Way south of Pond SF2, and a tunnel underneath San Francisco Bay that will surface south of Pond SF2. While we are proponents of restoring the salt ponds in the Ravenswood complex, any project alternative selected cannot threaten the structural integrity of existing and/or future structures (i.e., Pipeline Project).

Excavated Materials as a Potential Source of Fill

As discussed in the Construction and Operations and Maintenance section of Volume 1 (p. 2-79), excavated material from the SFPUC's proposed tunnel is a potential source of fill for required SBSP Restoration Project construction activities. SFPUC staff has been meeting with Executive Project Manager Steve Ritchie on this issue and it is our hope that both the timing of SBSP and SFPUC projects and the quality of excavated material will allow for a mutually beneficial situation.

Security Concerns about Public Access

The SBSP Restoration Project's Phase 1 Recreation Actions propose a yearround trail in and/or near Pond SF2 that would connect the Bay Trail spine along California State Highway 84 with a proposed north-south segment of the Bay Trail spine. We support the concept of creating additional public access trails, but any selected alternative must allow us to continue to manage a secure corridor for reliable water transmission by the SFPUC.

We appreciate the time agency staff has taken in the effort to restore the South Bay Salt Ponds and inform us about potential environmental effects of the SBSP Restoration Project. The above comments are a brief overview of SFPUC's issues and we look forward to continuing to work with project proponents in the Stakeholder Forum to implement this exciting restoration project while simultaneously protecting the water supply for our customers. If you have any questions please contact Jane Lavelle at 415-934-5708.

Sincerely,

Michael P. Carlin Assistant General Manager – Water Enterprise

cc: Diana Sokolove, San Francisco Planning Department

SFPUC-1 continued

SFPUC-2

SFPUC-3

Response to San Francisco Public Utilities Commission

- SFPUC-1: Comment acknowledged. The SBSP Restoration Project is aware of the Hetch Hetchy Aqueduct adjacent to Pond SF2 and the Ravenswood pond complex, as well as the planned upgrades which include construction of a fifth pipeline along the existing San Francisco Public Utilities Commission (SFPUC) right-of-way south of Pond SF2. The restoration action at Pond SF2 would be designed, constructed and coordinated so that the structural integrity of the Aqueduct and the proposed pipeline are not threatened.
- SFPUC-2: Comment acknowledged.
- SFPUC-3: The location of proposed trail facilities (including interpretive stations and viewing platforms) within Pond SF2 under the Phase 1 actions is shown in Figure 2-22 of the EIS/R. The proposed recreational facilities do not include any extension into the SFPUC property or the aqueducts. As such, the SBSP Restoration Project would not infringe upon SFPUC's management of its facilities.

SCVWD

May 3, 2007

Clyde Morris USFWS Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Avenue Newark, CA 94560

Subject: Comments on South Bay Salt Pond Restoration Project Draft Environmental Impact Statement/Report (March 2007)

Dear Mr. Morris:

The South Bay Salt Pond Restoration Project (Restoration Project) holds great promise for the future of the South San Francisco Bay. The unprecedented tidal habitat restoration, tidal flood protection and public access opportunities offer a promising future for our region. As a Responsible Agency under the California Environmental Quality Act (CEQA), the Santa Clara Valley Water District (District) is pleased to provide comments on this Environmental Impact Statement/Report (EIS/R).

Attachment 1 contains all District comments on this document, and I would like to highlight several of our substantive comments here:

 Scope of Coverage. It is not clear whether this EIS/R is intended to supersede and/or incorporate the Initial Stewardship Plan (ISP) that was finalized in 2004. That plan was designed to be effective while the long-term restoration plan (i.e., the Restoration Project) was completed. However, implementation of the Restoration Plan will take decades and impacts associated with ongoing management of not-yet-restored ponds should be covere by this EIS/R, if the Restoration Project is to supersede the ISP. 	SCVWD-1
• Pond A8 System and Flood Storage. The proposed No-Project conditions specified in Alternative A include raising the levee along the east side of Pond A8. The east side of Pond A8 borders Alviso Slough, and so it appears that the <i>west</i> levee is the intended subject of the work. Presumably, this west levee would be raised from its current height or about four feet (4') to the height of the slough levees (approximately 10 to 12 feet). This activity appears to constitute a new project, and resulting impacts should be analyzed in this EIS/R. In particular, Ponds A5, A6, A7 and A8 currently function as one system by providing flood storage for the District's Lower Guadalupe River Flood Control Project, and the EIS/R needs to address changes to flood risk to adjacent urban areas, such as the community of Alviso, that would result from Alternative A.	SCVVD-2
 Pond A8 Phase I Project – Two Matters of Interest. First, the implementation of this Phase I action must sustain existing levels of flood protection, as with all Phase I projects. The 	e SCVWD-3

Mr. Clyde Morris Page 2 May 3, 2007

EIS/R acknowledges that there is uncertainty associated with opening Pond A8, especially with regard to the effect of scour on the non-engineered levees on the east side of Alviso Slough that provide de facto flood protection to the community of Alviso. The document does not specify how this uncertainty will be eliminated or managed so as to maintain or improve the current level of flood protection, however. It appears that the design, construction and operation of the reversible notch will be the means of avoiding enhanced flood risk in this area and, insofar as it is possible to do so, these actions and the management approach should be detailed in this EIS/R. Second, because the high ground adjacent to Pond A8 is a former landfill, it may need protection from tidal influences. The EIS/R needs to analyze this situation.

- Approach to Flood Management. Because low-lying urban areas that abut the project area are up to eight feet (8') below sea level, flood protection is a critical component of project success. Indeed, implementing a long-term, engineered flood protection solution is pre-requisite to restoration of nearly all of the Alviso Pond Complex after Phase I projects are completed. For this reason, the District's interest is to have the project consider improving flood protection, and not only maintaining the current levels of protection. The Adaptive Management Plan seems to indicate that levees would be built incrementally higher as restoration proceeds up the staircase toward more and more tidal restoration. However, such an approach would be very disruptive to nearby ecosystems and communities, as well as being very expensive. The EIS/R should look at the comparative impacts of the two approaches to construction. In the face of likely sea level rise, the District agrees that the prudent course of action is to conduct the monitoring and analysis recommended by the EIS/R prior to future phases of restoration, even after tidal flood protection levees have been constructed.
- Imported Sediment. The EIS/R covers importing sediment only for construction activities after Phase I. Between the issuance of the Record of Decision for this document and subsequent phases of the Restoration Project, there is likely to be a need for maintenance activities that could use such sediment. In addition, filling borrow ditches in ponds that are not yet under construction may be beneficial whether they remain as managed ponds or are restored to tidal marsh. Such activities and resulting impacts, including traffic/haul routes, staging areas, and noise, should be addressed in this document. The traffic estimates that are given in the document appears to be insufficient to cover trips associated with construction and maintenance, based on District experience. In addition, mitigation measure 3.12-1, which restricts trips to non-commute hours, may severely impact the feasibility of projects that require a large amount of fill, since deliveries would only be allowed a few hours a day or on nights and/or weekends. It may be difficult to attract contractors to projects with these limitations and the limitation may not actually be feasible.
- *Groundwater.* Thank you for acknowledging that U.S. Fish and Wildlife Service (FWS) and the California Department of Fish and Game should consult with the District before conducting well identification and abandonment, groundwater monitoring, and communication and outreach regarding groundwater. Contrary to EIS/R statements, the District does not have a well abandonment program, nor is the District considering re-instituting such a program. Also, the proposed outreach regarding groundwater resources does not appear to actually mitigate any potential impacts and further, may not be feasible

SCVWD-3 continued

SCVWD-4

SCVWD-5

SCVWD-6

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> to implement because "groundwater users" may encompass everyone in Santa Clara County. Obtaining the type of information specified is not a matter of public record. Therefore, this outreach strategy should not be considered a mitigation measure.

- Advice Regarding Maintenance of Non-engineered Levees. In several places, the EIS/R states that FWS will consult with local flood control agencies regarding how to maintain their levees. The appropriate entity to provide this type of advice is the U.S. Army Corps of Engineers. The Corps' National Levee Inventory Program may be a resource for providing this type of guidance.
- Pond A4. Impacts to Pond A4 water levels from the Phase I action at Pond A8 should be addressed in this document. Also, Pond A4 is owned by the District, and no decision has been made regarding its future. This pond should be represented as "outside the project area," as is Pond A18, which is owned by the City of San Jose. If it is assumed that Pond A4 is to be mitigation or count toward the portion of managed ponds for the Restoration Project, then the assumption(s) need to be revised.
- Adaptive Management Plan (AMP). The Restoration Project has taken an innovative, thoughtful approach to recognizing that considerable uncertainties underlie such large restoration projects. However, avoidance of significant impacts appears to depend on the successful implementation of the AMP, and this may not always be possible, due to costs, mutually incompatible resolutions to "tripped triggers," and factors beyond the control of the project. Prioritization of monitoring is important, especially since the AMP has no identified funding source(s). Roles and responsibilities for implementation are still conceptual and decision-making processes need further definition.

Thank you again for the opportunity to comment on the Draft EIS/R. As a potential implementer of select Restoration Project actions, our Board of Directors may need to certify this document, and we look forward to favorable resolution of our comments. If you have any questions regarding this letter or District comments, please contact Beth Dyer at (408) 265-2607 x3125.

Sincerely,

Ann Draper Assistant Operating Officer Office of Watershed Planning

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cc: Yvonne LeTellier, U.S. Army Corps of Engineers John Krause, California Department of Fish and Game Steve Ritchie, South Bay Salt Pond Restoration Project Brenda Buxton, California Coastal Conservancy Mr. Clyde Morris Page 4 May 3, 2007

bcc:

R. Austin A. Baker K. Chan S. Choy M. Coleman M. DiMarco D. Drury B. Dyer J. Fiedler B. Ganjoo B. Goldie A. Gurevich S. Hosseini S. Katric M. Khan M. Klemencic D. Liu Y. Liu J.M. Lo U. Mandlekar M. Martin N. Nguyen K. Oven L. Porcella A. Rouhani B. Springer V. Stephens L. Xu

Page	Paragaph/	Commont		Agency Contact/ Contact
Number	Sentence	Comment ODD STORAGE	Additional Comment	Info
2-46 to 2-47	last on p. 2-	The proposed no-project (Alternative A) condition includes raising the levee along the east side of Pond A8 from its current height of about 4' to a similar height of the slough levees (approximately 10' to 12'). This activity appears to constitute a new project, and not simply maintenance. Impacts associated with this activity, as well as mitigation measures, should be included in this document. Raising this levee would eliminate existing flood storage capacity in Ponds A5, A6 and A7 and may negatively impact the capacity of the Lower Guadalupe River Project. SCVWD modeling shows that, in a 1 percent high flow event, water would currently spill into Ponds A5 and A7, then into Pond A6. Currently, these ponds function as one system and impacts analysis needs to consider how changes to this system would affect flood risk.	See also: - p. 2-110, last paragraph; - p. 3.3-43, last paragraph; - p. 3.5-25, Phase 1 No Action, 2nd paragraph, last two sentences	B. Dyer bdyer@valleywater.org
2-110	Pond A8. 2nd paragraph	How would this circumstance affect levees on the east side of Alviso Slough, where there is a flood risk if those levees are compromised?		B. Dyer SCVW bdyer@valleywater.org
2-123	last	"Restoration of muted tides in Ponds A8, A7 and A5 during the rainy season would also reduce the amount of flood storage provided by these ponds and possibly result adverse effects to existing flood harzards." Please provide technical analyses to support this. On Page 3.3-63, it clearly states that for Phase I actions, the water level in Alviso Slough will not increase, even the volume of fluvial flood storage lost in Ponds A5, A6 and A7. This latter statement is supported by technial analyses in Appendix G. Also, management of the Pond A8 structure will be important so as to minimize flood risk. This bullet should define as explicitly as possible how operations will be achieved so as to: 1) minimize the likelihood of increasing flood risk; and 2) learn where scour will occur.		B. Dyer bdyer@valleywater.org
3.3-26	last	"The reconfigured left bank diverts approximately 6,100 cfs" Based on the design condition, the overflow is 8,500 cfs, not 6,100 cfs.		B. Dyer SCVW bdyer@valleywater.org
PHASE I - P	OND A8		·	
2-122	Armored Notch	Discuss what becomes of the spoils excavated from the notch and pilot channel. Potential impacts associated with disposal, as well as mitigation, should be addressed in this document.		B. Dyer SCVW bdyer@valleywater.org
2-124	Restoration Monitoring	Continuous water elevation monitoring could be pretty costly and roles have not been defined. It may be beneficial to start soon as some background information may be useful. Also, would cross-sectional surveys be conducted each season? This seems to be very frequent, rather costly, and perhaps dangerous during the wet season		B. Dyer bdyer@valleywater.org
2-110	2nd, last sentence	This document needs to analyze the effects on flood storage in the Pond A8 pond system (Ponds A5, A6, A7 and A8), so that flood impacts can be identified and addressed.		B. Dyer SCVW bdyer@valleywater.org
2-110	last	This discussion should mention that, without a project at Pond A6, that pond would also serve as flood storage in the Pond A8 system.		SCVW
2-120	legend	The armored notch should not show as "closed" during summer operations.		B. Dyer SCVWI bdyer@valleywater.org
2-122	last paragraph and following	Impacts of upgrading the "donut" at Pond A4 should be included in this document.		B. Dyer SCVWI bdyer@valleywater.org
Chapter 3		There seems to be inconsistencies in the text and figures as to what will occur with the Pond A8 breach. Some of the figures only depict Pond A8, but some of them show changes to Ponds A5 and A7 as well. Double check all the figures and text for consistency.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.3-31		Identify whether the cut in the levee between Ponds A5 and A7 currently exists, or if it will be installed as part of this project. Also, SCVWD understands that the current practice is to add some water from Pond A7 to Pond A8, in order to better manage water levels for wildlife habitat. Since Pond A8 currently has no outlet, doing so will eventually make Pond A8 more and more saline, since the water will evaporate and leave the dissolved salts behind. At some point, it may become infeasible to restore Pond A8 as a result. Impacts and associated mitigations should be included in this document.		B. Dyer bdyer@valleywater.org
3.3-69	Pond A8, 2nd paragraph	It seems that the scour is not well understood, and may increase the flood risk by undermining non-engineered levee(s) that provide de facto flood protection to adjacent urban areas, especially the community of Alviso. The discussion of the Phase I Pond A8 action should include an overview of the ability to manage velocity and scour in the Slough, and the approximate timeframe for the expected results. Specific mitigation measures for scour- associated impact(s), should the risk occur before the more extensive flood control levees are built or if there is a decision to retain those ponds as managed (long term), should be addressed in this document.	See also: - p. 2-110, Pond A8, 2nd paragraph; - p. 2-123, last bullet	B. Dyer bdyer@valleywater.org
3-3.72	Pond A8	"Benefits to navigation would be further enhanced if the Phase 1 action at Pond A8 were coordinated with other planned activity, such as improvements to or relocation of the marina structures associated with vegetation removal along Alviso Slough." Please elaborate on the vegetation removal. If it is part of this project, then impacts should be discussed in this document.		B. Dyer bdyer@valleywater.org
3.12-15	last	If hazardous materials are present in the Pond A8 project area, the estimate of 30 one-way trips may be very low, as the material may require trucking to an appropriate disposal facility.	See also: - p. 3.12-20, Alviso section; - p. 3.13-32, Alviso section	B. Dyer bdyer@valleywater.org
		The analysis of the Phase I Pond A8 action should identify anticipated permit requirements for actions in Alviso Slough.		B. Dyer SCVWD-2 bdyer@valleywater.org
MISCELLA	AEOUS FLOOD	MANAGEMENT	·	
2-14	1, Flood Protection, 3rd column	The frequency of levee erosion monitoring should be dictated by rainfall and tidal events and may be needed more frequently than annually in some years. Potential impacts of less frequent monitoring in wet years and/or high intensity storm events should be examined in this document.	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-38	1st full sentence	In terms of cost effectiveness, it seems appropriate that the project would avoid wherever possible armoring levees that will be breached later.		B. Dyer SCVWD-2 bdyer@valleywater.org
2-46	3rd, 1st sentence	Flood management priorities are not specified in Section 1.4.4.		B. Dyer SCVWD-2 bdyer@valleywater.org
2-53	next-to-last paragraph	SCVWD would like this project to consider improving the existing level of tidal flood protection, and not only maintaining that level.		B. Dyer SCVWD-2 bdyer@valleywater.org
2-57	last, 1st sentence	Fluvial flood protection projects are in place along nearly all of the waterways that drain to the project area. It would be more appropriate to state that "Fluvial flood protection under Alternative B would be enhanced"		B. Dyer bdyer@valleywater.org
2-59	Alviso, 1st paragraph	The high ground of Shoreline Park is a former landfill, and may require protection from tidal action because of the potential for mobilizing contaminants from the former landfill areas. Impacts associated with introducing tidal action to Pond A2W need to be examined in this document. The same applies to the former landfill located to the south of Pond A8.	See also p. 3.3-58, 2nd paragraph, and standardize throughout the document.	B. Dyer bdyer@valleywater.org
2-59	last line	The City of San Jose is undertaking a master planning process for its water pollution control plant and plant lands, but it seems that the city is looking to collaborate with the Shoreline Study regarding the location of a perimeter levee, and not necessarily decide this in isolation.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
2-73	Flood Mgt., 2nd paragraph,	This section reads as if the levees would be built incrementally higher as the project advances up the staircase. This approach would be very disruptive, to both the adjacent ecosystem and communities, as well as being very expensive. Impacts of different approaches to levee construction should be analyzed. In the face of rising sea level, SCVWD agrees that the prudent course of action is to conduct the monitoring and analysis referenced in this section after levees are constructed to ensure that future restoration actions do not compromise the level of flood protection.		B. Dyer bdyer@valleywater.org
2-81	Restoration, 1st paragraph	There are references in earlier sections of the document stating that: 1) selection of subsequent phases of the project will use he same rationale as was applied to selecting Phase I projects; and 2) Phase I actions essentially address all sites within the project area that can be addressed without constructing flood protection. In light of this, it would seem appropriate to explicitly state that there is a high likelihood that flood protection measures are required as part of, or prior to, Phase II actions.	See also p. 2-153, 1st two paragraphs	B. Dyer bdyer@valleywater.org
3.3		By opening ponds in alternative B and C, the slough will become wider and deeper, as stated in Chapter 3.3. There is not enough analysis in the Appendix E showing the impact on invert stability of the creeks beyond these sloughs, particular on Alviso Slough, which may have negative impact on the levee stability along the creek, due to the slough deepening.		B. Dyer bdyer@valleywater.org
3.3		Increasing the tidal prism may cause slough levee failure during the interim phases, which is acknowledged in the Chapter 3.3. The proposed measure is to monitor these levees and make an adjustment of operation of slough opening if necessary. The approach is too general and does not map out specific locations where more rigorous monitoring may necessary, due to weakness of the existing levee or importance of some areas for Phase I action.		B. Dyer bdyer@valleywater.org
3.3-10	2nd	There is a numerical modeling study of tsunami effects in S.F. Bay published on June 8, 2006, entitled "Numerical Modeling of Tsunami Effects at Marine Oil Terminals in San Francisco Bay". Authored by Joss Borrero, Lori Dengler, Burak Uslu, and Costas Synolakis, this report was prepared for Marine Facilities Division of the California State Lands Commission and it contains valuable information that could be included in this paragraph.		B. Dyer bdyer@valleywater.org
3.3-23	2nd, last sentence	Please mention the flood protection projects that SCVWD has constructed to prevent future flooding events along Coyote Creek, the Guadalupe River, and the upper reaches of Alviso Slough.		B. Dyer SCVWD-3 bdyer@valleywater.org
3.3-27	2nd	"SCVWD, as part of the Calabazas Creek Flood Control Project, will increase the Calabazas Creek capacity to the 100-year event, reduce bank erosion, and provide for long-term riparian habitat improvement when complete." The statement is not complete. In fact, from Guadalupe Slough to Miller Avenue, the District completed a flood control project with flood wall, levee and channel enlargement, and Calabazas has 100-year capacity in this reach. The District currently has a project upstream of Miller Avenue to upgrade the channel to 100-year capacity. This project is in the planning stage.		B. Dyer bdyer@valleywater.org
3-3.44	Alt B and C	If early implementation of flood protection (i.e., levee construction) is considered part of the SBSP project, it should be specifically mentioned as a beneficial impact.		B. Dyer SCVWD-4 bdyer@valleywater.org
3.3-53	Alt. A, 1st sentence	The appropriate entity to provide levee maintenance advice to the landowners is the U.S. Army Corps of Engineers. The Corps' National Levee Inventory Program may be a resource for providing this type of guidance.	See also: - p. 3.5-18, Alt A, 1st sentence; p. 3.5-25, Phase 1 No Action, 2nd paragraph, 2nd sentence	B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.3-54	Alt B, last line	Once a flood protection levee is built, it is not likely that it will be set back. Such an action would be very disruptive to adjacent ecosystems and communities, as well as being very expensive.		B. Dyer SCVWD-42 bdyer@valleywater.org
3.13-19	Construction	How was the estimate of fill derived? How certain is this estimate?		B. Dyer SCVWD-4 bdyer@valleywater.org
3.14-22	3rd	Activities could also include construction or improvement of levees for flood protection; potential impacts associated with those activities should be included in this discussion.		B. Dyer SCVWD-44 bdyer@valleywater.org
3.16-5	Fig 3.16-2	Existing Flood Protection Levees are not correct; many of the levees shown are salt pond levees, not flood protection levees; See Fig 3.3-4 for correct designations.		B. Dyer SCVWD- bdyer@valleywater.org
3.16-21	Alts B and C	If the intent is not to select an alternative but instead bookend the possibilities, it would be best to accommodate the "worst case" scenario with the levee heights, and include the higher elevation in the discussion for both Alternatives B and C. It is not clear exactly when a levee higher than 16 feet would be required, but it is likely to be well before Alternative C is reached.		B. Dyer bdyer@valleywater.org
4-14	Flood Protection	This section should include recently completed projects, as well as those currently in planning, as the Wetland Restoration section does. Completed flood control projects should be addressed, as appropriate, in the impacts sections of this document, where the SBSP Restoration Project may impact those projects.	See also impacts sections	B. Dyer bdyer@valleywater.org
APPENDIX D, p. 72	Item 2, Flood Mgt., 3rd column	Revise to read: "No increase above current levels at any project phase."		B. Dyer SCVWD-48 bdyer@valleywater.org
App. E Page 14	Line 7 - 11	Tidal range of 2.83 m was based on the measured tidal data from 1974 to 1976. Tidal range of 2.06 m was based on three month measured data in 2004. One of the best ways of comparing these two sets of data is by comparing the result of the same three months for different years.		B. Dyer bdyer@valleywater.org
App. E, p. 20		Figure 5: The range of storm surge height at San Francisco is from 0 to 100 cm when compared with storm surge height at San Mateo Bridge-west. The range of storm surge height at San Francisco is from 0 to 30 cm when compared with storm surge height at Dumbarton Bridge. Why was the range in San Francisco not from 0 to 100 cm when compared to the storm surge height at Dumbarton Bridge? It would be better to use the same scale.		B. Dyer bdyer@valleywater.org
App. E, p. 26	Table 5	Please provide the units and datum for the listed water level information.		B. Dyer SCVWD-5 bdyer@valleywater.org
App. E, p. 30	Lines 1 to 4	Please provide the units for all the variables in the given equation.		B. Dyer SCVWD-5 bdyer@valleywater.org
App. J	General	The Delft3D numerical model was applied to produce numerical model simulation results for this report. Only 2D model simulation mode was applied for this study. The 2D simulation approach means there are two horizontal depth averaged velocity components (in general, u and v). However, all the figures that show the relations between water level and velocities in this report have plotted only one velocity component (such as Figs. 4-89, 5-79). Those plots do not present 2D tidal circulation numerical model simulation results that contains two velocity components (u and v).		B. Dyer bdyer@valleywater.org
АррЈ	Fig. 3.13	It shows there is less tidal prism under Alternative C condition (more area) in comparison with the existing condition (less area). This result is quite different with the traditional tidal prism formula. Please verify this.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
2-6 and ollowing		Imported sediment may be an important contribution to this project. Sources of clean sediment, such as SCVWD's Stream Maintenance Program, would could be well-suited to provide such sediment. In framing this option, attention must be paid to the logistics of importing the sediment by truck (e.g., large staging areas to facilitate the cost efficient flow of truck traffic and heavy equipment operations at the various sites), and any potential impacts that may result from such activities.	See also: - p. 3.13-26, SBSP Impact 3.13-3; - p. 3.13-32, Phase 1 No Action	B. Dyer bdyer@valleywater.org
2-9	Large Scale Sediment Import	If the project intends to import sediment to fill borrow ditches, which may assist with restoration of ponds (whether their ultimate fate is as tidal habitat or a reconfigured pond managed for bird use), the alternatives discussion should include this activity. Also, impacts associated with this activity should be evaluated in the document.	See also: - p. 3.13-25, SBSP Impact 3.13-2; - p. 3.13-32, Alviso	B. Dyer bdyer@valleywater.org
2-79	2nd, 4th sentence	There may be other appropriate sources of sediment (e.g., stilling basins for drinking water treatment plants).		B. Dyer SCVWD bdyer@valleywater.org
2-124	Restoration Plan and following	If clean fill might be imported to assist with restoring Pond A16, and/or other Phase I actions, that activity should be included in this discussion. The document should address any potential impacts that may result from this activity.	See also, p. 2-146, 3rd paragraph, 1st sentence	B. Dyer bdyer@valleywater.org
3.6-66 and following		Are there biological impacts associated with importing sediment? If so, they should be addressed here.		B. Dyer SCVWD bdyer@valleywater.org
3.12-9	Alt A	Importing sediment may be beneficial to maintenance activiites for various parts of the property in the interim period before long-term restoration is implement in those areas. If this document is to replace the ISP, then this activity should be included in the No Action Alternative, and any potential impacts resulting from this activity should be included in this EIS/R.	See also p. 3.12-20, Alviso section; and p. 4 92, 2nd paragraph	B. Dyer bdyer@valleywater.org
3.12-9	Alt B	Is it valid to assume that the trips will be spread out over the 50-year life of the project? 136 one-way trips seems to be too low.	See also: - p.3.13-19, last paragraph; - p. 3.13-22, last paragraph	B. Dyer bdyer@valleywater.org
3.12-10	MM 3.12-1	Restrictions from commute periods may severely impact the feasiblity of any project requiring large amounts of fill. Deliveries would only be allowed a few hours a day, or would need to occur on nights and/or weekends. In addition, contract truck drivers will expect to get a full day's compensation. Without that condition, attracting contractors to conduct this work will be very difficult.		SCVWD- B. Dyer bdyer@valleywater.org
3.12-14	SBSP MM 3.12-4	If the project is conducted in phases, traffic may be extended over a long period of time. If borrow ditches are filled, there could be traffic for a considerable amount of time before a construction "phase" begins. This section should address possible impacts associated with that circumstance.		B. Dyer bdyer@valleywater.org
3.13-23	SBSP Impact 3.13-1	Please include sediment importation via truck in this discussion.		B. Dyer SCVWD- bdyer@valleywater.org
4-92	2nd	O&M activities may generate traffic that is similar to construction-related traffic. This may also be the case if, for example, water control structures required replacement or repair.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.3-4	5th	 "very low elevations relative to the adjacent sea level" should be changed to "about 8 ft below the adjacent sea level." "Recent estimatesdue to groundwater extraction." This conclusion was based on conditions before 2003. It cannot be used to predict future land subsidence without considering site condition changes in the next 50 years. "Therefore, in this EIS/R over 50-year planning horizon.". This is only true with assumptions of no interruption in imported water supply, no groundwater overdraft, and favorable water supply outlook over the 50-year planning horizon. Sea level rise due to the global warming also has to be considered for future conditions within the 50-year planning horizon. 		B. Dyer bdyer@valleywater.org
3.4-30	2nd set of bullets	Sea level rise due to the global warming is not discussed here. Sea level rise in next 50 years may result in a larger tidally influenced area, then increased potential for seawater intrusion.		B. Dyer bdyer@valleywater.org
3.4-39	5th, 2nd sentence	Santa Clara Valley Water District has groundwater management ordinances, including two mentioned in this report, 89-1 and 90-1. These are mentioned on the next page; please correct this erroneous statement.		B. Dyer SCVWD-68 bdyer@valleywater.org
3.4-43	5th, last sentence	The SCVWD once had a well abandonment program, but no longer does and is not considering reinstating this program. The SBSP Restoration Project must conduct due diligence in finding and destroying abandoned wells in the project area, however, in order to avoid potentially significant impacts to the groundwater basin.	See also 3.4-89, 2nd paragraph & 1st bullet	B. Dyer bdyer@valleywater.org
3.4-82	4th	"The cause of this isrelated to the high selenium in groundwater found" Please use the primary source, and not a secondary source. Also, this claim is based on data from one well. The CA drinking water MCL for selenium is 50 μ g/L. The detection limit of groundwater quality monitoring for selenium is 5 μ g/L. Most selenium data collected near the Shoreline project area has a concentration < 5 μ g/L, which is considered the natural background concentration in groundwater. This concentration is not too high for other beneficial uses, but it is not considered as a high concentration for groundwater. Selenium concentrations from one well exceeded were still well below the drinking water MCL.		B. Dyer bdyer@valleywater.org
3.4-81 to 3.4-84		This discussion addresses potential impacts to surface water only. What are the potential project impacts to groundwater?		B. Dyer SCVWD-7 bdyer@valleywater.org
3.4-87		Groundwater contamination could occur via the transfer of water between the shallow aquifer and the deeper aquifer that is used for drinking water supply, even if overdraft conditions are avoided. For example, abandoned but improperly destroyed wells could act as a conduit between the two aquifers.		B. Dyer bdyer@valleywater.org
3.4-89	SBSP MM 3.4-6	Thank you for acknowledging the need for the Project Proponents to consult with the District before implementing this mitigation measure.		B. Dyer SCVWD-73 bdyer@valleywater.org
3.4-89	1st bullet	The <u>project</u> should be responsible for locating and abandoning wells in the Alviso complex prior to construction, as failure to do so may cause a potentially significant impact. The well identification and abandonment program should include areas along creeks in which salinity is expected to increase due to the project.	See comment regarding p. 3.4-43, above.	B. Dyer bdyer@valleywater.org
3.4-89	2nd bullet	The <u>project</u> should be responsible for monitoring groundwater to ensure that the project continues to fulfill Project Objective #4. What is the plan if the monitoring program detects seawater intrusion?		B. Dyer SCVWD-75 bdyer@valleywater.org
3.4-89	3rd bullet	This part of the mitigation mesaure does not appear to be practical to implement. "Groundwater users" would include everyone in Santa Clara, and possibly Alameda, Counties. The type of information described here is not a matter of public record and so obtaining and sharing it may be problematic.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
2-50	Pond A4	Pond A4 should be depicted on this map as it is on p. 2-42. Planning for the future of Pond A4 is currently underway as part of the Sunnyvale East and Sunnyvale West project, and no decisions have yet been made regarding the future of this pond. If an assumption has been made by the SBSP Restoration Project that Pond A4 will remain a managed pond and that, as such, it would comprise either mitigation or a particular percentage of the managed pond acreage, that assumption will need to be changed.	This comment also applies to the map on 2-70.	B. Dyer bdyer@valleywater.org
2-59	last paragraph	Linkage to all flood protection levees in Santa Clara County should be coordinated with the SCVWD, and not just those along the Guadalupe River.		B. Dyer SCVWD-78 bdyer@valleywater.org
3.3-1 and ollowing		This section should include discussion of possible impacts to Pond A4 water levels. Baseline for Pond A4 should be referenced as 2006 conditions. Also, impacts from construction and O&M should be included here as well.		B. Dyer bdyer@valleywater.org
3.3-41	1st full	Revise to read: "Under the Water Resources Protection Ordinance (Ordinance 06-1), SCVWD requires encroachment permits for modifications on District facilities and/or District easements. Activities requiring permits include: grading, removing, dredging, mining, or extraction of any materials; construction, reconstruction, demolition or alteration of the size of any structure, including any facility of any private, public or municipal utility; and the removal or installation of vegetation. Permits, if granted"	See also: - p. 3.6-46, last paragraph	B. Dyer bdyer@valleywater.org
3.3-66	Phase 1 Actions, 2nd paragraph	If the increase in tidal prism is to result in scour downstream of levee breaches, one could reasonably expect that there would be headcutting above the nick point (i.e., <i>upstream</i> of each breach) as the stream's longitudinal profile equilibrates. Please add discussion of that potential impact.		B. Dyer bdyer@valleywater.org
1-10 and ollowing	Table 4-5	The Island Ponds restoration should be included in this list as a completed project.		B. Dyer SCVWD- bdyer@valleywater.org
4-10	Table 4-5, 27th row, last column	The Coyote Creek Flood Control Project's mitigation sites have been completed.		B. Dyer SCVWD-8 bdyer@valleywater.org
4-14	Table 4-6, 5th row, last column	The Permanente Creek project is scheduled for completion in 2008. This is consistent with the last sentence of Paragraph 5 on page 3.3-27.		B. Dyer SCVWD-8 bdyer@valleywater.org
4-17 and ollowing		The Alviso Slough Restoration Project is a "reasonably foreseeable future action" under CEQA/NEPA. However, action on this project cannot proceed until CEQA/NEPA compliance is completed, and the District Board chooses to move forward on one of the project alternatives and approves the same at the public Board meeting in the future.	See also p. 4-30, Alviso section	B. Dyer bdyer@valleywater.org
4-30	Alviso	The linkage between the Alviso Slough Restoration Project and seasonal impacts to DO are not clear. Also, dredging is one option for the Alviso Slough project that may occur; that has not yet been decided.		B. Dyer bdyer@valleywater.org
l-37	Alt A, 3rd sentence	The amount of impact on tidal prism that the Alviso Slough Restoration Project could effect would be relatively small compared to that of the Pond A8 Phase I project and, in any case, is expected to be far less than historical levels. It is therefore unclear whether the Alviso Slough Project could have any impact on seawater intrusion.		B. Dyer bdyer@valleywater.org
ADAPTIVE		NT PLAN		
		Under the Adaptive Management Plan (AMP), it is possible that multiple "tripped triggers" may require incompatible resolutions. The document should address potential impacts that may result from such situations.		B. Dyer bdyer@valleywater.org

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bdyer@valleywater.org	

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
		The Adaptive Management Plan for the Phase I actions should identify specific impacts thresholds, signaling when and how the project action will be adjusted in order to avoid significant impacts.		B. Dyer SCVWD-89 bdyer@valleywater.org
2-9 and following		The Adaptive Management Plan should also identify triggers that demonstrate <u>success</u> so that monitoring can be reduced, eliminated or redirected to other parts of the project.	See also Table 2-3	B. Dyer SCVWD-9 bdyer@valleywater.org
2-13	Table 2.3	The restoration targets should be peer reviewed with regard to feasibility. For example, the project proposes to meet the number of clapper rails and salt marsh harvest mice called out in the 1984 Draft recovery plan. The project objectives are to "promote restoration" and to "increase abundance" but they don't necessarily call out that the project must meet the specific recovery plan numbers. The level of effort necessary to determine whether the 1984 recovery plan numbers may cause impact that should be addressed by this document.	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-13 and following		All adaptive management tasks and restoration monitoring tasks pertinent to Phase 1 should be clearly prioritized within Table 2.3 with an anticipated start date.	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-13	1, 2nd Sediment Dynamics row, 3rd column	Will annual transects or SET cover breached ponds only, or the entire project area?	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-14	1, Sediment Dynamics row, 3rd column	Is the bathymetry and LiDAR data here the same as that conducted for the first Sediment Dynamics category, described on p. 2-13?	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-17	Clapper Rails, 2nd & 6th columns	Please specify what type of acreage is to be monitored. Is it acreage of pickleweed marsh, for example?	See also Appendix D, pp. 129-145	B. Dyer SCVWD-95 bdyer@valleywater.org
2-22	Table 2.3	Given there are no strong baseline numbers of migrating steelhead or estuarine fishes in South Bay streams, how will the project know when the management trigger has been tripped? Similarly, how will the project know if fish numbers are enhanced post-project?	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
Chapter 3		Avoiding significant impacts appears to depend on the successful implementation of the AMP. It may be hard to guarantee that all significant impacts will be avoided by the AMP. Adaptive management may not be able to avoid a significant impact. In addition, it is not clear how all of these monitoring activities will be funded. Given that the AMP is not funded yet, how effective is the AMP going to be at minimizing significant impacts before they occur? In addition, shouldn't these studies be prioritized so that the most important ones will get funded first prior to Phase I actions? This document should address potential impacts that may result from inadequate funding and/or partial implementation of the Adaptive Management Plan.	Especially: - p. 3.1-6, 1st sentence; - Impact 3.4-1; - Impact 3.4-2; - Impact 3.4-2; - Impact 3.4-3; - Impact 3.6-17; - Impact 4-6; - APP. D, p. 3, 2nd paragraph, last sentence; and many others	B. Dyer bdyer@valleywater.org
3.4-60 and following		In Chapter 3.4, a lot of past investigation data was reviewed and summarized but in the evaluation of impacts most discussion is about phytoplankton and DO impacts. Corrective actions/mitigation actions will depend on how quickly impacts are visibly evident, so that the Adaptive Management Process is effective. The discussion needs to emphasize how impacts will be known to have occurred, visual observation, field portable-instrument based data collection, sampling and testing using a laboratory.		B. Dyer bdyer@valleywater.org
3.4-63 & 3.4-68		Why are the adaptive management triggers listed on these pages not included in Table 2.3? (e.g., phytoplankton abundance)		B. Dyer SCVWD-99 bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.6-103	After "Determina- tion of Threshold"	There are several identified impacts for which there is no reference to the Adaptive Management Plan, although it would seem appropriate that measures may be taken to modify the project and improve results. For example, the measure that addresses reduced foraging habitat for ruddy ducks (SBSP Impact 3.6-7).	See also: - p. 3.6-115; - p. 3.6-117; - p. 3.6-119; - p. 3.6-121; - p. 3.6-125; - p. 3.6-140; - p. 3.6-142 All are after the "Determination" discussion in each respective section	SCVWD-10 B. Dyer bdyer@valleywater.org
3.6-137	Adaptive Mgt	Herbicides and ongoing vegetation management will be required, and should be included in impacts discussions.		B. Dyer SCVWD-10 bdyer@valleywater.org
3.6-134 and 3.6-137	Baseline	For <i>Lepidium</i> , species composition monitoring would begin with 40% vegetation cover; for <i>Spartina</i> it was listed as 30%. Does species compostion monitoring begin at 30% or 40% vegetative cover?		B. Dyer bdyer@valleywater.org
APP. D, p. 17	3rd from last row	How will this modeling effort relate to the Corps Bay model, the DELFT3D modeling already conducted for the SBSP Restoration Project, Shoreline Study modeling and other modeling efforts?		B. Dyer bdyer@valleywater.org
APP. D, p. 23	2nd	What are the consequences of inadequate funding for research? What if construction funding can be found, but not research funding?		B. Dyer SCVWD-1 bdyer@valleywater.org
APP. D, p. 27	3rd, last two sentences	What is the expected timeframe for the updated Tidal Marsh Species Recovery Plan, and how will it relate to the South Bay Salt Pond Restoration Project?		B. Dyer bdyer@valleywater.org
APP. D, p. 29		The text states "Adaptive Management Summary table lays out the monitoring that will be required for the Project, beginning in Phase 1. " Is it possible, given that funding is still undetermined, that all of these monitoring activities will start prior to the Phase I actions in 2008? Also, it states that "before Phase I implementation the PMT will develop monitoring plans for the parameters listed." These monitoring plans should undergo peer review prior to their implementation.		SCVWD-10 B. Dyer bdyer@valleywater.org
APP. D, p. 31	Modeling, 2nd	What is the relationship between this modeling and the Corps modeling effort?		B. Dyer SCVWD-1 bdyer@valleywater.org
APP. D, p. 80	Applied Study Concepts, 2nd paragraph	What is the linkage envisioned to the Corps work?		B. Dyer bdyer@valleywater.org
APP. D, p. 147		How will the proposal solicitation be funded?		B. Dyer SCVWD-10 bdyer@valleywater.org
APP. D		How does Table 3 relate to APPX 3?		B. Dyer SCVWD-11 bdyer@valleywater.org
		Who will be responsible for the monitoring and maintenance activities? Who will have the responsibility, authority, resources and expertise to respond to adaptive management measures necessitated by monitoring results?		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
2-124 and ollowing		How has the construction of flood protection levees in the project design been considered in the design of Pond A16, especially in the southern end and the viewing platform? Since the potential alignment of a flood protection levee is at the southern edge of the pond, it may be appropriate to consider how the design of Pond A16 could accommodate the footprint of the levee.		B. Dyer bdyer@valleywater.org
2-124	Restoration Plan	Given the problems with dissolved oxygen in existing ponds, how will water quality targets be met?	See also section 3.6.	B. Dyer SCVWD-1 ⁻ bdyer@valleywater.org
MERCURY			·	
2-123	1st bullet, 3rd sentence from the end	It is not yet known whether the there will be increases in mercury in the food web when ponds are opened to tidal action. Part of the outcome of the applied study will be to learn <i>whether</i> there will be such an increase.		B. Dyer SCVWD-114 bdyer@valleywater.org
3.4		This section does an excellent job of describing the Hg issues as well as the significant uncertainties involved in trying to determine what will happen with MeHg production and it's relationship to sulfides, dissolved oxygen, vegetation types, sunlight, eutrophication, and related matters, and the challenges in identifying how various MeHg concentrations affects various fish and birds. There is also the limited potential that a pathogen TMDL could be developed on the same creeks, due to the significant sources of untreated animal and human waste associated with trail access, homelessness and the significant resident waterfowl population that exists in the South Bay.		SCVWD-115 B. Dyer bdyer@valleywater.org
3.4-5	4th	There is another potential source of mercury in the estuary that may exceed that provided by the Guadalupe River watershed, per the Contra Costa Times (4/11/07). This article states that refineries may be contributing much more mercury to the estuary than all other sources combined, as the 3,700 lbs of mercury that enter refineries each year is unaccounted for, per the Regional Water Quality Control Board. According to the article, all other sources of mercury combined contribute approximately 2.698 lbs per year to the bay.	See also p. 4-31, last sentence	B. Dyer bdyer@valleywater.org
3.4-58	Mobilization and Transport, and following	Discuss the linkage to dissolved oxygen early in this section.		B. Dyer bdyer@valleywater.org
3.4-58	next-to-last	If total mercury is not bioavailable, then will an increase in total mercury concentrations alone be enough to stop the project from proceeding up the staircase? Or would an increase in the concentrations found in aquatic life and/or methylmercury also be necessary for this to occur?		B. Dyer bdyer@valleywater.org
3.4-70	last	Currently, Pond A7's gate is functioning as both an inflow and outflow structure. This means that the Guadalupe River sediment and water can enter the pond now, and therefore this should be part of the no-project condition. This operation is a new development, and data from 2003 (pp. 3.4-21 to 3.4-24) would therefore not represent an accurate baseline condition.		SCVWD-119 B. Dyer bdyer@valleywater.org
3.6-172	Net Phase 1 Effects	Add mercury / water quality monitoring in and around Pond A8		B. Dyer SCVWD-120 bdyer@valleywater.org
APP. D, p. 6	3rd paragraph	There are other potential mercury sources that should be mentioned, including atmospheric deposition, Central Valley legacy mining remains, and, potentially, refineries (per Contra Costa Times, 4/11/07).		B. Dyer bdyer@valleywater.org
SEA LEVEI				
3.3-4	2nd and 3rd	The approach to global climate change and sea level rise sounds reasonable. SCVWD suggests closely coordinating with the Corps regarding application of new data relevant to these topics over the course of the Shoreline Study.		SCVWD-122 B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Info	
3.3-46 to 3.3-47	Changes in bathymetry	It sounds as if the predicted changes to bathymetry are equally caused by ocean rising.		B. Dyer bdyer@valleywa	SCVWD ter.org
3.3-49	2nd and 3rd	How does this projection compare with the recently released DWR report on climate change and global warming?		B. Dyer bdyer@valleywa	SCVWD ter.org
3.4-72	1st full	Wet-dry cycles may potentially produce methylmercury, so this section should be qualified accordingly.		B. Dyer bdyer@valleywa	SCVWD ter.org
HABITAT			·		
3.6		The assessment of wetland impacts is not fully quantified. However, it would only take 1 or 2 sentences to address this matter. Total impacts to existing wetlands should be quantified (acres) and reported. The DEIR has impacts to specific wetland and aquatic habitat types that are related to special status species; mudflats, pickleweed marsh, and special-status marsh associated wildlife. There are less than significant and even beneficial impacts to these wetland types from the Phase 1 actions. The DEIR could simply quantify and report the total impact to existing wetlands, then report impacts as less than significant / beneficial since the project goal is to restore 7,500 – 13,400 acres of tidal habitat (most of which will be wetland). The wetland habitat restored by the project will be thousands of times larger than the impacts to existing wetlands.		B. Dyer bdyer@valleywa	SCVWD- ter.org
3.6		Numerous sections regarding construction impacts to birds and protected species state that the primary avoidance measure is to work outside nesting season - however this would require all construction between September and January (the rainy season). This measure may not be feasible.		B. Dyer bdyer@valleywa	SCVWD-
3.6-36	Table 3.6-3, last row	Does habitat for Delta woolly-marbles exist in the Shoreline project area?		B. Dyer bdyer@valleywa	SCVWD- ter.org
3.6-38	Table 3.6-4, Peregrine Falcon, last column	The text earlier states that a pair nested in Alviso Pond complex		B. Dyer bdyer@valleywa	SCVWD-
3.6-54	2 nd	The District is continuing to develop salt marsh harvest mouse (SMHM) habitat as a mitigation requirement in Lower Coyote, and this population should not be isolated. This and other populations of SMHM should be protected during the years of transition before new habitat is created. Impacts to this and/or other populations of SMHM should be discussed in this document, along with appropriate mitigation measures.		B. Dyer bdyer@valleywa	SCVWD-
3.6-55	3rd	Monitoring of steelhead is problematic in the project area for a variety of reasons. How will baseline population numbers be established, given the low water clarity and the fact that electroshocking is not particularly effective in a saline environment? How will future monitoring occur?		B. Dyer bdyer@valleywa	SCVWD- ter.org
3.3-112 and following	1	Impacts to wildlife and fish associated with on-site intervention necessary to operate and maintain all the water management structures should be discussed here.		B. Dyer	SCVWD- ter.org
3.6-128	3rd	10% cover is very low cover relative to <i>Lepidium</i> . It may serve as a trigger but should not be used as a control threshold. Eradication or management under 10% may not be feasible.		B. Dyer bdyer@valleywa	SCVWD ter.org
3.6-181	1st	The increased water depth at Ponds A5, A7 and A8 may be only seasonal.		B. Dyer bdyer@valleywa	SCVWD ter.org
4-73	Alts A, B and C	This seems to be a rather ambitious assumption that the Invasive Spartina Program will eradicate all Invasive <i>Spartina</i> prior to Phase I actions and therefore there will be no impacts associated with this invasive species.		B. Dyer bdyer@valleywa	SCVWD- ter.org

Page	Paragaph/	Comment		Agency Contact/ Contact
Number 4-28	Sentence Alviso	Comment The Lower Guadalupe River Flood Control Project does not contribute to algal abundance.	Additional Comment	B. Dyer SCVWD- bdyer@valleywater.org
INSTITUTIC	DNAL			
APP. D, p. 47	2nd	How will decisionmaking work at the Executive Leadership Group level?		B. Dyer SCVWD-1 bdyer@valleywater.org
APP. D, p. 48	1st	Will the MOU be a new one, or an amendment to the existing five-agency agreement regarding cooperation for the SBSP Restoration Project?		B. Dyer SCVWD-1 bdyer@valleywater.org
APP. D, p. 63	1st five bullet points	Please describe the decisionmaking process, who is involved and how it will be accomplished.		B. Dyer SCVWD-1: bdyer@valleywater.org
APP. D, p. 63	4th bullet point	How will the Corps be involved with restoration-related decisionmaking, especially with regard to breach locations?		B. Dyer SCVWD-1/ bdyer@valleywater.org
		ION		
2-13	1, 1st Sediment Dynamics row, 7th column	How will the development of a 2- and 3-D South Bay tidal habitats model be coordinated with other efforts (<i>e.g.</i> , the Shoreline Study) that are currently underway? How will development of other models (e.g., hydrodynamic) be coordinated with other efforts?	See also Appendix D, pp. 125 and 129-145	SCVWD-1 B. Dyer bdyer@valleywater.org
MISCELLA	NEOUS			
		It would be most helpful to the District support of the SBSPR and other projects if the EIS/R clarify the process by which CDFG, as the CEQA lead agency, plans to develop, review and adopt its findings (who has been identified as the decision-making body for this project).		B. Dyer bdyer@valleywater.org
		The process should develop draft findings that can be reviewed by partner agencies as part of CEQA review process.		B. Dyer SCVWD-1 bdyer@valleywater.org
		Is the term "subsidence" used interchangeably with "settlement" in this document? Typically, the former is used to to signify lowering of the ground surface of a large, regional area of substrate, due to groundwater lowering, earthquake or other natural phenomena. In case of levee, the lowering of the the ground surface would be caused by the load of levee fill, and would be localized under the levee foot print. In such instances, "settlement" would be more appropriate.	See also: - p. 2-80, sentence before Section 2.5; - p. 3.5-17, SBSP Impact 3.5-1; - p. 3.5-19, Alt C, 4th sentence; Please standardize usage throughout the document.	B. Dyer bdyer@valleywater.org
2-30	Veg. Mgt.	This document will need to consider the effects of vegetation management on the species that the project is seeking to help.		B. Dyer SCVWD-14 bdyer@valleywater.org
2-31	Predator Control	This document will need to consider the effects of predator control on the species that the project is seeking to help.		B. Dyer SCVWD-14 bdyer@valleywater.org
2-109 to 2- 110		Do the Pond A6 levees provide escape refugia for Salt Marsh Harvest Mouse currently during high flow events? If so, it seems that shaving down the levees may remove this refugia, and there may be project impacts associated with that action that would need to be addressed.	Section 3.6 should contain impacts and necessary mitigation measures.	B. Dyer bdyer@valleywater.org
2-146	3rd, last sentence	Planned staging areas should be identified in this document, including specifics such as location, size, newly constructed or existing. Impacts associated with constructing new, and modifying existing, staging areas should be included in this document.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.3	Sentence	"Calculation of Effective Suspended Solids Concentration in Alviso Slough", June, 1998, by Ray B. Krone & Associates, Davis, California, calculated effective suspended solids concentration in Alviso Slough and predicted future marsh soil surface elevations. Four cores of the marsh plain along the lower 6.6 km of the Guadalupe River were analyzed to determine moisture contents, bulk densities, and organic matter contents. Dominant vegetation is as follows: pickleweed, 2 km inland from the mouth; bullrush, at 6.6 km inland; and mixed vegetation in the middle sections. The calculated suspended sediment concentration (SSC) was about 240 mg/l. However, during the field trip, the observed SSC under the Gold Street Bridge exceeded 1000 mg/l with incoming tides. The projected rise (from the 1998 datum) of marsh surface elevation is about 0.25 m in year 2025 and 0.4 m in year 2050 after adjusting for subsidence and historic sea rise over the last half century, not accounting for climate change/global warming effects. These findings may be helpful in establishing baselilne marsh development ra		B. Dyer bdyer@valleywater.org
3.3-1 and following		This document should use one standard datum, preferably NAVD88.		B. Dyer SCVWD-150 bdyer@valleywater.org
3.3-1 and following		The extent of tidal influence should be identified for the creeks in the project area.		B. Dyer SCVWD-151 bdyer@valleywater.org
3.3-11	legend	For this map, references to levees should read "salt pond levees."		B. Dyer SCVWD-152 bdyer@valleywater.org
3.3-23	3rd	Include the winter discharge rate for the Sunnyvale WPCP into Sunnyvale West Channel, and both winter and summer discharge rates for the Palo Alto Wasterwater Treatment Plant discharge rate into Mayfield Slough.		B. Dyer SCVWD-153 bdyer@valleywater.org
3.4-51	1st	Are the LTMS Guidelines the latest SFRWQCB Guidelines? Why were the RWQCB's Environmental Screening Levels (ESLs) in "July 2003 Update to ESLs Technical Document" not used in this discussion?		B. Dyer bdyer@valleywater.org
3.4-60	last	Monitoring (regarding algal abundance and composition) should be part of the Adaptive Management Plan, in support of Project Objective #4.		B. Dyer SCVWD-155 bdyer@valleywater.org
3.4-86	MM 3.4-5c	The only requirement here is to install trash racks at gate structures. Some of the "could"s in the first paragraph should be"shall"s		B. Dyer SCVWD-156 bdyer@valleywater.org
3.4-87	Alt C	Include a statement that MM 3.4-5(a through f) would apply to Alternative C.		B. Dyer SCVWD-157 bdyer@valleywater.org
3.5-18 to 3.5-19	Alts. B and C	If long-term settlement rates of four inches per foot of fill is expected, then the impacts section of this document needs to include the impacts of creating habitat berms and islands, as well as flood protection levees, under Alternatives B and C.		B. Dyer bdyer@valleywater.org
3.6-114	1st and 2nd	"Maintenance" activities should be defined in as much detail as possible, and should include those related to maintaining habitat, flood protection and recreational facilities (e.g., rodent control for levee protection using approved rodenticides). The document should cover potential impacts that may result from these activities.	See also all other parts of the document where O&M is mentioned (e.g., p. 3.8-55, Phase 1, No Action section; and 3.8-59, Phase 1 No Action section).	B. Dyer bdyer@valleywater.org
3.7-1 and following		There does not seem to be mention of the proposed Alviso Slough Bridge (for recreational access) from UPRR (west of Gold Street) to Legacy property. The bridge is a City of San Jose project.	See also section 4.	B. Dye bdyer@valleywater.org
3.8		There is a great deal of interesting background discussion about cultural resources, but it generally does not advance an understanding of the potential impacts from the project.		B. Dyer bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Contact Info
3.8-54	SBSP MM 3.8-2	The documentation / outreach / signage proposed as a mitigation measure may not reduce the potential impact to less than significant if the ponds are determined to be a historical / cultural landscape. CEQA case law has generally found that the destruction of a historical resource cannot be fully mitigated and a finding of significance is necessary.		B. Dyer bdyer@valleywater.org
3.17	Visual Impacts	Impact of taller power lines is not discussed, although taller utility lines was discussed as a likely result of the project in the Utility section.		B. Dyer SCVWD-163 bdyer@valleywater.org
APPENDIX D, p. v	3rd, last sentence	Is the referenced model computer-based?		B. Dye <mark>r</mark> SCVWD-164 bdyer@valleywater.org
APP. D, p. 18	C., bullet #3	These data need to be shared with Brown and Caldwell. The water quality section of the EIS/R does not seem to take into account all of this data.		B. Dyer SCVWD-165 bdyer@valleywater.org
EDITORIAL	ORGANIZAT	IONAL	·	
	Figs ES- 2a,b,c	In the legends of b and c, both managed and seasonal are labelled most likely to be maintained; in the legend of a, seasonal is labelled least likely to be maintained. Please verify that this is correct.		B. Dyer SCVWD-16 bdyer@valleywater.org
1-26	22	Suggest adding public libraries located adjacent to project area and the Refuge as sites where the document may be publicly inspected.		B. Dyer SCVWD-167 bdyer@valleywater.org
1-10	1st	Add bullet: long-term tidal flood protection.		B. Dyer SCVWD-168 bdyer@valleywater.org
1-21	last, next-to- last sentence	Not all of the Alameda County ponds are included in the first interim feasibility study. Revise statement accordingly.		B. Dyer SCVWD-169 bdyer@valleywater.org
2-13	1, 1st Sediment Dynamics row, 1st column	"Preserve existing estuarine habitat areas" is more of a constraint than an objective.	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-13 to 2-23		Suggest including the objectives in this table to clarify linkages. It is unclear how the verbiage in column is linked to the designated project objective. Alternatively, another table that includes a brief rationale for the linkage between the two would be helpful.	See also Appendix D, pp. 129-145	B. Dyer bdyer@valleywater.org
2-111	Fig 2-14	This figure, "Eden Landing-Archimedes Screw Loop Trail," should be located in the Eden Landing section and not in the Alviso section.		B. Dyer SCVWD-17 bdyer@valleywater.org
3.3-6 to 3.3- 7		The second paragraph of "Salinity" reports oceanic salinity at 33ppm. The first paragraph of page 3.3-7 reports less than 20.		B. Dyer SCVWD-17 bdyer@valleywater.org
3.3-15	Fig. 3.3-4	The high ground noted is not located at the back edge of the pond, as the map indicates, for Ponds A1 and A2W. The high ground is a considerable distance from the pond's edge.		B. Dyer bdyer@valleywater.org
3.3-22	last	For the Alviso pond complex, Alviso Slough is missing from the list of tributaries.		B. Dye <mark>r SCVWD-175</mark> bdyer@valleywater.org
3.3-13		The location of "Whisman Slough" is not included in Fig. 3.3-3.	See also p. 3.3-23, 3rd paragraph, 4th sentence	B. Dye SCVWD-176 bdyer@valleywater.org
3.3-31	last, last 2 lines	Revise to read: "SCVWD operates a pump in cooperation with FWS that conveys water"		B. Dyer SCVWD-17 bdyer@valleywater.org
3.3-37	Flood Mgt., 3rd, 2nd sentence	There was no WRDA in 2005.		B. Dyer SCVWD-178 bdyer@valleywater.org

Page Number	Paragaph/ Sentence	Comment	Additional Comment	Agency Contact/ Cont Info	act
3.3-42	2nd bullet	What constitutes substantial vs insubstantial injury, death? Should this be worded: "Increase the risk of flooding that could cause injury, death, or substantial property loss?"		B. Dyer SCV bdyer@valleywater.org	WD-179
Section 3.4		Eden Landing pond complex is discussed in text with the letter B for the pond names, the figures however use the letter E instead.		B. Dyer SCV bdyer@valleywater.org	WD-180
3.4-53	1st under "Emerging Programs…"	Revise to read: "There are five emerging programs"		B. Dyer bdyer@valleywater.org	VWD-181
3-4.78	3rd Paragraph	Please include the source.		B. Dyer SC bdyer@valleywater.org	/WD-182
3.6-2	Figure 3.6-1	Label San Mateo Bridge (at least on the first figure) as this is being used as the northern boundary for "South Bay".		B. Dyer SC bdyer@valleywater.org	/WD-183
3.6-118	1st	The first sentence should say "Alternative C" (not Alternative B) ; and the end of paragraph should say "Alternates A and B" (not Alternatives A and C).		B. Dyer SC\ bdyer@valleywater.org	/WD-184
3.7-3	Last line	Bay Trail Reach 7A (County Marina to UPRR) should be included under "additional trails."		B. Dyer SCV bdyer@valleywater.org	WD-185
3.16-16	Alt B, 2nd paragraph, 3rd line	Revise to read: " poor drainage through"		B. Dyer bdyer@valleywater.org	/D-186
APPENDIX D: AMP		Suggest moving figures and tables to follow the first reference of each as closely as possible. This helps the reader follow the discussion without the distraction of searching for the referenced item.		B. Dyer bdyer@valleywater.org	
APPENDIX D, p. iv	3rd	A bulleted list of all eight key uncertainties would be helpful following this paragraph.		B. Dyer SCVV bdyer@valleywater.org	
App. E p. 28	Last, line 5	Revise to read: "Only one"		B. Dye SCVW bdyer@valleywater.org	D-189

CONTRIBUTORS:

Don Arnold; Mike Coleman; Beth Dyer; Al Gurevich; Mohammad Khan; David Liu; Yaping Liu; Jen Men Lo; Uday Mandlekar; Michael Martin; Melissa Moore; Brian Mendenhall; Bill Springer; Doug Titus; Jim Wang; Liang Xu

Response to Santa Clara Valley Water District

SCVWD-1: As discussed in Section 1.4.4 of the EIS/R, the ISP is an interim plan to maintain and enhance the biological and physical conditions within the SBSP Restoration Project Area during the interim period between the cessation of salt production and implementation of the long-term restoration plan – the SBSP Restoration Project. It is anticipated that each pond would be managed in a manner similar to the ISP until its implementation phase. Because the SBSP Restoration Project would be implemented in phases over time, some ponds may be managed under the ISP for many years. Ongoing management of the notyet-restored ponds will be consistent with current O&M activities. As noted below in the response to Comment SCVWD-5, ongoing O&M activities are covered under existing permits issued by the Corps.

If the SBSP Restoration Project were not implemented, ongoing management of the ponds would be similar to the ISP, but O&M activities would be scaled back to match available funding and habitat conservation and flood management priorities. Section 2.4.2 of the EIS/R describes the scenarios at each pond complex under Alternative A, the No Action Alternative.

SCVWD-2: The commenter identifies a typographical error in the reference to the Pond A8 levee. The text in Sections 2.4.2 in Chapter 2 of the EIS/R under the heading Alviso has been revised as follows:

The levee along the <u>west east</u> side of Pond A8 would be raised to prevent frequent tidal overtopping into Ponds A8 and A8S.

Text in Section 2.5.3 under the heading Pond A8 has been similarly revised, as follows:

The levees surrounding Ponds A8 and A8S would be maintained in order to provide a portion of the existing flood storage capacity, and the levee along the <u>west east</u> side of Pond A8 would be raised to prevent frequent tidal overtopping into Ponds A8 and 8S.

The environmental impacts of Alternative A, including assumed levee improvements to the Pond A8 west levee, are addressed by subject area in Sections 3.3 through 3.17, with flood impacts addressed in Section 3.3. With respect to raising the Pond A8 west levee, this type of activity is consistent with the definition and intent of the No Action alternative.

The Project proponents acknowledge that there would be undesirable, potentially significant flood impacts under Alternative A. The EIS/R (Section 2.4.2) acknowledges that there are various ways that Alternative A could play out. Alternative A as evaluated in the EIS/R reflects levee maintenance priorities for minimizing the risk of inundating adjacent, low-lying developed areas. One possible (though not considered most likely) outcome of the No Action alternative would be that flood storage for the District's Lower

Guadalupe River Flood Control Project at the Pond A8 system is maintained. Text has been added to Section 2.4.2 under the heading Alviso to elaborate on the range of possible Alternative A outcomes:

The scenario depicted in Figure 2-4 and described above is considered the most likely outcome in the absence of the SBSP Restoration Project. However, a range of No Action outcomes is possible. In the Pond A8 vicinity, for example, it is possible that additional funding could be available to the Refuge, allowing the Refuge to maintain the Pond A5, A7, and A8 perimeter levees, and forego improvements to the Pond A8 west levee. Alternately, Santa Clara Valley Water District (SCVWD) could maintain the levee along Guadalupe Slough/Pond A5 (where they have an existing easement for levee maintenance) and the Refuge could then focus its limited funds on maintaining the Alviso Slough/Pond A7/Pond A8 levee and the Pond A6 south levee. The Refuge would take steps to maintain current levels of flood protection as funding allows; however, potential actions and funding are not known at this time.

Additional text has been revised in Section 2.5.3, under the heading Pond A8:

The scenario depicted in Figure 2-4 described above is considered the most likely outcome in the absence of the SBSP Restoration Project. However, a range of No Action outcomes is possible. In the Pond A8 vicinity, for example, it is possible that additional funding could be available to the Refuge, allowing the Refuge to maintain the Pond A5, A7, and A8 perimeter levees, and forego improvements to the Pond A8 west levee. Alternately, SCVWD could maintain the levee along Guadalupe Slough/Pond A5 (where they have an existing easement for levee maintenance) and the Refuge could then focus its limited funds on maintaining the Alviso Slough / Pond A7 / Pond A8 levee and the Pond A6 south levee.

No public access and recreation currently exists at Pond A8, and no new public access or recreation facilities would be constructed under this alternative.

SCVWD-3: As described in the Phase 1 discussion of Impact 3.3-4, the proposed notch structure at Pond A8 is designed with an adjustable opening for flexibility of operation, largely to avoid impacts to flood risks due to erosion of downstream levees. Implementation of the Pond A8 Phase 1 action would begin with opening only one 'bay', providing for a notch opening of less than 10 ft. Subsequent opening of additional bays would be informed by monitoring data, including surveys of downstream channel widening. The predicted slough widening under 20- and 40-ft operation of the notch is presented in Table 2 of Appendix G-5. Seasonal operation of the structure and the risk of downstream levee erosion are discussed in Section 2.5, Phase 1 Impact 3.3-4, and the concluding paragraph of Appendix G-5. Section 2.5 has been revised to include more detail on the adjustable operation of the notch, as follows:

Due to structural considerations, the notch would likely consist of multiple 'bays' that can be opened and closed independently. This would allow tidal exchange between the Pond A8 and Alviso Slough to be adjusted based on monitoring data. <u>Initially, the notch would be operated with only one bay open.</u> Additional bays would be opened if monitoring data confirmed that slough widening did not threaten downstream levees, in particular the levees along the east side of Alviso Slough (perimeter levees to Ponds A11 and A12).

The high ground areas adjacent to Pond A8 is a landfill and may require protection as tidal action is restored to these ponds. Restoration planning for the Pond A8 Phase 1 action will include coordination with the operator of the SR 237 landfill so that any design features required to comply with the landfill closure conditions can be evaluated. Conditions imposed by the Waste Discharge Requirement of the SR 237 landfill already require the landfill operator to prevent erosion of sediment placed within the existing 100-year floodplain (RWQCB WDR No. 01-029). The expected water levels within Pond A8 during operation of the proposed notch remain within the 100-year floodplain; therefore, the proposed Phase 1 action would not increase the regulatory requirements for the landowner to satisfy the closure conditions of the facility.

SCVWD-4: The commenter's interest in having the Project improve, and not only maintain, the current levels of flood protection is acknowledged. The EIS/R states that it is desirable to achieve flood protection that meets both FEMA and Corps criteria around the entire Project Area, and that the Project expects to be able to achieve this. However, the actual level of protection over and above existing would depend on available funding.

The text is not intended to imply that the levees would be built incrementally higher as additional outboard ponds are breached. Text has been added to the EIS/R to clarify that building the levees incrementally higher is only one option that would be considered in future levee design, prior to each phase of implementation. Detailed environmental assessment of any incremental levee construction would be addressed in subsequent project-level NEPA/CEQA documentation. The text has been revised in Section 2.4.4 as follows:

The phased nature of the Project's implementation would require that flood protection be provided prior to restoring the additional acreage of tidal restoration. As in Alternative B, modeling and analyses would be completed prior to each phase of implementation to verify flood performance and ensure that existing or improved levels of flood protection would be provided. If the levee is designed and constructed before the type of habitat to be restored to the outboard ponds is known, the levee can either be constructed to the larger

(Alternative C) cross section or built to the smaller (Alternative B) cross section and raised later, if needed.

The comment regarding monitoring and analysis recommended by the EIS/R prior to future phases of restoration is acknowledged. This comment expresses support for actions proposed in the SBSP Restoration Project and does not address the adequacy of the EIS/R.

SCVWD-5: Previously, O&M activities within the SBSP Restoration Project Area were covered under a 10-year O&M permit issued to Cargill by the Corps. The Corps issued permit #19009S98 in November 1995 to Cargill Salt Division for certain structures and work occurring in or affecting navigable waters of the U.S. and the discharge of dredged or fill material into the waters of the U.S, pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Corps 1995). The permit was transferred to USFWS and CDFG in May 2003 following the salt ponds acquisition. This permit covered all O&M activities, including importing fill for levee maintenance³. The permit was scheduled to expire in 2006 but was extended by the Corps to allow USFWS to continue its O&M activities while the Biological Opinion for the SBSP Restoration Project is prepared. After the Biological Opinion is issued, the Corps and Bay Conservation and Development Commission (BCDC) will issue a new permit that is expected to cover the same O&M activities as the existing permit. (Morris 2007)

The amount of fill that would be needed for ongoing O&M activities is not considered to be substantial. Importing fill via trucks is a permitted activity under the existing O&M permit and will also be covered under the new O&M permit. Importing material to fill borrow ditches is not covered as an O&M activity. Filling of borrow ditches will be incorporated into the plans for future Project phases as needed. In the SBSP Restoration Project EIS/R, filling of borrow ditches is considered a construction activity and not an O&M activity.

O&M activities are ongoing and will continue to be covered by the O&M permit issued by the Corps and BCDC. Additional analysis of O&M activities before and after each Project phase is not warranted in the EIS/R.

As stated in Section 2.4.5 of the EIS/R, up to 15 million cy of fill would be needed for Project construction activities (levee construction, filling or block of borrow ditches, and the creation of upland transitional habitat) over the 50-year planning horizon. Imported fill would be transported either by barge and/or trucks, and examples of imported

³ The Corps allows the following activity to be conducted as an ongoing and new work as long as the landowners followed notification procedures established in the permit: Placement of dredged and fill material on the pond side of salt pond levees including replacement of the eroded beach below the plane of high water in the pond for the purpose of raising and fortifying the levees to prevent degradation. The material, either dredged mud from the salt ponds or imported fill, will be placed along the inside and the top of the salt pond levee in accordance with the BMPs.

sediment sources are identified in the EIS/R. These assumptions for the amount of fill required and the method of transport are reiterated in Section 3.12.3 for the traffic impact analysis. However, for the purposes of considering a conservative estimate for the EIS/R, all material was assumed to be transported by truck. Assuming an even distribution of the material, up to 136 truck trips per day would be generated. However, the EIS/R acknowledges the uncertainties associated with the actual amount of fill that would be required and the timing of delivery; the actual number of daily, one-way, construction-related truck trips delivering fill could be more or less than 136.

As described in SBSP Impact 3.12-1 of the EIS/R, subsequent project-level environmental review would be conducted for each future phase to determine the estimated Project-related construction traffic volumes (*e.g.*, from sediment and equipment transport and work commute) and the effects on roadway network. It is possible that the project-level environmental documents for subsequent phases of the SBSP Restoration Project would find that traffic levels on a roadway or an intersection would not degrade, depending on the number of expected truck trips as well as the road conditions on proposed haul routes. In such a case, restriction of the traffic hours would not be necessary. However, based on the program-level analysis, traffic impacts would be considered potentially significant under Alternatives B and C, and as such SBSP Mitigation Measure 3.12-1 would be required. This mitigation measure would limit construction-related haul truck trips to non-peak commute periods such that potentially significant traffic impacts would be reduced to less than significant.

SBSP Mitigation Measure 3.13-2 specifies the need to include in construction plans and specifications the requirement to transport a portion of the fill by barge to reduce traffic-related noise effects. This mitigation measure has the potential to further reduce the amount of truck traffic which may offset the difficulty by contractors to deliver the fill by truck traffic.

Section 2.4.5 of the EIS/R specifies that imported fill would be transported either by barge and/or trucks. Depending on the location of the potential sources of fill sites near the Bay, the delivery of fill via barge may be a feasible option. However, the timing and amount of fill that would be imported are unknown. SBSP Mitigation Measure 3.13-2 specifies the need to include in construction plans and specifications the requirement to transport a portion of the fill by barge to reduce traffic-related noise effects. This mitigation measure has the potential to further reduce the amount of truck traffic which may offset any difficulty by contractors to deliver the fill by truck.

SCVWD-6: The reference to a well abandonment program being considered has been deleted. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Project Setting has been revised as follows:

Improperly abandoned wells may also be present in the Ravenswood and Alviso pond complexes. Historical wells located in the Ravenswood pond complex were not immediately sealed after abandonment, and the eventual method (effectiveness) of sealing was questioned by the SCVWD (1980). A program to locate improperly abandoned wells in the Alviso pond complex is currently being considered by SCVWD.

Please see the response to Comment SCVWD- 76 below regarding practicality of an outreach program.

SCVWD-7: The Project acknowledges that local flood control agencies will not be responsible or liable for providing levee maintenance advice to the landowners under Alternative A. However, the Corps may or may not be the appropriate agency to provide this type of advice. The intent of the text in the EIS/R is to note that the landowners will solicit input from key stakeholders including local flood control agencies when making decisions regarding where to focus their limited levee maintenance funds for Alternative A. Text in Section 3.3.3, SBSP Impact 3.3-1 has been revised as follows:

Alternative A No Action. ... Under Alternative A, The landowners would solicit input from key stakeholders including local agencies to help the landowners coordinate with local flood management agencies to focus their limited maintenance and improvement funds on pond levees with high priority to be maintained.

Similarly, text in Section 3.3.3, SBSP Impact 3.3-4 has been revised as follows:

Alternative A No Action. The landowners would <u>solicit input from key</u> <u>stakeholders including local agencies to help the landowners coordinate with</u> local flood management agencies to focus limited maintenance funds on those pond levees designated as most important for flood protection.

SCVWD-8: Section 2.5 of the EIS/R describes changes to water levels in the Pond A4 sump as a result of the Pond A8 Phase 1 action and notes that that the levee surrounding the sump may be raised by up to 1 foot to maintain appropriate freeboard. Freeboard requirements will be evaluated further during final design. Impacts from higher water levels in the Pond A4 sump are not expected.

Figures depicting Alternatives B and C have been revised such that Pond A4 is not depicted as a managed pond.

SCVWD-9: The adaptive management approach described in Section 2.3.2 is designed such that monitoring results would trigger an evaluation of potential adverse impacts before a threshold of significance is reached. Text from this section of the EIS/R has been revised to specifically mention how incompatible resolutions of tripped triggers would be managed, as follows:

In the event that no management action is proven effective at reversing a negative trend in the trajectory of the evolving ecosystem, <u>or if responses to</u> <u>multiple triggers are mutually incompatible</u>, the PMT would reconsider additional tidal restoration and may decide to stop further tidal restoration altogether.

Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of adaptive management funding and its consequences for implementation of tidal restoration. The proposed institutional structure and the roles and responsibilities of the various parties are described in Part 4 of Appendix D.

- SCVWD-10: See the response to Comment SCVWD-2.
- SCVWD-11: Under the No Action Alternative, USFWS would continue to maintain the salt pond levees along the east side of Alviso Slough (the perimeter levees along Ponds A10 and A11).
- SCVWD-12: Flood modeling results presented in Appendix G-5 and summarized in Phase 1 Impact 3.3-3 (increased fluvial flood risk) include a description of how operation of the proposed notch at Pond A8 would potentially increase peak water levels along Guadalupe Slough under the 100-year design storm event, unless the notch opening were limited to 20 ft or less. Section 2.5.3, under the subheading Phase 1 Restoration Actions EIS/R and Pond A8, has been revised as follows to clarify that potential increases to flood risks are confined to Guadalupe Slough:

These potential changes would increase the ability of the slough channel to convey flood flows and lower water levels<u>associated with</u>-when-large amounts <u>rainfall</u>-runoff <u>events</u> from the watershed is routed to <u>on the</u> Guadalupe River. However, restoration of muted tides in Ponds A8, A7 and A5 during the rainy season would also reduce the amount of flood storage provided by these ponds and possibly result <u>adverse effects to existing flood</u> hazards-in higher maximum water elevations along Guadalupe Slough (see Figure 25 in Appendix G-5).

SCVWD-13: The EIS/R has been modified to include the commenter's recommended phrase. Note that the LGFPP was designed to divert 8,500 cfs into Pond A8, although the actual volume of water diverted across the overflow weir may differ from its design condition due to differences in slough geometry between 2004 (survey date of slough geometry used in SBSP flood modeling) and 1996 (survey date of slough geometry used in the LGFPP analysis). Section 3.3.1 of Section 3.3, Hydrology, Flood Management, and Infrastructure, under the subheading Fluvial Flood Hazards, has been revised as follows:

The reconfigured left bank is designed to diverts approximately <u>6,100 8,500</u> cfs of the 100-year flow in Alviso Slough to Pond A8, thereby decreasing peak discharges and water surface elevations downstream of the UPRR.

SCVWD-14: The EIS/R has been revised to describe disposal of the spoils excavated during construction of the pilot channel (see below). Please note that impacts associated with the disposal of excavated spoils, like other temporary impacts associated with construction activities, are considered to be self-mitigated by the restoration actions. Text in Section 2.5.3 of Chapter 2 of the EIS/R, under the heading Pond A8, has been revised as follows:

An approximately 300 475-ft-long pilot channel would be excavated through the fringe marsh of Alviso Slough immediately outboard of the armored notch. Excavated earth would be placed within Pond A8, or trucked to an upland landfill if testing indicates soil contamination exceeds allowable levels for wetland foundation. This channel would facilitate tidal exchange through the notch by providing <u>a</u> an initial flow path <u>between Pond A8 and</u> <u>Alviso Slough</u> and removing erosion-resistant marsh vegetation so the channel can gradually enlarge through tidal scour. The top width <u>and area</u> of the constructed pilot channel would approximately match <u>its maximum</u> <u>expected equilibrium dimension</u> the notch width (40 ft) and to limit the amount of sediment eroded from tidal flows once operation of the notch <u>begins</u>. its depth would extend through the erosion-resistant vegetation and root mass. Tidal current velocities are expected initially to widen and deepen the pilot channel over time until it reaches equilibrium with the flows.

SCVWD-15: The commenter states that the cost and frequency of water level monitoring and crosssection surveys at Pond A8 and Alviso Slough may be high. The level of effort and frequency associated with these proposed monitoring elements is consistent with the intent of adaptively managing the notch opening. In an effort to minimize the cost of monitoring, the proposed water level measurements are limited to short durations (approximately 4 weeks) and cross-section surveys along Alviso Slough would be concentrated at critical locations where existing fringe marsh is minimal.

The commenter states that the cross-section surveys may be dangerous during the wet season. Note that various monitoring activities have been safely conducted in Alviso Slough. The channel cross-sections proposed to be collected for Pond A8 Phase 1 could be surveyed before the onset of the rainy season to avoid high current velocities.

The Project proponents acknowledge that it may be useful to start collecting background information soon. In addition, data collected for planning, such as the tide data collected for the Project in 2004, will be evaluated to determine whether it adequately characterizes baseline conditions.

SCVWD-16: The commenter requests that the EIS/R analyze and "address" flood impacts caused by changes to the Pond A8 storage system (Ponds A5, A6, A7, and A8) for Alternative A, the No Action Alternative. The impacts are evaluated in Section 3.3.3, SBSP Impact 3.3-3. Note that Alternative A and the Phase 1 No Action scenarios do not include mitigation for adverse impacts. Additional discussion has been added to the Phase 1 No Action description for Pond A8 in Section 2.5.3 to reflect the range of possible No Action outcomes, some of which would potentially maintain the flood storage in the Pond A8 system.

The scenario depicted in Figure 2-4 described above is considered the most likely outcome in the absence of the SBSP Restoration Project. However, a range of No Action outcomes is possible. In the Pond A8 vicinity, for example, it is possible that additional funding could be available to the Refuge, allowing the Refuge to maintain the Pond A5, A7, and A8 perimeter levees, and forego improvements to the Pond A8 west levee. Alternately, SCVWD could maintain the levee along Guadalupe Slough/Pond A5 (where they have an existing easement for levee maintenance) and the Refuge could then focus its limited funds on maintaining the Alviso Slough / Pond A7 / Pond A8 levee and the Pond A6 south levee.

No public access and recreation currently exists at Pond A8, and no new public access or recreation facilities would be constructed under this alternative.

Please refer to the response to Comment SCVWD-2 for additional discussion of different levee maintenance outcomes under the No Action Alternative.

SCVWD-17: Section 2.5.3 of the EIS/R has been revised to include mention of flood storage at Pond A6 under initial No Action.

Pond A8 also contains an overflow weir, and during flood events greater than a 10year flood in the lower Guadalupe River/Alviso Slough, overflows into Pond A8 would occur and Ponds A5, <u>A6</u>, A7 and A8 would initially be used for flood storage. In the absence of the Phase 1 action at Pond A6, the pond would continue to provide flood storage during large rainfall events. In the long-term, Ponds A5, <u>A6</u>, and A7 would <u>likely</u> convert to tidal action.

- SCVWD-18: The Pond A8 Phase 1 figure has been revised to correctly show a closed notch during winter operations.
- SCVWD-19: Proposed upgrades to the Pond A4 donut are part of the Project description (Section 2.5) and have been evaluated as part of the Project impacts. See the response to Comment SCVWD-8 for discussion of impacts to the Pond A4 donut.

- SCVWD-20: The commenter points to apparent discrepancies in the way Ponds A5 and A7 are depicted in Phase 1 figures. Some figures show these two ponds affected by Phase 1 action, and other figures do not. As described in Section 2.5, operation of the proposed Phase 1 notch at Pond A8 will affect water depths in Ponds A5 and A7. However, no new restoration features will be constructed in Ponds A5 and A7 (all construction activity occurs in Pond A8).
- SCVWD-21: The cut between Ponds A5 and A7 currently exists and is not a new feature proposed for construction. The EIS/R notes that USFWS occasionally pumps water from Pond A7 into A8, and the text has been revised to note that continued practice of this water management is expected to elevate soil salinities. Because of the occasional nature of the pumping, elevated soil salinities are not expected to increase to levels that would compromise restoration of Pond A8 within the timeframe of proposed implementation. Text in Section 3.3.1 of Section 3.3, Hydrology, Flood Management and Infrastructure, under the subheading Pond A8, has been revised as follows:

USFWS occasionally operates a 4,000 gallon-per-minute pump to convey water from Pond A7 to Pond A8 when flow through the 24-inch control gate is insufficient. <u>Since water is not discharged from Pond A8, evaporation of the pumped water gradually increases soil salinities.</u>

SCVWD-22: See the response to Comment SCVWD-3 for discussion of impacts to flood risks associated with scour of downstream levees. Section 2.5 of the EIS/R has been revised to acknowledge that the adjustable operation of the Pond A8 notch would be used to manage tidal flows and slough scour in Alviso Slough (see below). Modeling results describing the expected tidal current velocities under a 40-ft notch opening are included in Appendix G-5 and velocities generally less than 1 ft/sec downstream of the notch and outside of the immediate pilot channel.

Restoration of muted tidal action at Pond A8 is expected to deepen and widen the channel along the upper (landward) portion of Alviso Slough due to substantial increases in the slough tidal prism. <u>The magnitude of tidal</u> current velocities and associated slough scour would be related to the size of the notch opening, with less deepening and widening occurring with fewer open bays.

SCVWD-23: The vegetation removal referenced in the EIS/R is not associated with the SBSP Restoration Project. This activity would be associated with the Alviso Slough Restoration Project, which the SCVWD is currently developing. The EIS/R has been revised to clarify this point. Due to the lack of specificity on the exact footprint of vegetation removal likely to occur as part of the Alviso Slough Restoration Project, only general conclusions can be drawn about how this activity may impact the proposed Phase 1 action at Pond A8. Phase 1 Impact 3.3-5 in Section 3.3, Hydrology, Flood Management, and Infrastructure, has been revised as follows: Benefits to navigation would be further enhanced if the Phase 1 action at Pond A8 were coordinated with other planned activity, such as improvements to or relocation of the <u>South Bay Yacht Club docks</u> marina structures associated with vegetation removal along Alviso Slough <u>as part of the Alviso</u> <u>Slough Restoration Project.</u>

- SCVWD-24: It is not expected that there would be a need for truck trips associated with the disposal of potentially contaminated soils from Pond A8. Section 2.5.3 describes the reversible tidal restoration activities intended at Pond A8. It includes applied studies to test wildlife response to increased exposure of MeHg. As described in Section 2.5.5 of the EIS/R, all fill material would be reused on site for the Phase 1 actions; therefore, fill is not expected to be brought in or hauled offsite for the Phase 1 action at Pond A8. As such, no change to the number of construction truck trips associated with the Phase 1 actions is warranted.
- SCVWD-25: Permit requirements are covered in Section 3.6.2, Regulatory Setting.
- SCVWD-26: The Project acknowledges the commenter's suggestion that the frequency of levee monitoring should be dictated by rainfall and tidal events and may be needed more frequently than annually in some years. The Project description and EIS/R assessment are consistent with the commenter's suggested monitoring frequency. The proposed levee monitoring as presented in the EIS/R (Table 2.3 Adaptive Management Summary Table, third column) includes inspecting for levee erosion "initially monthly, then annually, and after major rainfall and/or tidal events." The Project acknowledges the commenter's suggestion that the EIS/R should assess the impacts of less frequent monitoring in wet years and/or after major rainfall and/or tidal events. This comment does not address the SBSP Restoration Project or the EIS/R since the Project does not propose such less frequent monitoring.
- SCVWD-27: The commenter states that, with respect to cost effectiveness, it would be appropriate for the Project to avoid wherever possible armoring levees that would be breached later.

The Project agrees that, with respect to cost-effectiveness, it would be appropriate to avoid, wherever possible, armoring levees that would be breached. The Project intends to improve and maintain levees in the most cost-effective way practical. Please refer to the response to Comment SCVWD-4 for a discussion of phased levee construction.

SCVWD-28: The text in Section 2.4.2 has been modified as follows to clarify the parenthetical reference:

Under the No Action Alternative, USFWS would continue to operate and maintain the Alviso pond complex in a manner similar to the ISP (Life Science! 2003), or similar to current management for Pond A6, although ongoing O&M activities (see Section 1.4.4) would be scaled back to match

available funding and habitat conservation and flood management priorities (see Section 1.4.4).

- SCVWD-29: Please see the response to Comment SCVWD-4.
- SCVWD-30: The text in Section 2.4.3, under the heading Flood Management has been modified as follows to include the suggested word change:

Fluvial flood protection under Alternative B would be <u>provided enhanced</u> by increasing channel conveyance.

- SCVWD-31: The high ground areas of Shoreline Park and the Legacy property adjacent to, respectively, Ponds A2W and Pond A8 are former landfills and may require protection as tidal action is restored to these ponds. Future project-level planning for Pond A2W would include an evaluation of this need. See the response to Comment SCVWD-3.
- SCVWD-32: The text in Section 2.4.3 has been revised as follows to reference the City of San Jose's master planning process and eliminate the reference to a "separate" process that could be misinterpreted as separate from the Shoreline Study:

From Artesian Slough to Coyote Creek, north of San Jose-Santa Clara Water Pollution Control Plant (WPCP), the perimeter levee would traverse Pond A18 along an alignment presently being planned through separate process by the City of San Jose. The eastern end of the proposed SBSP Restoration Project levee, along Artesian Slough, would be coordinated with the City of San Jose's master planning process for the San Jose/Santa Clara WPCP lands. The exact location of the eastern end of the SBSP Restoration Project levee would be determined in future project-level planning for a subsequent phase of implementation. Existing levees at Pond A18 consist of salt pond levees and engineered flood protection levees along the outboard side of Pond A18 (along Coyote Creek and Artesian Slough) and salt pond levees along the inboard side of Pond A18 (the stair-shaped levee).

- SCVWD-33: Please see the response to Comment SCVWD-4.
- SCVWD-34: Comment acknowledged. The EIS/R (Section 2.6.1) states that criteria for actions after Phase 1 will include flood management requirements and that "[o]ne or more of the levee construction/improvement actions may be proposed for development and construction soon after Phase 1 of the SBSP Restoration Project is implemented."
- SCVWD-35: The commenter suggests that there is not enough analysis in the Flood Analyses Report (Appendix E) showing the impact on invert stability of the creeks, particularly Alviso Slough. Figure 19 in Appendix E shows the anticipated Alviso Slough cross-section for each of the Alternatives. The figure illustrates the potential for a *wider* and deeper

channel resulting from opening ponds to tidal action and increasing the tidal prism in the slough. Long-term modeling was performed utilizing the cross-sections shown in Figure 19. Modifying the baseline cross-section in the model in order to represent long-term conditions required reducing the area of adjacent fringe marsh to accommodate the widened channel. If the adjacent fringe marsh was narrow, the equilibrium channel may widen far enough to impact the corresponding adjacent levee. These locations were identified during the impact analysis and are identified on Figure 3.3-10 in Section 3.3-4: *Increased levee erosion along channel banks downstream of tidal breaches*. Note: For Alternative C, it is assumed that levees along both banks of Alviso Slough would not be maintained downstream of the perimeter flood protection levee.

SBSP Impact 3.3-4 in Section 3.3, Hydrology, Flood Management and Infrastructure, under the subheading Alternative B Managed Pond Emphasis has been modified as follows to provide clarity:

Potential long-term levee failure locations were identified along the eastern levee of Alviso Slough for Alternative B and are shown in Figure 3.3-10. As mentioned above, this levee is not necessary for flood protection (see discussion in SBSP Impact Section 3.1-1 above) and failure at these locations would not contribute to inland flooding.

SCVWD-36: The commenter suggests that although the threat to downstream levee erosion due to tidal restoration is acknowledged in the EIS/R, the document does not provide enough specific information regarding how Phase 1 monitoring of levee integrity would occur.

A detailed operation and management plan for the Phase 1 action at Pond A8, which would include information on monitoring, has yet to be developed. However, a potentially critical transect (referred to as the 'A8-Bulge') at which expected channel widening was computed in Appendix G-5 was identified in consultation with SCVWD staff. Future consultation with SCVWD staff would occur as the Pond A8 Phase 1 O&M Plan is developed by USFWS.

In addition to the A8 Bulge section, the potentially critical locations along Alviso Slough identified in Phase 1 Impact 3.3-4 (see Figure 3.3-10) may be included in the Phase 1 monitoring plan. These areas are potentially critical due to the minimal amount of existing fringing marsh, which reduces the amount of channel widening that can occur before levees are affected.

SCVWD-37: Comment acknowledged. The information regarding the Borrero and others (2006) report is appreciated. Section 3.3 of the EIS/R has been revised as follows to add relevant information from the suggested report:

Tsunamis are another potential flood source for South San Francisco Bay. Historically, tsunamis were considered to result in a lower flood risk than storm conditions due to lower calculated runup elevations (the water elevation above the stillwater level) (Houston 1980; US Army Corps of Engineers 1988b; US Army Corps of Engineers 1989). More recently, the risk of tsunami-induced flooding is being reassessed in California and may be higher than previously thought (State of California 2006). Borrero and others (2006) evaluated historical and hypothetical tsunami-induced wave heights in San Francisco Bay, focusing on the locations of marine oil terminals in the central and northern regions of the Bay. The largest hypothetical tsunami-induced wave was caused by a very large earthquake (greater than 9.0 on the Richter scale) on the Alaska-Aleutian subduction zone (Borrero and others 2006). Modeling results predicted a 16.4 ft (5.0 m) wave entering San Francisco Bay, and the wave height was quickly reduced to less than 3.2 ft (1 m) as it passed under the San Francisco–Oakland Bay Bridge. The modeling study did not extend to the far South Bay; however, previous relationships based on compiled runup data from tsunamis in 1960 and 1964 suggest that tsunami-induced wave heights are reduced to less than ten percent of the height at the Golden Gate in the far South Bay below the Dumbarton Bridge (Borrero and others 2006; Magoon 1966).

SCVWD-38: Additional text was added to Section 3.3.1 as follows to respond to the requested change:

Overflow from the Guadalupe River, Alviso Slough and Coyote Creek flooding historically represent the most significant flood hazards to the City of San Jose and the community of Alviso. <u>Flood protection projects have</u> <u>been constructed by SCVWD to reduce the risk of flooding along Coyote</u> <u>Creek, the Guadalupe River, and the upper reaches of Alviso Slough.</u>

SCVWD-39: The text in Section 3.3.1 has been modified as follows to include the suggested additions:

Since 1950, flooding has occurred during four major storms. Several flood protection projects were developed and constructed as a result. For example, FEMA approved a Letter of Mapped Revision (LOMR) that removed split flow conditions from San Tomas Aquino Creek in the City of Santa Clara. SCVWD, as part of the Calabazas Creek Flood Control Project, <u>has</u> completed a flood protection project from Guadalupe Slough to Miller Avenue with a flood wall, levee, and channel enlargement to improve the capacity of will increase the Calabazas Creek capacity to the 100-year event, reduce bank erosion, and provide for long-term riparian habitat. improvement when complete.SCVWD is currently in the planning stages for extending the Calabazas Creek flood protection project upstream of Miller Avenue. SCVWD is <u>also</u> currently planning upgrades to Sunnyvale East and West Channels to protect against the one percent flood.

- SCVWD-40: Comment acknowledged. The EIS/R describes Alternatives B and C as having a (NEPA) beneficial impact for flood protection due to the construction of the perimeter flood protection levee (SBSP Impact 3.3-1) and benefits to fluvial flooding due to downstream tidal restoration and integration of the fluvial flood protection levees with the perimeter levee (SBSP Impact 3.3-3). The EIS/R also states that removing property from the effective FEMA floodplain will result in "a beneficial effect under both FEMA and Corps flood standards."
- SCVWD-41: Please see the response to Comment SCVWD-7.
- SCVWD-42: Comment acknowledged. The reference to setting back levees to reduce the potential for levee erosion refers to setting back existing levees adjacent to managed ponds, not necessarily newly constructed flood protection levees.
- SCVWD-43: As stated in Section 2.4.5 of the EIS/R, construction activities would require the import of as much as 10 to 15 million cy of fill for levee construction, filling or blocking of borrow ditches, and the creation of upland transitional habitat over the 50-year planning horizon. The estimate of fill needed for levee construction was calculated using the conceptual levee cross-sections included in the Flood Analyses Report, which is presented in Appendix E of the EIS/R, and the estimated levee lengths proposed under Alternatives B and C. The fill for borrow ditches was estimated based on the area of the borrow ditches derived from the Light Detection and Ranging (LiDAR) data and assuming a mean borrow ditch depth of approximately 2 ft below mean lower low water (MLLW). The fill for upland transition zones was calculated by assuming a uniform 10:1 slope from the flood protection levee (starting at 1 ft above mean higher high water [MHHW]) to the pond bed.

These fill estimates are preliminary calculations that are appropriate for the programlevel analysis in the EIS/R. These estimates will be refined for future Project phases that involve levee construction, filling or blocking of borrow ditches, and/or the creation of upland transitional habitat, and will be addressed in future project-level environmental documentation.

SCVWD-44: The activities listed under SBSP Impact 3.14-1 are representative of the types of activities that would occur. The suggested text has been added. The inclusion of the additional construction activities does not change the impact conclusion. Temporary impacts associated with short-term construction-generated air pollutant emissions would still be considered potentially significant and SBSP Mitigation Measure 3.14-1 would be needed to reduce such impacts to less-than-significant levels. Text under SBSP Impact 3.14-1 in Section 3.14, Air Quality, has been revised as follows:

Alternative B would involve <u>construction and</u> modification of levees (<u>including</u> breaching and lowering, <u>and improvements for flood control</u>), excavation of pilot channels, construction/installation of water control

structures, creation of nesting islands, creation of tidal habitat, and construction of recreational facilities (trails, interpretative stations, viewing platforms, staging areas, and amenities).

- SCVWD-45: Figures 3.16-1 through 3.16-3 have been revised to show the correct levee designations.
- SCVWD-46: Comment acknowledged. Different levee heights are used for the assessment of Alternatives B and C to bookend the range of possible levee heights. As described in Appendix E, different levee heights are required depending whether or not the outboard ponds continued to be managed, resulting in less change to baseline coastal flood risks (as in Alternative B), or restored to tidal habitat, resulting in higher coastal flood risks (as in Alternative C). If the higher levee height is constructed, then the impact to rail service assessment for Alternative C is applicable, even if the outboard ponds have not been breached. Please see the response to Comment SCVWD-4 for additional discussion relative to levee construction.
- SCVWD-47: Completed flood protection projects, such as the Lower Guadalupe River Flood Protection Project, are included in the EIS/R baseline conditions. Potential impacts of the SBSP Restoration Project to the completed flood protection projects are evaluated in Chapter 3 of the EIS/R.
- SCVWD-48: The Adaptive Management Summary Table (Flood Protection row, 2nd column) in Section 2.3.2 of Chapter 2 has been revised to reflect that the restoration target is for no increase in flood risks at any Project phase.

No increase in tidal or fluvial flood risk <u>at any Project phase</u> and improve tidal and fluvial flood protection in the South Bay in specific areas

- SCVWD-49: Comment acknowledged. The tide range of 2.83 m is based on data collected at the Gold Street Bridge station in Alviso Slough between January 1, 1976 and March 31, 1976. The tide range of 2.06 m is based on data collected between February 7, 2004 and April 29, 2004. Although these three-month time periods do not completely overlap, two of the three months of data collection are comparable (February and March); therefore, the comparison of the tide range is based on comparing similar data from the same season in different years.
- SCVWD-50: Comment acknowledged. A smaller scale (0 to 30 cm) was used for the comparison of the Dumbarton Bridge and San Francisco storm surge heights for clarity with respect to the comparison. Using the larger scale (0 to 100 cm) would have limited the comparison to only a small portion of the graph.
- SCVWD-51: Table 5 of Appendix E, Flood Analyses Report has been modified as follows to indicate the units and datum of the water level information:

STATION NAME	USACE (1984) <u>(M NAVD88)</u>	KNUUTI (1995) <u>(M NAVD88)</u>	PWA (2006) <u>(M NAVD88)</u> 10-YR 100-YR	
San Francisco 1984	2.65			
1995		2.71 ± 0.05		
2005		2.72 ± 0.05	2.56	2.66
Alameda	2.90		2.65	2.77
San Mateo Bridge, West (Eden Landing Complex)	3.00		2.89	3.01
Dumbarton Bridge (Ravenswood Complex)	3.10		3.00	3.11
Coyote Creek, Alviso Slough (Alviso Complex)	3.35		3.24	3.36
<i>Note</i> : Most analyses performed in ft. Precision of values reported in ft maintained in conversion to m.				

SCVWD-52: The commenter requests that the unit be supplied for the equation shown below. The discussion of the wind setup methodology has been modified in Appendix E, Flood Analyses Report, as follows to indicate the units of the variables in the wind setup equation:

This equation was simplified by retaining only the sea surface slope and wind stress terms resulting in the following equation:

 $s = -d \pm (d^2 + 2(\tau_{sx} / \rho g)L)^{1/2}$

where; d = water depth <u>in m</u>, L = length <u>in m</u> over which the wind blows, s = wind setup <u>in m</u>, τ_{sx} = wind stress <u>in kilograms per m squared second</u>, ρ = density of water <u>in kilograms per cubic m</u>, g = gravitational acceleration <u>in m</u> <u>per second squared</u>, and $\tau_{sx} = \rho_a CW^2$ where ρ_a = density of air <u>in kilograms</u> <u>per cubic m</u>, C = 2.28*10⁻³ and W = wind speed <u>in m per second</u>.

SCVWD-53: Comment acknowledged. The velocity figures in the Appendix J, Hydrodynamic Modeling Report, of the EIS/R have been revised to indicate the method for calculating the velocity shown. The following note was added to each velocity figure:

The depth-averaged velocity (v) is calculated as $v = (u^2 + v^2)^{1/2}$, where u and v are the horizontal depth-averaged velocity components.

SCVWD-54: Comment acknowledged. In the Hydrodynamic Modeling Report, the model simulation evaluating Alternative C at Year 0 described in Chapter 4 (immediately after implementation with all tidally-restored ponds – approximately 13,500 acres – breached to adjacent sloughs and no geomorphic change such as channel scour and pond

sedimentation included) shows that tidal prism in the sloughs and at Channel Marker 17 in the far South Bay increases relative to baseline (existing) conditions (see Figures 4-46 through 4-51). This result is expected, as the commenter suggests, as the larger area under restored conditions results in an increase in the modeled tidal prism. At the Dumbarton and San Mateo Bridges, a slight decrease in tidal prism is observed (Figure 4-45). This Year 0 simulation with all ponds restored at Year 0 represents a large (and somewhat hypothetical) perturbation to the system. The resulting change is presumably large enough to affect the tidal range and tidal dynamics within the South Bay, causing an overall decrease in the tidal resonance in the South Bay. The enclosed nature of the South Bay creates a mix of progressive and standing wave behavior, which leads to tidal amplification southward. Restoring 13,500 acres of former salt ponds appears to alter the mix of standing and progressive wave, and such a change could result in a decrease in tidal prism. This result has been replicated by independent modeling studies performed by others using MIKE21 (see Moffatt & Nichol (unpublished) report "Hydrodynamic Analyses of Tidal Marsh Restoration in North and South San Francisco Bay, San Francisco International Airport Airfield Development Program, Preliminary Report No. 8, Water Circulation, Sedimentation and Water Quality Studies").

In Chapter 7, a similar simulation is performed for Alternative C at Year 50. This simulation assumes that the slough channels have scoured and sedimentation within the tidally-restored ponds has filled the ponds to vegetation colonization elevations so that mature salt marsh is assumed to have developed. These assumptions result in a substantial decrease in the "restored" tidal prism when compared with the Year 0 simulations; therefore the overall impact to South Bay tidal dynamics is less. As shown on Figure 7-30, the modeled tidal prism at the Dumbarton and San Mateo Bridges increases. Therefore, the smaller restored tidal prism under Year 50 conditions does not have as large of an impact on the tidal dynamics and/or tidal resonance within the South Bay. The modeled tidal prism at Channel Marker 17 and the tidal sloughs (see Figures 7-31 through 7-36) also increases relative to baseline conditions, and the increase is less than that observed under Year 0 conditions (see Figures 4-46 through 4-51).

Based on previous discussions with SCVWD staff, the model results and model input and set-up conditions were reviewed with DELFT Hydraulics staff with expertise in the DELFT model formulation and applications. The model set up and boundary conditions were considered appropriate for the application by the DELFT Hydraulics staff. In addition, the DELFT Hydraulics staff expressed that the DELFT3D model formulation was sound and that the conservation of mass and momentum equations were being satisfied.

SCVWD-55: Section 2.4.5 of the EIS/R identifies the excavated material from SCVWD's Stream Maintenance Program as a potential source of fill that may be well-suited for the SBSP Restoration Project. Imported fill would be transported either by barge and/or truck, although the locations and phasing of future actions and the actual amount of fill required for each phase have not yet been determined. Staging of material, including fill, is expected to occur entirely within the pond complexes due to the availability of space. The imported fill would be used for levee construction, filling or blocking of borrow ditches, and the creation of upland transitional habitat. Potential impacts that may result from importing fill to the SBSP Restoration Project Area are discussed in various sections of Chapter 3 of the EIS/R. Specific impacts which address traffic, air quality and noise impacts associated with truck traffic associated with importing fill include: SBSP Impact 3.12-1 (Potential short-term degradation of traffic levels on a roadway or at an intersection due to construction), SBSP Impact 3.13-1 (Short-term construction noise effects), and SBSP Impact 3.14-1 (short-term construction-generated air pollutant emissions). Mitigation measures are identified as appropriate to reduce potential construction-related impacts associated with the imported fill. The CEQA Guidelines do not consider cost as a factor in determining environmental effects, and as such the cost efficient flow of truck traffic, while a consideration for the Project proponents, is not considered in the EIS/R.

SCVWD-56: As stated in Section 2.4.5 of the EIS/R, construction activities would require the import of as much as 10 to 15 million cy of fill for levee construction, filling or blocking of borrow ditches, and the creation of upland transitional habitat over the 50-year planning horizon. Filling of borrow ditches is considered in the program-level impact analysis for the long-term alternatives. No filling of borrow ditches is proposed in Phase 1, so project-level analysis of this issue is not presented in the EIS/R. It will be addressed in future project-level NEPA/CEQA documentation prepared for future Project phases that include filling of borrow ditches. Please also see the response to Comment SCVWD-5 for more information on filling of borrow ditches.

> Sections 3.12, 3.13, and 3.14 (Traffic, Noise, and Air quality) describe the environmental impacts associated with the import of up to 15 million cy of fill. SBSP Impact 3.12-1 evaluates the potential traffic impacts associated with short-term degradation of traffic levels on a roadway or at an intersection from transport of material and equipment. SBSP Impact 3.13-2 describes the potential noise impacts associated with the transport of fill via trucks. SBSP Impact 3.14-1 discusses air quality impacts associated with short-term generation of air pollutant emissions. As such, the Project analyzes the environmental effects associated with the import of fill material to the SBSP Restoration Project Area, which would be used for levee construction as well as for filling borrow ditches. Mitigation measures are identified to reduce potentially significant impacts to less-thansignificant levels, including limiting transportation of fill and equipment to outside the weekday am and pm peak commute traffic hours, limiting haul routes through residential areas, increasing the import of fill via barge, and implementing basic control measures for dust. As described in Sections 2.4.5 and 3.12.3, the locations and timing of future Project phases and the actual amount of imported fill required for each phase have not yet been determined. Detailed evaluations of construction-related traffic impacts based on

more realistic estimates will be conducted as part of project-level environmental review for future phases of the Project.

- SCVWD-57: Section 2.4.5 of the EIS/R identifies the following potential sources of fill for the SBSP Restoration Project: excavated material from SCVWD's Stream Maintenance Program, the proposed tunnel for the Hetch Hetchy Aqueduct, and development projects in nearby upland areas. This list is not meant to be exhaustive; many potential sources of fill can be identified for the SBSP Restoration Project. Both the City of Redwood City and the Port of Redwood City have offered to provide fill for the Project. As noted by the commenter, stilling basins for drinking water treatment plants are another potential source. As stated in Section 2.4.5 of the EIS/R, the locations and phasing of projects and actual amount of imported fill required for each phase have not yet been determined. Since no fill would be imported for the Phase 1 actions, the EIS/R evaluates potential impacts associated with importing fill at the program level. Project-level NEPA/CEQA documentation for future phases will address these potential impacts in more detail as needed. No change to the text of the EIS/R is warranted.
- SCVWD-58: As discussed in Section 2.5.5, it is assumed that all fill material would be reused on site for Phase 1 actions, including Pond A16. As such, fill is not expected to be brought in or hauled offsite, although occasional delivery of supplies and materials would be necessary, such as piping, water control gates, lumber, and fuel. Because imported fill material is not needed for Pond A16 under the Phase 1 actions, the evaluation of adverse effects from importing material would not be necessary. Potential impacts associated with the importation of fill are addressed at the program level in Section 3.12, Traffic; Section 3.13, Noise; and Section 3.14, Air Quality. Please refer to the response to Comment SCVWD-56 for a discussion of the impacts covering imported fill.
- SCVWD-59: There are no current plans to import sediment for intertidal or tidal mudflat restoration. For concerns on water quality, please see Adaptive Management Summary Table, Water Quality Project Objective 4.
- SCVWD-60: As discussed in the responses to Comments SCVWD-5, SCVWD-56, and SCVWD-58, the filling or blocking of borrow ditches is not considered an O&M activity (Morris 2007). It is considered to be a construction activity and is evaluated at the program level only, as no fill would be imported for the Phase 1 actions. As such, no additional analysis of the filling of borrow ditches under the No Action Alternative is warranted.
- SCVWD-61: As discussed in Section 3.12.3, approximately 136 one-way truck trips are estimated per day to import fill to the Project Area. This estimate was calculated for planning purposes only and is based on the assumption that all materials would be transported via truck and the delivery of material would be distributed evenly over 50 years. The EIS/R acknowledges that the actual number of daily truck trips may be higher or lower depending on Project phasing and how traffic is distributed throughout each subsequent phase. However, as noted in the EIS/R, portions of the fill may be transported by barge.

Construction-related traffic, noise, and air quality impacts associated with the imported fill would be considered potentially significant under Alternatives B and C, and mitigation measures, as identified in the response to Comment SCVWD-56, would be required to reduce potential effects to less-than-significant levels.

- SCVWD-62: Please see the response to Comment SCVWD-5.
- SCVWD-63: As described in Section 2.4.5 of the EIS/R, construction activities would require the import of as much as 10 to 15 million cy of fill for levee construction, filling or blocking of borrow ditches, and the creation of upland transitional habitat over the 50-year planning horizon. Because truck traffic associated with the transport of material for the filling or blocking of borrow ditches is considered to be a construction activity, traffic outside of each "construction phase" is not anticipated. As such, SBSP Mitigation Measure 3.12-4, which requires the videotaping of pre-construction and post-construction road conditions, would be appropriate, and no changes to this mitigation measure are warranted.
- SCVWD-64: The discussion of sediment import related to traffic noise is evaluated in SBSP Impact 3.13-2. As such, analysis of this issue is not warranted in SBSP Impact 3.13-1, which is related to the construction noise effects from on-site restoration activities.
- SCVWD-65: Current O&M activities are covered by the existing O&M permit issued by the Corps and BCDC. Future O&M activities will be covered under the new O&M permit to be issued following the completion of the Biological Opinion for the Project. Please see the response to Comment SCVWD-5.
- SCVWD-66: The text in Section 3.3.1 in Section 3.3, Hydrology, Flood Management and Infrastructure under the subheading Sea Level Rise has been modified to include the suggested word change in part 1 of the comment:

Historically, subsidence has occurred in the Santa Clara Valley due to groundwater withdrawals, leaving parts of Alviso at very low elevations relative about 8 ft below the adjacent sea level. The rate of groundwater withdrawals has since been reduced and the aquifers artificially recharged. Recent estimates of vertical land movements in the Santa Clara Valley (Schmidt and Burgmann 2003) show that only small amounts of subsidence are likely to be occurring in the South Bay due to groundwater extraction. Therefore, in this EIS/R, it is assumed that no local subsidence would occur over the 50-year planning horizon.

Second comment acknowledged. As new information on subsidence estimates and rates becomes available, it would be incorporated into subsequent project-level analysis and design.

Third comment acknowledged. Sea level rise is being considered for future conditions within the 50-year planning horizon. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

- SCVWD-67: Global climate change and the resulting potential for sea level rise are uncertainties that do indeed exist, but the EIS/R mitigation measures and conclusions are still relevant. No revision to text is necessary.
- SCVWD-68: Comment acknowledged. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the subheading Groundwater Management, has been revised as follows:

Groundwater management in the Santa Clara Valley has been conducted at the local level. <u>None of the counties in the South Bay (Alameda and San</u> Mateo and Santa Clara counties have not <u>passed enacted</u> groundwater management ordinances; <u>however</u>, <u>Santa Clara County currently has two</u> <u>such groundwater ordinances in place.</u> In addition, there has not been a court adjudication of groundwater rights in the basin (California Department of Water Resources 2003)

SCVWD-69: Since the salt marsh area has historically been used for salt production, old wells are not anticipated. In addition, no data on wells were provided by Cargill or anyone else during the property acquisition (personal communication from Clyde Morris, USFWS). As a result, a well identification and abandonment program is not judged necessary for the Project. However, if any such wells are found before or during construction they will be properly abandoned by the Project as per County and State regulations. The Project proponents will also lend support and cooperation with any well identification and abandonment program that may be undertaken as part of the Shoreline Study or other implementing projects. Text in Section 3.4.2 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Project Setting has been revised as follows:

Improperly abandoned wells may also be present in the Ravenswood and Alviso pond complexes. Historical wells located in the Ravenswood pond complex were not immediately sealed after abandonment, and the eventual method (effectiveness) of sealing was questioned by the SCVWD (1980). A program to locate improperly abandoned wells in the Alviso pond complex is currently being considered by SCVWD.

- SCVWD-70: The primary source cited is Santa Clara Valley Water District, 2004. In that report, Appendix C presents a table of selenium concentrations in groundwater as measured in 1992. There are four wells with selenium concentrations that are elevated compared to the other 20 in the cited survey:
 - 07S1E16Z0, Location 12'th St. 1 & 2, Selenium = $6.7 \mu g/L$;

- 07S1E22Z0, Location Tully 1 & 2, Selenium = $4.8 \mu g/L$;
- 07S1W03Q, Location Station 4, Selenium = $3.9 \,\mu g/L$;
- 07S1E2Z0, Location Cottage Grove, Selenium = $5.1 \mu g/L$

It is agreed that all of the 24 wells are below the human health MCL of 50 μ g/L. However, the surface water quality objective for selenium established by the California Toxics Rule is 5 μ g/L. Selenium concentrations exceeding 5 μ g/L in surface waters are considered to be a potential threat to beneficial uses. That objective is exceeded in the surface water of Alviso Slough. The exceedances are greatest during the summer and on outgoing tides. The secondary source cited, Abusaba and Ogle (2005), found that the most likely explanation for the localized exceedance of the CTR selenium water quality objective in Alviso Slough was mobilization of groundwater from adjacent aquifers, possibly by dewatering activities. That peer-reviewed report recommended that the potential for a groundwater source of selenium to Alviso Slough needs to be further investigated. The issue, as explained in the EIS/R and the report by Abusaba and Ogle (2005), is that movement of selenium via dewatering and groundwater pumping can cause exceedance of numeric water quality objectives; this appears to be an issue in many California coastal watersheds, including the Santa Clara Valley.

- SCVWD-71: This was considered in the analysis of salinity intrusion into groundwater. Currently, groundwater flows from the aquifers into the Bay. Should aquifers be overdrawn in the future, causing flow from the Project Area into the aquifers through natural and artificial conduits, the primary threat to potable water supplies is salt. All other contaminant impacts would be secondary compared to this effect. Therefore, the impacts and mitigation measures focus on preventing salinity intrusion into potable water supplies. If salt intrudes the aquifers they will become non-potable and the issue of other contaminants would be moot.
- SCVWD-72: Comment acknowledged. The text in SBSP Impact 3.4-5 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under Alternative C Tidal Habitat Emphasis, has been revised as follows:

Groundwater contamination in the SBSP Restoration Project Area is not expected as a result of this alternative, as long as groundwater overdraft is avoided <u>and abandoned wells are properly destroyed to eliminate vertical conduits.</u>

- SCVWD-73: Comment acknowledged. This comment expresses support for the need for the Project proponents to consult with SCVWD before implementing the mitigation measure.
- SCVWD-74: Please refer to the response to Comment SCVWD-69 for discussion of responsibility for locating and abandoning wells. The text in SBSP Mitigation Measure 3.4-6 of Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

Project proponents will ensure that any well identification and abandonment work within flooded areas is completed before breaching levees. A well abandonment program typically includes the identification of wells through a records search, location through field visits, aerial photographs and/or geophysical surveys, and proper sealing (typically through pressure grouting) If any abandoned wells are found before or during construction they will be properly destroyed by the Project as per local and state regulations by coordinating such activities with the local water district. If abandoned wells are located during restoration or other future activities within ACWD or SCVWD boundaries, a well destruction work plan will be prepared in consultation with ACWD or SCVWD (as appropriate) to ensure accordance to ACWD or SCVWD specifications. The work plan will include consulting the databases of well locations already provided by ACWD and SCVWD. The Project will properly destroy both improperly abandoned wells and existing wells within the Project Area that are subject to inundation by breaching levees. Well destruction methods will meet local, county and state regulations. The Project proponents will also lend support and cooperation with any well identification and destruction program that may be undertaken as part of the Shoreline Study or other implementing projects.

SCVWD-75: See the response to Comment ACWD-6 above. The second bullet of SBSP Mitigation Measure 3.4-6 in Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

> Project proponents will coordinate with the ACWD and SCVWD to ensure that adequate programs for monitoring groundwater levels and quality and quantity have been developed and adequately funded and that monitoring data is being analyzed and reported The Project proponents will assist ACWD and SCVWD to obtain funding for the development, implementation, analysis, and reporting of groundwater levels and groundwater quality adjacent to the Project boundaries. If groundwater monitoring detects seawater intrusion, the Project proponents will participate and assist ACWD and SCVWD in identifying the sources and causes, and in selecting and implementing an appropriate mitigation measure.

SCVWD-76: Project proponents believe that ACWD and SCVWD already have effective strategies for communicating such information to their respective stakeholders. The communication tools now include or may be expanded to include District websites; annual groundwater condition reports; newspaper, TV, and radio communications; public meetings; and District and/or municipal water purveyor mailings. Information concerning groundwater levels, quality usage, and interpretations concerning groundwater overdraft and salinity intrusion are all included in the most recent SCVWD Groundwater Conditions Report for 2002/2003 (January 2005; http://www.valleywater.org/media/pdf/GWConditionsReport_080505_web.pdf) and ACWD's Groundwater Monitoring Report 2005 (ACWD 2006). As a result, sharing such information should not be problematic. The third bullet of SBSP Mitigation Measure 3.4-6 in Section 3.4, Surface Water, Sediment, and Groundwater Quality has been revised as follows:

Project Proponents will coordinate with the ACWD and the SCVWD to develop and implement a The Project will work to assist ACWD and SCVWD in the development and implementation of District communication and outreach strategyies that ensure groundwater users are regularly updated on groundwater levels, quality, usage, and the linkage between groundwater overdraft and salinity intrusion. <u>Groundwater data will be shared with</u> groundwater users to the extent allowed by law.

- SCVWD-77: Figures 2-5b, 2-7b, ES-3b, and ES-4b have been revised such that Pond A4 is consistently shown on the maps as not having any future habitat features. However, a note has been added to the maps to indicate that a separate planning process is under way for Pond A4.
- SCVWD-78: The text in Section 2.4.3, under the subheading Alviso, has been revised in two places in response to the comment:

The proposed perimeter levee system is shown on Figure 2-6b for the Alviso pond complex. Linkage of proposed levees to existing flood protection levees would be coordinated with the SCVWD in Santa Clara County and with the Alameda County Flood Control and Water Conservation District (ACFCWCD) in Alameda County.

...The newly constructed western end of the proposed levee would link into the existing levees that provide flood protection along lower Guadalupe River/Alviso Slough, and this connection would be coordinated with the Santa Clara Valley Water District's (SCVWD's) ongoing flood protection effort along the lower Guadalupe River.

- SCVWD-79: See the response to Comment SCVWD-8 for discussion of changes in Pond A4 water levels. The baseline conditions at Pond A4 are fall 2006, which is consistent with the Project baseline defined in the EIS/R. Construction related impacts for improvements to the Pond A4 sump are assessed in Chapter 3. O&M impacts are not expected.
- SCVWD-80: The text in Section 3.3.2 has been modified as follows per the suggestion of the commenter:

Under the Water Resources Protection Ordinance (Ordinance 06-1, formerly Ordinance 83-2), SCVWD requires encroachment permits for all

construction activities along or within a CVWD right of way modifications on SCVWD facilities and/or SCVWD easements. Activities requiring a permit include: grading adjacent to the watercourse, along the levees, or within the channel and/or any activity resulting in modifications to the drainage, discharge or conveyance of the watercourse, removing, dredging, mining, or extraction of any materials; constructions, reconstruction, demolition or alteration of the size of any structure, including any facility of any private, public or municipal utility; and the removal or installation of vegetation. Permits, if granted, may require mitigation for any disturbance to the health of the watercourse.

- SCVWD-81: The commenter suggests that "one could reasonably expect" that channel downcutting would occur upstream of tidal breaches to achieve an equilibrium thalweg profile. In situations where fluvial processes are dominant, channel adjustments may occur upstream of management actions such as tidal breaches, as suggested by the commenter. However, monitoring data collected from previous tidal restoration projects (*e.g.*, Warm Springs) and geomorphic principles (*e.g.*, hydraulic geometry relationships) suggest that channel adjustments are strongly correlated to tributary tidal prism. Given the relative size of the tidal prism increase associated with implementation of Alternatives B and C, tidal processes are expected to govern the long-term morphology of the slough channels.
- SCVWD-82: Section 2.4.2 of the EIS/R states that the Island Ponds (Ponds A19, 20 and 21) were breached in March 2006, restoring tidal action to these ponds. This has been included in Table 4-5 as suggested by the commenter.
- SCVWD-83: The text in Table 4-5 for Coyote Creek Flood Control Project has been updated as suggested by the commenter.
- SCVWD-84: The completion date identified in Table 4-6 for Permanente Creek has been revised as suggested by the commenter.
- SCVWD-85: The commenter acknowledges that the Alviso Slough Restoration Project is considered a cumulative project. This project is identified as a related project in Chapter 1. Section 4.1 of the EIS/R indicates that cumulative projects include the related projects discussed in Chapter 1. The Alviso Slough Restoration Project and the other related projects described in Chapter 1 are not described in Chapter 4 to avoid redundancy.

The commenter states that the "action on the project cannot proceed until CEQA/NEPA compliance is completed and the District Board chooses to move forward on one of the project alternatives and approves the same at the public Board meeting in the future." Additional text has been added to the description of the Alviso Slough Restoration Project in Section 1.6.5 to clarify that the Alviso Slough Restoration Project is still in its environmental planning phase, as follows:

SCVWD plans to coordinate their Alviso Slough Restoration Project with the larger SBSP Restoration Project as well as the Shoreline Study, as these projects may provide benefits for one another. <u>As the Project is still in its</u> environmental planning phase, action on the Project cannot proceed until <u>CEQA/NEPA compliance is completed and the District's Board chooses to</u> move forward on one of the Project alternatives and approves the alternative at a future public Board meeting.

- SCVWD-86: Dredging or vegetation removal can release chemical oxygen demand by stirring up anoxic sediments. While dredging may or may not take place as part of the Alviso Slough Restoration Project, vegetation removal is part of the alternatives analysis for that project.
- SCVWD-87: It is agreed that the magnitude of increased tidal prism due to the Alviso Slough Restoration Project is small compared to the Phase 1 action at Pond A8. To be conservative, the cumulative impact is still considered potentially significant.
- SCVWD-88: Please see the response to Comment SCVWD-9 regarding mutually incompatible tripped triggers.
- SCVWD-89: The commenter suggests that the Adaptive Management Plan identify "specific impacts thresholds, signaling when and how the Project action will be adjusted in order to avoid significant impacts."

As described in Section 2.3, monitoring parameters would be compared to *management triggers* to evaluate the need to adjust restoration action. Discussions regarding how these management triggers would be used to avoid specific environmental impacts are presented within the various impact analyses in Chapter 3 and summarized in Table 2.3, Adaptive Management Summary Table.

- SCVWD-90: The commenter suggests that "success" triggers be identified in the Adaptive Management Plan so that "monitoring can be reduced, eliminated or redirected to other parts of the Project." As discussed in Section 2.3.1, a key element of the adaptive management process is to track progress toward the Project Objectives and restoration targets. Monitoring of a particular attribute of the South Bay ecosystem would be reduced, or possibly eliminated, once its associated restoration target was achieved.
- SCVWD-91: The restoration targets have undergone extensive review by the consultant team, the Science Team, the PMT, resource agencies, and others. With respect to the specific restoration target noted in this comment (*i.e.*, meeting recovery plan goals for the California clapper rail and salt marsh harvest mouse), it is clear that this Project will be responsible for achieving the recovery goals for these species in the recovery units located within the SBSP Restoration Project Area because of its geographic dominance in those units.

- SCVWD-92: The commenter suggests that a detailed schedule for adaptive management and monitoring tasks pertinent to Phase 1 should be prioritized with an anticipated start date. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management funding and the sequencing of applied studies.
- SCVWD-93: Annual transects or SET measurements will only be collected in breached ponds, not over the entire Project Area.
- SCVWD-94: Yes, the same bathymetry and LiDAR data will be used to conduct monitoring / adaptive management activities listed in the first and third rows of Table 2.3, Adaptive Management Summary Table in Chapter 2, Description of Alternatives.
- SCVWD-95: In Table 2.3, Adaptive Management Summary Table, the text "<u>tidal salt marsh</u>" has been added to columns 2 and 3 for the California clapper rail to define the type of acreage to be monitored.
- SCVWD-96: It is acknowledged that population estimates will be difficult if not impossible to obtain, and instead monitoring will focus on how steelhead and other estuarine fish use slough and pond habitats. Monitoring protocols for fish are being developed by NOAA Fisheries and the Science Team to evaluate how fish use slough and pond habitats and to monitor the effects of the SBSP Restoration Project on fish.
- SCVWD-97: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management funding and the sequencing of applied studies.
- SCVWD-98: The need for rapid-response indicators and effective monitoring is acknowledged. This will be addressed in the Adaptive Management Plan. A great deal of emphasis was placed on phytoplankton and DO because they appeared to be one of the most significant, long-term, ecosystem level impacts, based on input from the National Science Panel.
- SCVWD-99: The adaptive management triggers for algal abundance and composition discussed on pages 3.4-63 and 3.4-68 are listed in Table 2.3, Adaptive Management Summary Table, on page 2-16 (top) of the Draft EIS/R.
- SCVWD-100: For SBSP Impact 3.6-7 (impacts to Ruddy Ducks), it is acknowledged that declines in numbers of Ruddy Ducks are likely to be significant. Due to conflicts between this species' habitat associations (deep salt ponds) and the needs of other species likely to be targeted for management, adaptive management to increase habitat for Ruddy Ducks is unlikely to occur. In some of the other examples to which this comment was applied, adaptive management was referenced, though not on the specific pages listed by the commenter (*e.g.*, for SBSP Impacts 3.6-12, 13, and 14, adaptive management was mentioned on pages 3.6-114, 117, and 119).

- SCVWD-101: Herbicide use and vegetation management are discussed in the sections of invasive species control, as well as vegetation control on created nesting islands. Impacts related to these management activities are discussed in SBSP Impact 3.6-12.
- SCVWD-102: Species composition data will be collected once species composition monitoring reaches 30 percent vegetation cover for a given restored pond. Text has been changed to be consistent. See SBSP Impact 3.6-20: Colonization by non-native *Lepidium* Adaptive Management Plan, *Determination of Baseline and Monitoring*, as follows.

Once $\underline{3040}$ -percent level of vegetation cover has been achieved for a given restored pond, species composition data would be collected (in years corresponding to the habitat mapping) in a variety of zones (*e.g.*, low marsh, high marsh, upland transition) within each restored marsh.

- SCVWD-103: The commenter asks how the modeling efforts proposed in the Adaptive Management Plan would be related to other modeling efforts (e.g., the Corps modeling effort and the DELFT3D modeling completed for the SBSP Restoration Project). The large- and smallscale 3D integrative modeling proposed as part of the Adaptive Management Plan is initially being pursued through work by investigators from UC Berkeley and Stanford University under a grant from the Conservancy. Information collected as part of other modeling efforts would be incorporated as appropriate. The integrative modeling approach is intended to include more processes (e.g., sediment transport) than previous modeling efforts and would include calibration and validation data collected during the early phases of implementation (e.g., monitoring data collected pre- and post-Island Ponds (Ponds A19, A20 and A21) breaching). As investigators from UC Berkeley and Stanford University begin their work, they will discuss their work with other modeling efforts relevant to the SBSP Restoration Project. Some integration and support of other models may be possible, although typically models have specific purposes and cannot be integrated. However, the researchers will do all they can to not redo work already being done by other entities.
- SCVWD-104: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management funding and its consequences for implementation of tidal restoration.
- SCVWD-105: The new Tidal Marsh Species Recovery Plan is under development by USFWS. Although it is not yet finalized, it is sufficiently advanced that the draft recovery goals (*e.g.*, in terms of habitat goals for particular marsh units) are being applied to the monitoring plan and the Biological Opinion for the SBSP Restoration Project.
- SCVWD-106: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management funding and sequencing of applied studies.
- SCVWD-107: Please refer to the response to Comment SCVWD-103.

- SCVWD-108: The proposed work for Applied Studies Question #3 (Flood Hazard Uncertainty) would be coordinated with the Corps modeling effort, assuming that results from the Corps's modeling are available to the Principal Investigator for the applied study. Coordination may include sharing of input data, model files, and/or other information.
- SCVWD-109: Potential funding sources for various monitoring activities and applied studies, as well as potential monitoring partners, are in the process of being identified. Given the breadth of geographic coverage and the variety of technical issues covered in the proposed monitoring plan and applied studies, separate funding sources are expected to fund different parts of the Adaptive Management Plan. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management funding.
- SCVWD-110: The commenter requests clarification regarding Table 3 in the Adaptive Management Plan (Monitoring, Applied Studies, and Modeling during Project Planning) and Appendix 3 of the Adaptive Management Plan (Adaptive Management Summary Table). The monitoring, applied studies, and modeling summarized in Table 3 are a subset of the monitoring activities and applied studies listed in Appendix 3. For example, bathymetric survey conducted by Sea Surveyor (item 3 in Table 3) will be used as the baseline data against which future surveys can be compared to assess large-scale geomorphic changes in the South Bay.
- SCVWD-111: As landowners, CDFG and USFWS will have the responsibility for maintenance activities in the former salt ponds. For monitoring and adaptive management actions, these agencies will be supported by the institutional framework described in the Adaptive Management Plan, which identifies specific roles and responsibilities.
- SCVWD-112: The commenter suggests that it may be appropriate to consider how the design of the Phase 1 action at Pond A16 could accommodate the footprint of the future flood protection levee. Although there are some advantages to anticipating construction of the future flood protection levee, accommodating the future levee is considered somewhat speculative (the exact levee alignment and base width will not be determined until subsequent project-level design) and is not necessary for successful Phase 1 implementation. The Pond A16 restoration action would be modified after implementation to accommodate a future flood protection levee.
- SCVWD-113: A management techniques memorandum describing specific monitoring tools and responses to address this has been developed and peer reviewed. That technical memorandum will be incorporated into the adaptive management plan.
- SCVWD-114: This is a helpful clarification. The expected channel scour along Alviso Slough associated with the Phase 1 action at Pond A8 would provide an opportunity to investigate if the selected biosentinel species are sensitive to mobilization of mercurycontaining sediments that have been historically buried.

- SCVWD-115: Comment acknowledged. This comment, plus the comment by City of Sunnyvale (SUN-3) inform the revision to this section.
- SCVWD-116: The article in question raises questions about the amount of mercury that could be discharged to the estuary from petroleum refineries, however, no analytical results have ever shown that amount to be entering the estuary. If and when new information becomes available, it will be factored into considerations regarding mercury management in the Project Area.
- SCVWD-117: Text in Section 3.4.4 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Mobilization and Transport of Mercury-Contaminated Sediments has been revised as follows.

Establishing this narrative objective as a threshold of significant impact clarifies that the main concern over mercury, both in the regional and in the Project setting, is over methylmercury, because methylmercury is the primary mercury form that bioaccumulates. Low dissolved oxygen is known to increase the risk of methylmercury production. Therefore, more sensitive thresholds for mercury concentrations in sediment may need to be considered for areas prone to low dissolved oxygen, in order to stay below the threshold defined by the narrative objective for bioaccumulation.

- SCVWD-118: The basis for stopping before reaching 90 percent tidal (Alternative C) should be indicators that further progression would lead to unacceptable increases of mercury in aquatic life. Some fraction of total mercury is bioavailable, so total mercury is a risk factor to monitor, but by itself should not stop progression towards 90 percent tidal.
- SCVWD-119: Comment acknowledged. Text has been deleted from SBSP Impact 3.4-3 of Section 3.4, Surface Water, Sediment, and Groundwater Quality as follows.

Currently, as described in the 2005 ISP Operations Plan, the entry point of sediments from the Guadalupe River into the Project area is through more remote, Bayward water control structures. This means that the sediments have generally lower mercury concentrations because they have been mixed with Bay sediments. Entry of sediments into ponds at points closer to the watershed source, and therefore likely to have more mercury, may occur <u>at some time</u> as a result of the Lower Guadalupe River Flood Protection Project.

- SCVWD-120: Comment acknowledged. Also see EIS/R Adaptive Management Summary Table 2.3, Sections 2.5, and Section 3.6-12.
- SCVWD-121: Appendix D of the EIS/R has been revised.

- SCVWD-122: Comment acknowledged. As new information on sea level rise estimates and rates becomes available, it would be incorporated into subsequent project-level analysis and design. Please refer to Section 2.1, Master Responses, of this Response to Comments document for additional discussion of the impacts of sea level rise.
- SCVWD-123: Comment acknowledged. Sea level rise plays an important role relative to long-term changes to the South Bay's bathymetry. The South Bay Geomorphic Assessment did not separate out the relative contribution of sea level rise vs. unplanned levee breaches vs. other system-wide changes (*e.g.*, changes in sediment loading) when estimating long-term bathymetric change trends. However, as discussed in the EIS/R under SBSP Impact 3.3-2, the predicted change in water levels under Alternative A Year 50 conditions is on the same order as sea level rise, therefore sea level rise may drive bathymetric change under Alternative A.
- SCVWD-124: The recent report by the California Department of Water Resources (Progress on Incorporating Climate Change into Management of California's Water Resources, July 2006 Technical Memorandum Report) refers to and summarizes the Intergovernmental Panel on Climate Change 2001 Report with respect to sea level rise projections. The EIS/R is therefore consistent with the California Department of Water Resources report. Please refer to Section 2.1, Master Responses, of this Response to Comments document for additional discussion of the impacts of sea level rise.
- SCVWD-125: Comment acknowledged. SBSP Impact 3.4-3 of Section 3.4, Surface Water, Sediment, and Groundwater Quality as follows:

In contrast, dried out ponds in southerly Project Areas may exceed water quality objectives during seasonal rains, assuming the elevated mercury concentrations in sediments found during ISP monitoring of the Alviso pond complex persist. Wetting and drying cycles may potentially enhance methylmercury. Without an adaptive management plan, this is a potentially significant impact.

SCVWD-126: *Wetland Impacts* SBSP Impact 3.6-9 in Section 3.6, Biological Resources has been revised as follows:

Alternative B Managed Pond Emphasis. Under Alternative B, small losses of pickleweed-dominated tidal marsh would occur at a number of locations throughout the Project Area. Total direct impacts to existing wetlands from Phase 1 are expected to be approximately 15 acres. Future phases are expected to have a similar level of direct impact. Indirect impacts from marsh scour at the programmatic level could be as much as 200 to 400 acres over the life of the project. These impacts will be less than significant/beneficial since the project goal is to restore 7,500 -13,400 acres

of tidal habitat (most of which will be marsh). The marsh habitat restored by the project will be many times larger than the impacts to existing marsh.

- SCVWD-127: Comment acknowledged. It will not be feasible for many activities to be conducted outside the avian nesting season. Nevertheless, if certain activities can occur outside the avian nesting season, this would be the most effective way to ensure that impacts to nesting birds are avoided.
- SCVWD-128: Text has been added to Table 3.6-3 in Section 3.6 Biological Resources, as follows:

Suitable habitat for Delta wooly-marbles occurs within vernal pool habitat adjacent to the SBSP Restoration Project Area. Currently no suitable habitat present in SBSP Restoration Project Area.

SCVWD-129: The fourth column of Table 3.6-4 in Section 3.6 Biological Resources has been revised concerning the status of the peregrine falcon, as follows:

Regular forager (on other birds) in the study area, primarily during migration and winter. In the Alviso pond complex, one pair nested on an electrical tower in 2006, and two pairs nested on towers in 2007. Does not breed in the study area.

- SCVWD-130: SBSP Restoration Project activities are not expected to result in the isolation of salt marsh harvest mouse habitat that is being restored along lower Coyote Creek by SCVWD. Although some salt marsh harvest mouse habitat may be lost due to scour in the short term as ponds are opened to tidal action and tidal prism increases, such effects are not expected to affect habitat connectivity to SCVWD restoration sites along lower Coyote Creek, or to result in long-term and/or substantial population effects.
- SCVWD-131: Monitoring protocols are being developed by NOAA Fisheries in conjunction with the Science Team to evaluate how fish use slough and pond habitats. There is difficulty using electrofishing methods or methods requiring good water visibility; however it is likely that monitoring methods will focus on life stages captured using seines and fyke nets or similar methods. It is also acknowledged that population estimates will be difficult if not impossible to obtain, and instead monitoring will focus on how steelhead and other estuarine fish use slough and pond habitats.
- SCVWD-132: In SBSP Impact 3.6-12, "Raising or lowering water levels within ponds via inlet and outlet structures (or via limited pumping, if necessary)" is listed as one of the management and maintenance activities that may occur, and that may result in impacts to wildlife. These impacts are described later in that impact section.
- SCVWD-133: As per the text, ten percent is simply the trigger for further evaluation.

SCVWD-134: Phase 1 Impact 3.6-16 in Section 3.6, Biological Resources, under the subheading Net Phase 1 Effects, has been modified as follows:

Although the increase in water depth in Ponds A5, A7, and A8, may adversely affect dabbling duck abundance to some extent, this impact <u>may</u> <u>only occur seasonally, and</u> is expected to be offset by tidal restoration at Pond A6 and management of shallow-water conditions in Pond A16

- SCVWD-135: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Invasive *Spartina* issues.
- SCVWD-136: Comment acknowledged. Cumulative Impact 3.4-1 of Chapter 4, Cumulative Impacts, under the subheading Alviso, has been revised as follows:

As <u>described in Alternative A</u> above, other cumulative projects in the vicinity of the SBSP Restoration Project Area would result in potentially significant impacts on algal abundance and composition. <u>Implementation of the Phase 1</u> actions, in combination with the monitoring and maintenance and the Adaptive Management Plan (see also Phase 1 Impact 3.4-1 and Appendix D), would result in a less-than-significant impact associated with changes in algal abundance or composition. The cumulative impacts of all projects would be potentially significant even though the impacts of the Phase 1 actions would be less than significant. These include the Lower Guadalupe River Flood Control Project and the Spartina Control Program.

- SCVWD-137: Decision-making at the Executive Leadership Group level is envisioned to occur by consensus.
- SCVWD-138: A new Memorandum of Understanding (MOU) would be established for the purposes of implementing the Adaptive Management Plan.
- SCVWD-139: The entities identified in the organizational structure depicted in Figure 9 of the Adaptive Management Plan would be involved in the decision-making process. A description of the roles and responsibilities is provided in Section 4-b. Also, as noted in the Adaptive Management Plan, the PMT will need to develop operational and decision-making guidelines.
- SCVWD-140: The Project assumes that the Corps would participate in the Adaptive Management Plan, but there are limitations regarding the degree of their participation based on legislation, regulation and policy guidance. Non-Federal sponsors would continue to coordinate with the Corps to optimize the degree of the Corps's participation.
- SCVWD-141: Please refer to the response to Comment SCVWD-103.

- SCVWD-142: Section 1.2 of the EIS/R provides an overview of the CEQA and NEPA purpose. CDFG is the lead agency under CEQA. As stated, the final step of the CEQA process consists of certification of the EIR, which includes preparation of a Mitigation Monitoring and Reporting Plan, adoption of its findings, and preparation of a Statement of Overriding Considerations. After approval of the Project, the CEQA lead agency is required to file a Notice of Determination with OPR and the relevant county clerks within five working days. Preparation of the finding is guided by CEQA Guidelines Section 15091. Section 15091(a) states that "no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the Project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for reporting on or monitoring the changes which it has either required in the Project or made a condition of approval to avoid or substantially lessen significant environmental effects (CEQA Guidelines 15091(d))."
- SCVWD-143: CEQA does not specify the involvement of responsible agencies in the preparation of findings, except in the case where changes are incorporated into the Project which avoid or substantially lessen the significant environmental effects and they "are within the responsibility and jurisdiction of another public agency and not the agency making the finding" and "such changes have been adopted by such other agency or can and should be adopted by such other agency." Under this scenario, the finding shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. As the lead agency, CDFG would prepare and adopt findings, unless the scenarios described above apply. CDFG will continue to work with its partner agencies, including SCVWD, during the environmental planning process.
- SCVWD-144: The text throughout Section 3.5, Geology, Soils and Seismicity of the EIS/R has been revised to replace the word "subsidence" with the word "settlement" when referring to lowering the ground by as the result of a discrete activity, such as adding a load.
- SCVWD-145: Please see the response to Comment SCVWD-101.
- SCVWD-146: Effects of maintenance and management activities, including predator management, on wildlife are discussed in SBSP Impact 3.6-12.
- SCVWD-147: The Pond A6 levees do currently provide escape refugia for salt marsh harvest mice during high flow events, and thus lowering the levees will result in a short-term loss of habitat for the species. The first sentence of SBSP Impact 3.6-9 has been revised as follows:

Tidal restoration would require direct alteration of habitats (*e.g.*, levee breaching, levee lowering, and installation of pond water-control structures)..."

- SCVWD-148: The description of planned staging areas should appear in the Report of Waste Discharge or the Annual Operations Plan.
- SCVWD-149: Comment acknowledged.
- SCVWD-150: The commenter suggests that the EIS/R use a standard datum. The standard datum for the SBSP Restoration Project is NAVD88. However, original data collected, reported or published relative to NGVD29 or MLLW is often reported in its original form in order to maintain the integrity of the original values. Conversions between NAVD88, NGVD29 and MLLW vary geographically. NOAA Fisheries developed conversions between NAVD88 and MLLW for the South Bay and the major tidal sloughs as part of the South Bay hydrographic survey (Jaffe and others 2007). Accurate conversions between NAVD88 and NGVD29 have not been established for all areas within the SBSP Restoration Project Area. Vertical control is being established for the Phase 1 action locations relative to NAVD88.
- SCVWD-151: The commenter requests that the extent of tidal influence be identified for all creeks in the SBSP Restoration Project Area. The extent of tidal influence is typically identified by reviewing the channel thalweg relative to mean higher high water (MHHW). However, sufficient information is not available at this time to document this level of information for all tributaries within the Project Area. The extent of tidal influence and/or the tidal range is described qualitatively in the Flood Management and Infrastructure Existing Conditions Report (incorporated by reference to the EIS/R) where information is available. If necessary, the extent of tidal influence in a particular slough would be identified and documented during subsequent project-level analysis and design.
- SCVWD-152: The commenter requests that references to levees should read "salt pond levees" on Figure 3.3-2. The legend on Figure 3.3-2, as well as the supporting text, has been revised for clarity. The FEMA 100 yr Fluvial and Coastal Flood Limit assumes that the pond levees, which do not meet FEMA standards for flood protection, will fail. The Corps's 100 yr Coastal Flood Limit (worst case) assumes that all low-lying areas which are not completely protected from tidal flooding will be flooded during extreme high tides to the elevation of the tide. This case assumes that there are no physical barriers (such as pond levees, high ground, and/or other levees that may provide flood protection) between the Bay and the low-lying areas. The Corps's 100-yr Coastal Flood Limit (most likely) assumes that the pond and flood protection levees would be maintained.
- SCVWD-153: The commenter requests that summer and winter discharge rates from the Sunnyvale and Palo Alto wastewater treatment plants be included in the Project Setting for the Alviso pond complex in Section 3.3. The EIS/R text has been modified as follows:

Guadalupe Slough receives water from Calabazas Creek, San Tomas Aquino Creek, Sunnyvale East Channel, and Sunnyvale West Channel. The Sunnyvale WPCP discharges into Moffett Channel, which connects to Guadalupe Slough, and provides the primary source of fresh water during the summer and fall (Life Science! 2003; 2004). The average seasonal daily flows from the Sunnyvale WPCP are 12 mgd during the summer/fall and 15 mgd during the winter/spring average dry weather effluent flow from the Sunnyvale WPCP is between 14 and 15 mgd. The remaining sloughs in the Alviso pond complex – Whisman Slough, Mountain View Slough, and Charleston Slough – are relatively shallow and narrow with limited freshwater inflows and small drainage areas (Life Science! 2003; 2004). The far South Bay also receives water from San Francisquito Creek and the Palo Alto Regional Water Quality Control Plant, both of which discharge from the west side of the Bay between the Ravenswood and Alviso pond complexes, outside of the SBSP Restoration Project Area. The Palo Alto Regional Water Quality Control Plant discharges average seasonal daily flows of 25 mgd during the summer/fall and 26 mgd during the winter/spring.

- SCVWD-154: The Environmental Screening Levels (ESLs) cited by the commenter compile screening levels for a variety of land uses. The most sensitive ESLs are driven by the LTMS guidelines. ESLs for residential, industrial, and recreational use are less stringent than the LTMS guidelines. Therefore, the cited ESLs are effectively considered, defaulting to the most conservative LTMS guidelines and other thresholds based on water quality standards because of the nexus of sediments in the Project Area to the beneficial uses of water.
- SCVWD-155: A detailed monitoring memorandum has been prepared by the consultant team: "Water Quality Approach Memorandum," dated May 9, 2007, by Dr. Kris May and Dr. Khalil Abusaba. Following recommendations by the National Science Panel, that technical memorandum describes monitoring approaches and early warning signs of algal blooms and low dissolved oxygen, and makes recommendations for specific actions if early warning signs are detected.
- SCVWD-156: SBSP Mitigation Measure 3.4-5c of Section 3.4, Surface Water, Sediment, and Groundwater Quality, has been revised as follows.

This mitigat<u>iones addresses</u> impacts from illegal discharge and dumping. The likelihood of increasing frequency of illegal discharge and dumping could likely-will be minimized with adequate public education and outreach, patrolling of the area, readily accessible and frequently serviced trash <u>and</u> <u>recyclable materials</u> receptacles, and timely clean-up activities.

SCVWD-157: SBSP Impact 3.4-5 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Alternative C Tidal Habitat Emphasis, has been revised as follows:

Additionally, it is unlikely that the impacts associated with mobilization and transport of contaminated sediment and increased interaction of urban runoff would be of a sufficient magnitude or extent as to cause exceedances of the thresholds identified after mitigation. <u>Mitigation measures 3.4-5a through 3.4-5f also apply to Alternative C.</u>

- SCVWD-158: Clarification that settlement is expected to result from placement of fill for levees, berms, and bird islands has been included in the SBSP Impact 3.5-1 discussion in Section 3.5, Geology, Soils, and Seismicity under the Alternative B Managed Pond Emphasis and Alternative C Tidal Habitat Emphasis headings. The design of levees, berms, and bird islands would incorporate anticipated settlement.
- SCVWD-159: Comment acknowledged. The O&M activities described in the EIS/R are examples of such activities, and it is understood that other O&M activities not explicitly described in the document may be conducted. However, the entire array of potential O&M activities has been considered in the assessment of impacts resulting from maintenance and management of the SBSP Restoration Project Area.
- SCVWD-160: The proposed Alviso Slough Bridge is shown on Figures 2-5b and 2-7b in the EIS/R. In response to this comment, the following text addition was made to Section 3.7, Table 3.7-9, SBSP Restoration Project Area Recreation and Public Access Related Plans:

The City of San Jose plans to construct a pedestrian bridge across Alviso Slough just west of Gold Street. It would be for recreational use and connect two trails that currently exist north and south of the slough.

- SCVWD-161: Comment acknowledged. The discussion will not be revised.
- SCVWD-162: As described in SBSP Impact 3.8-2, disturbance of historic salt ponds and associated structures may constitute a significant impact on the cultural landscape. SBSP Mitigation Measure 3.8-2 provides a range of actions that would reduce this impact to a less than significant level, including a determination whether the landscape is eligible for NRHP and/or CRHR, a study of the Project's effects on the landscape, relevant documentation, videotaping the resources, a public outreach program, and/or signage. It should be noted that the historic Oliver Salt Works currently consists of remnants of the old salt production / harvesting-related facilities. These salt works remnants would be retained, and under Phase 1 actions, the salt works would be accessible to the public by the new proposed, year-round trail (see discussion in Section 2.5.2 of the EIS/R). An interpretive station would be designed to tell the history of the salt works at this location, explain how salt is produced, and explain the salt work's cultural, economical, and social linkage to the greater San Francisco Bay Area.

- SCVWD-163: The impacts in Section 3.17 of the EIS/R have been revised to include the potential for raising of the power lines. No changes to the conclusion of the impacts would result from these revisions.
- SCVWD-164: Yes, the predictive 3D modeling referenced in Appendix D is a numerical computerbased model.
- SCVWD-165: The Project proponents believe the commenter means "Section B, bullet 3." The data were used in the development of DO models for the Nutrients and Contaminants Analysis Report.
- SCVWD-166: No changes to the legends are warranted.
- SCVWD-167: The commenter suggests that the EIS/R identify locations where the document is available for review. The cover sheet on the first page of the EIS/R and Section 1.2.3 identifies the locations where hard copies of the document are available for public review. These include the Don Edwards San Francisco Bay National Wildlife Refuge, as well as seven libraries: Alviso Branch Library, City of Mountain View Library, Palo Alto Main Library, Menlo Park Library, Sunnyvale Public Library, Hayward Public Library, and the Fremont Main Library.
- SCVWD-168: The Need for Action list in Section 1.3.2 has been revised to include the suggested bullet item.
- SCVWD-169: The text in Section 1.6 is revised in the EIS/R.
- SCVWD-170: Comment acknowledged. The commenter suggests that preserving existing estuarine habitat areas is more of a constraint than an objective. The format of Table 2.3 explicitly links adaptive management elements (columns 2 8) to specific Project Objectives (column 1). The phrase "Preserve existing estuarine habitat area" is included to identify how Project Objective 1 (see the Executive Summary of the EIS/R) relates to the adaptive management topic "Sediment Dynamics".
- SCVWD-171: Section 2.3.2 of the EIS/R and Part 2-A of the Adaptive Management Plan describe how the categories in the Adaptive Management Summary Table relate to specific Project Objectives. For the sake of brevity, these complete Project Objectives were not repeated in the summary table. However, the Adaptive Management Summary table does, in fact, list the Project Objective that each monitoring parameter links to.
- SCVWD-172: Per this comment, the placement of Figure 2-14 was corrected in Chapter 2.
- SCVWD-173: The commenter suggests that oceanic salinity is reported as 33 parts per thousand (ppt) and 20 ppt in different paragraphs in Section 3.3.1. The first reference states that summer salinities in the South Bay "remain close to that of the ocean (33 parts per thousand, [ppt]) (Cheng and Gartner 1985)". The second reference states that "An analysis of the

historical data shows that during dry years when Delta outflows are small, near surface salinity in the South Bay remains near oceanic (> 20 ppt)." The second reference has been revised in Section 3.3.1 of Section 3.3, Hydrology, Flood Management and Infrastructure under the subheading Salinity for clarity as follows:

An analysis of the historical data shows that during dry years when Delta outflows are small, near surface salinity in the South Bay remains <u>high (> 20 ppt)</u> near oceanic (> 20 ppt).

SCVWD-174: The figures in the EIS/R which depict the high ground (*i.e.*, Figures ES-2, ES-3, ES-4, 2-4, 2-5, 2-6, 2-7, 3.3-4) show only approximate alignments. The figures have been revised to include a note to this effect. Exact alignments for both high ground and proposed levees will be determined in subsequent detailed design (future phases of implementation). The text in Section 2.4.3 of Chapter 2, Description of Alternatives, under the heading Flood Management, has been revised to include additional discussion of the high ground areas.

It should be noted that in Figures 2-6a through 2-6c, areas shown as "Existing High Ground" may require flood protection improvements, depending on the exact ground elevations and design flood level. <u>These</u> areas may be high enough to provide desired flood protection with no improvements, may require placement of fill and possibly slope protection, or may require construction of a low levee to provide flood protection. Levees shown as "Existing Flood Protection Levee" on Figure 2-6 a through 2-6c may also require improvements to comply with FEMA standards, if applicable.

SCVWD-175: The text in Section 3.3.1 in Section 3.3, Hydrology, Flood management and Infrastructure, under the heading Alviso, has been revised to include Alviso Slough as follows:

Several tidal sloughs are located within the Alviso pond complex, including Coyote Creek, Mud Slough, Artesian Slough, <u>Alviso Slough</u>, Guadalupe Slough, Stevens Creek, Mountain View Slough, and Charleston Slough (Figure 3.3-3).

- SCVWD-176: Figure 3.3-3 has been modified to identify Whisman Slough as a tributary to the South Bay. Please refer to the figure itself for the revision.
- SCVWD-177: The text in Section 3.3.1 in Section 3.3, Hydrology, Flood management and Infrastructure, under the subheading Pond A8 has been revised as follows to include the suggested phrase insertion:

Additionally, SCVWD operates a pump in cooperation with USFWS that conveys water from Pond A4 to Pond A5 via a siphon under Guadalupe Slough.

SCVWD-178: The text in Section 3.3.2 in Section 3.3, Hydrology, Flood management and Infrastructure, under the heading Flood Management Implementing Agencies, has been revised as follows to indicate the correct most recent WRDA:

All <u>significant</u> Corps construction projects are subject to authorization by Congress pursuant to the Water Resources Development Act-of 2005.

SCVWD-179: The text was reorganized in Section 3.3.3 as follows to clarify that the adjective "substantial" refers only to property loss:

For the purposes of this EIS/R, the Project is considered to have adverse impacts on hydrology or flooding if it would:

- Alter existing drainage patterns in a manner which would result in substantial erosion or siltation on- or off-site;
- Increase the risk of flooding that could cause <u>injury</u>, <u>death</u>, <u>or</u> substantial property loss, <u>injury</u>, <u>or death</u>;
- Create a safety hazard for people boating in the Project Area;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems; or
- Place structures within the 100-year flood hazard area that would impede or redirect flood flows.
- SCVWD-180: The figures in Section 3.4, Surface Water, Sediment and Groundwater Quality, have been revised to use the E nomenclature for Eden Landing ponds.
- SCVWD-181: Text in Section 3.4.3 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Emerging Programs of Water Quality Standards, has been revised as follows.

There are <u>four several</u> emerging programs that will result in new, enforceable water quality and sediment quality objectives:

SCVWD-182: SBSP Impact 3.4-3 of Section 3.4, Surface Water, Sediment, and Groundwater Quality, under the heading Alternative B Managed Pond Emphasis, has been revised as follows.

Conversion of high and medium salinity managed ponds to low salinity managed ponds and tidal marshes has the potential to increase MeHg bioaccumulation. As noted in the Environmental Setting Report Mercury

Technical Memorandum (Appendix K), (reference??) the food webs of medium salinity ponds are simpler than food webs found in low salinity ponds or tidal marsh food webs.

- SCVWD-183: As described in Section 3.3.1, "The South Bay is defined as the portion of San Francisco Bay south of Coyote Point on the western shore and San Leandro Marina on the eastern shore (Goals Project 1999)." Thus, the San Mateo Bridge is not used as the northern boundary of the area defined as the "South Bay".
- SCVWD-184: For SBSP Impact 3.6-13, Alternative C, Tidal Habitat Emphasis, the text has been revised as follows:

Under Alternative <u>BC</u>, approximately 10 percent of the SBSP Restoration Project Area.... Alternative C is expected to be greater than that for Alternatives A and <u>CB</u>.

- SCVWD-185: In response to this comment, the following text addition was made to Section 3.7, Table 3.7-1, Regional Public Access and Recreational Facilities, Alviso Complex, Additional Trails:
 - Bay Trail Spur (surrounding City of Sunnyvale WPCP)
 - <u>Bay Trail Reach 7A (County Marina to UPRR)</u>
- SCVWD-186: The text in SBSP Impact 3.16-4 in Section 3.16, Utilities, under the subheading Alternative B Managed Pond Emphasis, has been revised to correct a typographical error as follows:

However, restoration actions would include measures to address poor drain<u>age</u> through storm drains affected by changes in water level or sedimentation.

- SCVWD-187: Comment acknowledged. This formatting approach was intended to be followed.
- SCVWD-188: Comment acknowledged. The eight key uncertainties are listed in bullet format on Page 10.
- SCVWD-189: The text in Appendix E, the Flood Analyses Report of the EIS/R has been revised to correct a typographical error as follows:

Only only O one event was selected in this study, and consequently, neutral to conservative assumptions are required with this approach. For example, the 10-year wind speed is applied along the "worst-case" direction and during the tidal stage that results in the maximum wave height.





May 1, 2007

California Department of Fish and Game P. O. Box 47 Yountville, California 94599

ATTENTION: John Krause

SUBJECT: South Bay Salt Pond Restoration Project Draft EIS/EIR

Dear Mr. Krause:

Thank you for providing staff with the opportunity to comment on the Draft Environmental Impact Statement/Report (DEIS/R) for the South Bay Salt Pond Restoration Project, in Alameda, Santa Clara, and San Mateo Counties. Although the Commission itself has not reviewed the DEIS/R, the staff comments are based on the *McAteer-Petris Act* and the Commission's *San Francisco Bay Plan* (Bay Plan).

As you know, BCDC has been partnering with the project sponsors throughout the planning phase for the project. We would like to commend the authors of the EIR/EIS on preparing a very thorough and thoughtful analysis of the issues related to the restoration and we look forward to continued involvement and coordination as the project progresses.

Public Access

The Bay Plan policies on public access state that, "...maximum feasible public access to and along the waterfront and on any permitted fills should be provided in and through every new development on the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts.....In these cases, in lieu access at another location preferably near the project should be provided...." The policies further state that "[P]ublic access to some natural areas should be provided to permit study and enjoyment of these areas. However, some wildlife are sensitive to human intrusion. For this reason, projects in such areas should be carefully evaluated in consultation with appropriate agencies to determine the appropriate location and type of access to be provided...." The policies go on to state, "...[P]ublic access should be sited, designed and managed to prevent significant adverse effects on wildlife...[and]...[P]ublic access

State of California • SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION • Arnold Schwarzenegger, Governor 50 California Street, Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • info@bcdc.ca.gov • www.bcdc.ca.gov

BCDC-1

BCDC-2

California Department of Fish and Game May 1, 2007 Page 2

improvements provided as a condition of any approval should be consistent with the project and the physical environment, including protection of the Bay natural resources, such as aquatic life, wildlife and plant communities, and provide for the public's safety and convenience. The improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should permit barrier free access for the physically handicapped, and should be identified with appropriate signs...."

The overall restoration program and Phase 1 public access proposal constitute a very robust public access program that needs to be carefully managed and pursued to ensure that the public benefits of the project are maximized. In general, the FEIR/S should clarify how impacts or effects from public access on wildlife would be determined to be significant, including for the trails indicated in orange in some of the alternatives. On page 3.1-3, the DEIR/S states that under CEQA, what is determined to be a "substantial or potentially substantial adverse change to the environment is left to lead agencies to determine." The DEIR/S thresholds of significance for public access impacts on wildlife include, among others, "substantial" population effects or "substantial" decline of nesting. It is unclear how "substantial" will be defined in the future and how and by whom this determination will be made.

The DEIR/S, including the adaptive management plan (AMP) in Appendix D, does not adequately describe how the project will be monitored to provide the data necessary to make these determinations, and how the effects will be determined to be "substantial". For example on page 3.6-128, the DEIR/S states "these monitoring results would provide some of the information as to potential adverse effects of public access on sensitive biological resources, so that public access can be modified if necessary to reduce or avoid impacts". The AMP on page 15 identifies two applied studies related to potential public access impacts, one would address boating and the other landside public access. The boating study is not scheduled for Phase 1, while the study addressing landside access would be conducted at several sites in Phase 1. The FEIR/S and AMP should describe how monitoring and applied studies will provide the information needed to determine whether effects are substantial, requiring a management response.

The Adaptive Management Plan needs to clarify the timing and approach to making decisions about future public access when decisions on future project phases are made. For example, when phase two or phase three restoration actions are determined, there needs to be a discussion in the adaptive management plan that describes how the public access component of those phases would be determined. At present, the discussion in the AMP is general and open ended and describes an opportunistic approach to determining future public access benefits.

Pages 3.7-29 through 3.7-31 in the DEIR/S discuss the loss of existing public access as a potentially significant impact from a qualitative perspective. The FEIR/S should, for each alternative, quantify the loss of public access, the proposed addition to public access with a quantified result, and evaluate this result using the proposed significance criteria of maximum feasible public access.

BCDC-4

BCDC-3

BCDC-5

BCDC-6

California Department of Fish and Game May 1, 2007 Page 3

Section 3.17, Visual Resources, does not evaluate public views from a public access perspective. The Bay Plan identifies public views as a critical form of public access. In addition, the Appearance Design and Scenic Views policies of the Bay Plan are used by the Commission to evaluate projects visual qualities and potential impacts on public views. The FEIR/S should discuss these policies in the regulatory framework portion of the visual resources section and evaluate the project's consistency with them.

The DEIR/S does not discuss the compatibility of consumptive recreation uses, particularly hunting, with non-consumptive recreation uses such as hiking, bird watching and viewing. The FEIR/S should address the compatibility of these uses and whether certain proposed public access features would be closed to public access due to safety considerations appurtenant to hunting. This discussion should address whether any of these closures would affect trail segments identified as spine segments of the Bay Trail, and whether any closures would impact whether the project provides the maximum feasible public access.

On page 3.6-126 the DEIR/S states, in part that, "recreation use and maintenance of trails have the potential to…increase predation…." There is no citation from the literature to support this claim, nor any further discussion of this issue. For example, there are no applied studies in the AMP to assess the public access impacts of increased predation. Unless this impact can be supported by citation from the literature with examples relevant to south San Francisco Bay, and it is integrated into the adaptive management plan, it should be removed from the public access impact discussion.

Recreation

The recreation policies in the Bay Plan state, in part, that "to assure optimum use of the Bay for recreation, the following facilities should be encouraged in...wildlife refuges.....Where shoreline open space includes areas used for hunting waterbirds, public areas for launching non-motorized small boats should be provided so long as they do not result in overuse of the hunting area.... In waterfront parks that serve as gateways to wildlife refuges, interpretive materials and programs that inform visitors about the wildlife and habitat values present in the park and wildlife refuges should be provided. Instructional materials should include information about the potential for adverse impacts on wildlife, plant and habitat resources from certain activities.... Where feasible and appropriate, waterfront parks and wildlife refuges should be provided appropriate, waterfront parks and wildlife refuges or provided appropriate, waterfront parks and wildlife refuges should provide diverse environmental education programs, facilities and community service opportunities, such as classrooms and interpretive and volunteer programs."

The DEIR/S does not discuss the consistency of the proposed project with the Bay Plan recreation policies. The FEIR/S should include this discussion.

Thank you for providing staff with the opportunity to review this environmental document. We value the coordinated efforts to date regarding this project and would appreciate being involved in the planning and implementation processes as they move forward.

If you have any questions, please do not hesitate to contact me at (415) 352-3622 or jenniferf@bcdc.ca.gov.

BCDC-7

BCDC-8

BCDC-9

BCDC-10

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Sincerely,

JENN FEINBERG Coastal Program Analyst

JF/mm

cc: Steve Richie, California Coastal Conservancy Clyde Morris, USFWS; Don Edwards San Francisco Bay National Wildlife Refuge

Response to BCDC

- BCDC-1: Comment acknowledged. The comment does not address the adequacy of the EIS/R.
- BCDC-2: Comment acknowledged. The Project affirms its commitment to complying with the Bay Plan as indicated in this comment.
- BCDC-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife. What constitutes a "substantial" impact is discussed in Section 3.6.3, "Overview", of the EIS/R. The Project team responsible for evaluating monitoring results and determining the need for adaptive management will determine on a species-specific basis whether monitoring results indicate that public access is having a substantial adverse effect on wildlife. A more precise definition of what constitutes a "substantial" effect (e.g., in terms of number of breeding pairs or individuals affected) may change over time depending on population dynamics of various species, in particular how these populations respond to the various influences (potentially both positive and negative) of the SBSP Restoration Project. For example, if a species' South Bay populations were to increase considerably as a result of tidal habitat restoration, the number of individuals that would have to be affected for a recreation-associated impact to be "substantial" may be higher than if the species' populations were to decrease as a result of the Project. Thus, criteria for what constitutes a "substantial" effect should be refined in the context of the results of monitoring conducted as a part of the Adaptive Management Plan.
- BCDC-4: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- BCDC-5: See the response to Comment BCDC-4 above.
- BCDC-6: A quantification of Project-wide trails by alternative has been developed to assist in analyzing the alternatives with regards to providing maximum feasible public access.

POND COMPLEX	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C				
Eden Landing	2.17	14.65	11.98				
Alviso	16.46	30.85	22.33				
Ravenswood 3.67 5.94 4.8							
<i>Note</i> : Alternative B and C totals for miles of trail include existing trails to remain as well as proposed trails.							

Table 4 Miles of Public Access Trails in SBSP Restoration Project Area

While some existing segments of trail are being removed in each of the Alternatives B and C, new trails and additional public access features are being added such that there is a net gain of these features across the Project Area.

- BCDC-7: Section 3.17.1 describes the visual quality of the pond complexes and Phase 1 action ponds as well as identifies the locations where views of the Project Area ponds are provided. SBSP Impact 3.17-1 evaluates the impacts associated with the altered views of the SBSP Restoration Project Area. It includes a discussion of how changes in the Project Area would affect public views. Under Alternative B, medium- and short-range views, particularly from existing trails, would be altered. The altered views would include a new visual experience, as viewing areas would be installed to allow users to enjoy the variation in forms and colors of both the tidal habitat and managed ponds. Views from the Bay (such as from a kayak) would also change under this alternative; the salt marsh vegetation along the shoreline would result in a softer vegetated edge in tidal areas than the hard edge of the current pond levees. Section 3.17.2 of the EIS/R has been revised to include policies from the Bay Plan.
- BCDC-8: It is not anticipated that any segments of the existing or proposed Bay Trail spine will be closed due to hunting at any of the three pond complexes. While hunters may use the proposed Bay Trail spine segment proposed at Alviso, for instance, this will be for access to blinds only and hunting is not permitted from this trail/levee. Hunting from ponds will be a significant distance away from the Bay Trail spine and it is not anticipated to become a conflict. However, if at any time it becomes a conflict whereby public health safety or welfare is threatened, then the land managers may opt to close segments of the trail during hunting season. These closures would be short term and of short duration and are not anticipated to limit public access such that "maximum feasible public access" would not be achieved.
- BCDC-9: Human disturbance of nesting birds can increase predation by drawing adult birds away from the nest, thus exposing eggs or chicks to predators; flushing chicks from cover; and by creating trails to or near birds' nests, thus leading predators closer to nests. SBSP Impact 3.6-18 in Section 3.6, Biological Resources, under the subheading Potential SBSP Restoration Project Effects has been revised as follows:

Increased recreational use and the maintenance of trails and recreational facilities have the potential to disturb wildlife, trample vegetation, decrease nesting success, increase predation, <u>increase the introduction of non-native species</u>, and decrease habitat quality (*e.g.*, see Korschgen and Dahlgren [1992] for a summary of the effects of human disturbance on waterfowl).

BCDC-10: A consistency review of the proposed Project with the recreation policies of the Bay Plan has been performed and a summary of this has been added to a footnote in Table 3.7-1 Regional Public Access and Recreational Facilities.

2.2.3 Organizations

Comments from organizations and the responses to those comments are presented in this section.

Message-Id: <<u>20070326231400.B39A62400574@mail.sfei.org</u>> Date: Mon, 26 Mar 2007 15:14:00 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Russ Last Name: Robinson Organization: Recreational Boaters of California Street Address: 10825 W. Estates Dr. Street Address2: City: Cupertino State: CA Zip Code: 95014 Country: Email: russ1011@ix.netcom.com

Subject(s) of question or comment: EIR;

Question or Comment:

As a stakeholder in the project and a long time advocate for the South Bay I have participated in the process leading up to this Draft EIR. A great deal of discussion has taken place and most interested parties have had an oportunity to present their views. In addition certain ponds have been returned to tidal habitat. There have been mixed reviews on these actions but by and large the results have been positive. Waterfoul have returned to the South Bay in huge numbers and in addition, what is not widely know except to the fishermen, the saltwater fishery is beginning to improve.

The South Bay for too long has been allowed to become a fresh water bay due to the excessive sewage water treatment plants in this area. Restoring the salt ponds to tidal action can only improve this sirtuation.

It is therefore with this in mind that I recommend that we move toward the 90% goal of returning the ponds to tidal action.

Russ Robinson Director and Past President Recreational Boaters of California and Staff Commodore South Bay Yacht Club--Alviso

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

RBC-1

Response to Recreational Boaters of California

RBC-1: Comment acknowledged. The comment expresses support of Alternative C and does not address the adequacy of the EIS/R.

EBBIN MOSER+SKAGGS LLP environmental and natural resources law and stratecy

April 10, 2007

Via Facsimile and Regular Mail

Clyde Morris **Refuge Manager** U.S. Fish and Wildlife Service Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Avenue, Newark, California 94560

Yvonne Le Tellier Project Manager U.S. Army Corps of Engineers 1455 Market Street San Francisco, California 94103

John Krause California Department of Fish and Game **Region 3 Headquarters** P.O. Box 47 Yountville, California 94599

Request for Extension of Time to File Comments on the March 2007 Draft Re: Environmental Impact Statement/Environmental Impact Report for the South Bay Salt Pond Restoration Project

Dear Messrs. Morris and Krause and Ms. Le Tellier:

We are writing on behalf of the Pacific Gas and Electric Company ("PG&E") to request a 30-day extension of time to file comments in response to the March 9, 2007 Federal Register notice and request for comments on the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) for the proposed "South Bay Salt Pond Restoration Project." The comment period is currently scheduled to close on April 23, 2007.

We are requesting an extension of time for comments due to the length and breadth of the DEIS/EIR and its appendices, and the highly complex issues associated with the potential impacts to existing utility infrastructure located in the proposed restoration areas. These issues span multiple scientific and legal disciplines. Consequently, the evaluation of those issues and the preparation of comments involves close coordination between a wide range of personnel within PG&E, and a significant commitment of time and resources. A brief extension of the comment period would

550 Montgomery Street, Suite 900 San Francisco, California 94111 E40NE 415 362 5050 TAX 415 391 2779

PGE1-1

619-858-4710

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enable PG&E to more adequately evaluate and comment on the important issues raised in the DEIS/EIR. Thank you for considering this request and we look forward to hearing from you soon.

PGE1-1 continued

Sincerely, Marc Ebbin

- 2 -

Response to PG&E

PGE1-1: The commenter requested a 30-day extension to review and file comments on the public draft of the EIS/R, given the length of the document and complexity of issues. A 10-day extension was granted.

PGE2



Diane Ross-Leech Manager Environmental Affairs 77 Beale Street, Room 2427C San Francisco, CA 94105

Mailing Address Mail Code B24A Pacific Gas and Electric Company P.O. Box 770000 San Francisco, CA 94177

415.973.5696 Internal: 223.5696 Fax: 415.973.9201

Sent via Fax and U.S. Mail

May 3, 2007

Steve Ritchie, Executive Project Manager California Coastal Conservancy 1330 Broadway, 11th Floor Oakland, CA 94612

RE: South Bay Salt Pond (SBSP) Restoration Project (Project) Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR)

Dear Mr. Ritchie,

Thank you for the opportunity to review and provide comments on the SBSP Restoration Project DEIS/EIR. Pacific Gas and Electric Company (PG&E) continues to support the overall goals of this Project. Nevertheless, as PG&E has advised you in letters dated August 4, 2004 and January 20, 2006 and in detailed comments submitted December 5, 2006, flooding the former salt ponds within the Project boundary will cause considerable damage to the electrical power lines located in former salt ponds surrounding the Bay – facilities that have been in place for nearly a century.

PG&E has fifteen electric transmission circuits (approximately 25 circuit miles) and nearly 200 towers and poles in the Project area. These circuits provide power to hundreds of thousands of residents in the South Bay and Peninsula area, as well as numerous high-technology companies in Silicon Valley including Applied Materials, Advanced Micro Devices, Oracle, NASA-Ames and Google. Protecting these circuits and supporting structures is essential. In addition, flooding the former salt ponds, breaching levees, eliminating levee roads, and changing the biological setting will destroy or restrict existing access to towers and will create an environment that could inhibit future repair and maintenance needs.

I. Introduction

PG&E appreciates the DEIS/EIR's acknowledgement that flooding the existing ponds will impact these essential facilities, but we believe that the DEIS/EIR falls far short of providing a full, realistic assessment of such impacts, or concrete solutions to mitigate those impacts. The impacts are not speculative, nor are the solutions. PG&E wishes to work with you toward meaningfully addressing these critical issues. This Project and the Bay Area's electrical system can co-exist, but only though creation of a workable framework that ensures protection of the electrical system along with creation of expanded habitats.

For purposes of this DEIS/EIR, we must set aside the issue over who will pay the costs of repairing and protecting these electrical facilities and access-ways. Regardless of who will pay

these costs, we need an adequate DEIS/EIR that fully analyzes all foreseeable impacts of the Project now – and mitigates them now to the fullest extent feasible – to prevent the need for costly subsequent environmental reviews that will otherwise be necessary. PG&E anticipates that it will need to modify and strengthen tower foundations to protect against rising water levels, raise conductors to maintain safe ground clearances, rebuild boardwalks, and even relocate facilities within the ponds to allow access. Permits will be required for this initial work, as well as additional permits to perform future maintenance in newly-created sensitive species habitats. The DEIS/EIR for this Project should provide the environmental review for these directly-foreseeable actions so that the cost of piecemeal future reviews and associated delays are avoided.

To that end, not only should the DEIS/EIR adequately address the direct and indirect Project impacts to PG&E's transmission facilities and ensure that the existing access is preserved, but the lead agencies should also agree on a permitting strategy for the foreseeable maintenance and repair work that will be necessary going forward, including the issuance of incidental take permits for state and federally listed species. PG&E is not a Project proponent, yet the vaguely-defined "mitigation" cited by the DEIS/EIR to reduce impacts on electrical facilities is not imposed on Project proponents, but on PG&E – *a third party impacted by the Project*. The DEIS/EIR then relies on PG&E's future "mitigation" to reduce impacts to less than significant levels. Neither the California Environmental Quality Act (CEQA) nor the National Environmental Protection Act (NEPA) permit lead agencies to impose mitigation on third parties or assess impacts in this way.

The lack of specificity in the impact analysis, and the vague mitigation measures described in the DEIS/EIR, hamper meaningful public comment and fail to provide the requisite "hard look" at the project's impacts. The environmental review process for this project would greatly benefit from substantial revisions to the DEIS/EIR and recirculation for additional public comment.¹

II. Comments To The DEIS/EIR

In this section, PG&E identifies three major issue areas where the DEIS/EIR is deficient and requires additional analysis, as described below. In addition to comments on these issues, PG&E provides additional comments and some recommendations for specific language changes on those issues in Table 1: Specific Comments and Requested Revisions, attached as Exhibit A.

A. ACCESS TO PG&E'S FACILITIES REQUIRED FOR MAINTENANCE AND CONSTRUCTION ACTIVITIES: The DEIS/EIR severely understates Project impacts to PG&E's existing access, summarily concludes that such impacts will be mitigated through "coordination" and vaguely-defined solutions, and fails to specify how future access will be provided and how related permitting issues will be addressed – even within the project-level analysis.

Any increase in access restrictions to PG&E's existing facilities for routine, urgent, and emergency repairs – whether due to breaching of levees or berms, increased sensitive species habitat, public access, or other factors – is a significant impact. Not only is the DEIS/EIR

PGE2-1 continued

¹ See 40 C.F.R. § 1502.9(a); 14 CCR § 15088.5.

unclear about the extent to which the restoration activities would reduce PG&E's ability to access its facilities, the alternatives analyzed fail to demonstrate how potential effects to public utility facilities would be avoided, minimized, or mitigated. PG&E uses a variety of methods to access its facilities, including helicopters, boats, vehicles, and foot traffic. Different access methods are needed for different utility purposes. The DEIS/EIR must include concrete analysis that spells out the existing access to each support structure currently holding a transmission circuit, and feasible solutions for access to each structure if flooding or habitat restrictions eliminate the existing access.² Only with this analysis can the DEIS/EIR demonstrate whether the significance thresholds would be crossed and whether mitigation is available to reduce impacts to less than significant. PG&E can and will provide detailed information to support this analysis, and requests the opportunity to do so.

One foreseeable Project impact that is not adequately addressed in the DEIS/EIR is that PG&E will have more facilities to which access would be limited due to an increase in adjacent sensitive species habitat. In order to maintain service to its customers, PG&E may only be able remove portions of the electrical system from service at any given time to make necessary repairs. Because the Project may impose limits on the seasons during which access can take place, PG&E may have insufficient time to complete all of the necessary work on its facilities. Use of access points, levee roads, boardwalks, and helicopters may also be restricted if sensitive species begin to inhabit these areas. PG&E currently faces challenges in achieving all of its operations and maintenance work within the seasonal windows associated with listed species. The Project will further exasperate this situation and is likely to eliminate some of the current access options. The DEIS/EIR should address this impact, and require the lead agencies to ensure that PG&E can repair and maintain the electrical system as needed.

The DEIS/EIR summarily concludes that coordination between PG&E and the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) would render access impacts less than significant, but there is no evidence to support this assertion. While the DEIS/EIR states that the USFWS would continue to allow access for emergency repairs, there is no indication that CDFG would also continue to allow access for emergencies, and – more importantly – there is no enforceable requirement or written commitment by either agency to provide this type of access. Unenforceable mitigation is unreliable and cannot be considered to reduce Project impacts to less-than-significant levels. Specific mitigation measures should be added to provide for this commitment.

The DEIS/EIR should also address the potential scenario of an increased need outside of seasonal access limits for urgent (as distinct from emergency) access by PG&E to address maintenance activities necessary to maintain system reliability. Examples would include an increase in helicopter access needed to perform insulator washing due to bird contamination of insulators, boat and foot patrols needed to remedy problems from bird roosting or nesting materials, required timelines to make repairs due to bird electrocutions or collisions, and the need for urgent foundation and structure repairs due to changing tidal flow conditions. It is highly likely that these types of maintenance activities will be needed to prevent insulator failure and resultant electrical outages, and that they will occur outside of the seasonal access limits. To be legally adequate, this issue should be addressed in the DEIS/EIR.

PGE2-2 continued

PGE2-3

PGE2-4

² The Phase 1 Action, at the very least, should provide a project-level analysis of these impacts.

The DEIS/EIR also appears to imply that the significant impacts of the restoration Project would be minimized through upgrades to boardwalks, creation of alternative access routes, raising of facilities, or tower relocation. For instance, the DEIS/EIR states that the high ground surrounding the PG&E Ravenswood Substation "would potentially be raised as needed" (see Page 3.16-11). It is unclear if these measures are referenced as mitigation measures, as Project elements, or as conditions of approval. In any event, the Project description does not appear to require these measures, let alone indicate who would undertake them, where they would take place, what would trigger their implementation, or if they are even feasible. It is inappropriate to consider these uncertain measures in determining the significance of the proposed restoration Project's impacts.

On Page 3.16-11, the DEIS/EIR includes as mitigation a Habitat Conservation Plan (HCP) that PG&E is developing, subject to approval by USFWS and CDFG, for operation and maintenance activities within the nine Bay Area counties. This is not proper mitigation for Project impacts. First, as discussed above, PG&E is not a Project proponent – mitigation must be imposed on the *Project proponents* to mitigate the impacts of the Project they are proposing. Second, the HCP in question has not been completed, and no permit decisions have been made by USFWS or CDFG. There is no certainty regarding when – or if – that document will be approved. Finally, the HCP is intended to address routine maintenance and repair work under existing conditions, not under the major physical changes that will be caused by the Project.

In addition, PG&E requests that the DEIS/EIR address the following issues on the subject of access:

- Page 3.16-24 should be revised to provide that nesting islands should be located at least 100 feet away from PG&E's boardwalks to provide buffers that allow PG&E continued access to its facilities. Buffer distances should be based on minimizing impacts to nesting birds from helicopter flights over the line.
- Page 3.16-10 should be revised to address impacts associated with the potential inundation of existing boardwalks. Liquefaction may cause portions of the levees to settle below minimum elevations, allowing boardwalks to be overtopped. Corresponding ponds and areas may be flooded. The DEIS/EIR must provide for, and assess the impacts of, constructing new boardwalks to preserve existing access to structures. For example, at Page 3.16-24, the DEIS/EIR states: "Access to boardwalks located in the immediate vicinity of the intake and outtake canals or proposed levees affected would be replaced or relocated to allow continued access. Nesting islands would not be constructed immediately adjacent to the boardwalk that bisects Pond SF2. USFWS would coordinate with PG&E to ensure boardwalks are upgraded, if necessary, and foot access is maintained to the tower footings." The analysis of construction impacts related to upgrading the boardwalks is entirely omitted, permitting issues are not addressed, the existing level of access is not protected, and the measure appears to assume that PG&E, not a Project proponent, will upgrade the boardwalks. This ill-defined measure, improperly relying on third-party actions rather than legitimate mitigation, is far from sufficient to ensure that impacts will be less than significant.

PGE2-6

PGE2-7

PGE2-8

- Specific locations that have been identified as PG&E restringing access points are too limiting. Future projects or emergency conditions may require additional restringing locations other than those identified in the DEIS/EIR. The DEIS/EIR should recognize that additional locations may be needed, and spell out lead agency responsibilities to provide them.
- Sharing of levees and other access routes between PG&E and members of the public presents many complexities and may not always be feasible. On Page 3.16-11, the DEIS/EIR states that a portion of the PG&E access routes would be maintained as public trails, but no mitigation measure assigns responsibility to a Project proponent for maintenance of these accessways to ensure public safety with the increased intensity of use or to protect PG&E's existing level of use for heavy equipment and other access. The impacts of converting these access roads to public trails have not been fully evaluated, and feasible mitigation measures have not been developed to address these concerns.
- On Page 2-139, the DEIS/EIR states: "Pond SF2 restoration is not expected to affect PG&E access to the existing PG&E power towers because the restoration would not increase water levels in Pond SF-2." However, although Pond SF2 is a managed pond, there is no mitigation that prohibits fluctuations in water levels. Currently, the pond appears to be dry, so any water added to this pond would increase the level. There is no basis for concluding that existing access will not be compromised without an enforceable mitigation measure.
- In fact, the DEIS/EIR is internally inconsistent on that issue: on Page 2-136, the DEIS/EIR describes the management of Pond SF-2 as an opportunity to test different approaches. The water levels, island configurations, and bird nesting locations are therefore highly likely to change over time. These changes would very likely affect PG&E tower access and should be analyzed in the DEIS/EIR.

B. STRUCTURAL INTEGRITY/LINE CLEARANCE: The DEIS/EIR severely understates Project impacts to PG&E's structures, summarily concludes that such impacts will be mitigated through "coordination" and vaguely-defined solutions, and fails to specify how future construction, repair and maintenance will be accomplished and how related permitting issues will be addressed – even within the project-level analysis.

The DEIS/EIR must fully address any impacts to the structural integrity of PG&E's existing facilities and changes to the line clearance (the distance between the circuits and the ground or water) that would result from the Project due to changing water levels, breaching of levees or berms, construction of flood-control levees, and other factors. To reduce impacts caused by the Project, PG&E would likely need to reinforce, install, modify or improve its towers and poles to maintain their structural integrity and/or line clearance requirements. The DEIS/EIR should perform a more thorough analysis of the impacts, including construction impacts associated with repair and maintenance activities, an evaluation of the economic and technical feasibility of raising the lines and relocating the towers, plus an analysis of the impacts associated with placing the towers elsewhere inside or outside the Project area, to clearly demonstrate whether the significance thresholds are crossed.

PGE2-10

PGE2-11

PGE2-12

PGE2-13

On Pages 3.16-12 through 3.16-24, the DEIS/EIR cites two actions that would minimize clearance impacts: (1) coordinating with PG&E on raising lines or relocating towers, and (2) restrictions on boating. Neither is set out as a mitigation measure or supported by analysis. For example, on Page 3.16-13, the DEIS/EIR states: "In breached ponds where navigation is allowed by the landowning agencies and large channels form over time, restoration actions would be coordinated with PG&E to achieve the 47-foot line clearance if necessary. This would include raising or relocating towers as necessary." Rather than a vague statement that relies on coordination with PG&E and future actions by PG&E to ensure the significance thresholds are not crossed, the DEIS/EIR needs to require Project proponents to provide specific permitting authority to allow PG&E to move or reinforce towers, and do whatever other construction is necessary to continue providing safe, reliable electric service via the affected transmission system.	PGE2-15
As for boating restrictions, the DEIS/EIR is inconsistent as to whether USFWS and CDFG would limit boating to reduce the anticipated impacts. The DEIS/EIR does indicate boating access restrictions may be considered, but these should be required as specific mitigation measures, with assigned responsibility by a Project proponent, or they cannot be considered to mitigate significant impacts. In order to be legally adequate, the mitigation measures must identify who, what, when, why, where, and how.	PGE2-16
The DEIS/EIR observes that towers can be raised so that required clearances over the water can be maintained (see Page 3.16-16), but it does not analyze potential clearance height restrictions that may apply if PG&E's towers are required to be raised. If any of these towers is in proximity to an airport, such tower height restrictions might prevent correction of the impaired line to ground clearance. The DEIS/EIR also does not discuss the potentially significant effects of reduced clearance on human safety.	PGE2-17
The results of liquefaction, subsidence and slope failure of the levees (specifically the seaward side or outboard levees) will impact existing PG&E towers. The DEIS/EIR does not take into account the fact that the water level would be higher than the tower foundations due to historic ground subsidence (with respect to sea level). The DEIS/EIR also lacks a forecast of anticipated water level compared with current ground levels. A detailed survey is currently being conducted by PG&E on its existing infrastructure within the Project area to determine the current integrity status and foundation heights with respect to a water level benchmark. This information, which will be available in late summer, will provide a better understanding of the effect of rising water The DEIS/EIR should be revised to include and analyze this critical information.	1
The DEIS/EIR does not analyze the impacts associated with tidal action or bay mud levels. Because of the higher water levels in a pond or bay-like environment, the wind-generated waves are likely to have an erosive effect on foundations and tower supports at the base level. The tida activity would result in scrub and erosion at the foundations. In addition, the formation of new	

channels due to increases in tidal flow at or near the tower foundations could result in mud subsidence and foundation pile exposure. This exposure has been shown to cause rapid deterioration of wood piles from marine borers. PG&E's transmission tower pilings must

continue to be covered with mud to ensure that oxygenated water does not cause pile deterioration or degradation due to marine life such as marine borers.	PGE2-19 continued
Another subject not addressed in the DEIS/EIR is potential mercury contamination from necessary reinforcement work. Construction activities associated with replacement of transmission towers located in salt ponds may disturb mercury-contaminated soils and sediments, potentially exceeding water quality objectives and sediment quality guidelines for total mercury, and possibly leading to increases in bioaccumulation in the food web. The DEIS/EIR must identify mitigation measures for these potentially significant impacts. (Construction activities associated with replacement of transmission towers located in salt ponds may increase likelihood of impacts to water quality from other contaminants; however, the implementation of mitigation measure 3.4-5a appears to be feasible.)	PGE2-20
Not only do the environmental impacts of PG&E's future maintenance and repair work need to be fully evaluated and discussed, the DEIS/EIR should also include an analysis of the potential economic effect on PG&E's electric customers. These impacts would result from the physical impacts of access restrictions to its infrastructure, including costs related to both infrastructure and regulatory compliance. Economic and socioeconomic effects must be analyzed under NEPA and CEQA when such effects directly result from physical changes to the environment. The DEIS/EIR is legally inadequate unless the economic and socioeconomic effects of the project are also considered in determining the significance of the physical changes. ³	PGE2-21
PG&E also requests that the DEIS/EIR address the following issues related to structural integrity and clearance for Phase I activities, which are to be evaluated at a project-specific level:	
• PG&E will need current information on changing water levels within Pond A8S to assess impacts to the adjacent transmission facilities along the southern edge of A8S. The DEIS/EIR should clarify that the changing water levels at this location would be coordinated with PG&E, assign responsibility for that coordination, and require the issuance of necessary permits for the needed repairs.	PGE2-22
• In regards to Pond SF2, PG&E will need to review and provide input on the detailed engineering proposal for the northern canal for adjusting the water levels within the Managed Pond. PG&E will need to check conductor to ground clearances for all three transmission lines that cross the proposed northern canal. The DEIS/EIR should clarify that the changing water levels at this location will be coordinated with PG&E, assign responsibility for that coordination, and require the issuance of necessary permits for the needed repairs.	PGE2-23
C. DEFECTIVE "NO PROJECT" ALTERNATIVE: The DEIS/EIR fails to adequately identify and evaluate the "No Action / No Project" Alternative.	
The DEIS/EIR identifies Alternative A as the No Action Alternative; however, Alternative A does not in fact represent the No Action Alternative. Alternative A describes significant changes to the current direction and intensity of management by the USFWS and the CDFG. As such, Alternative A may constitute an additional restoration action alternative, but not the No Action	PGE2-24
³ 40 Code of Federal Regulations § 1508.14; 14 California Code of Regulations § 15131(b)	l

³ 40 Code of Federal Regulations § 1508.14; 14 California Code of Regulations § 15131(b)

Alternative. The DEIS/EIR's identification of Alternative A as the No Action Alternative does not comply with the requirements of NEPA and CEQA.	
Under NEPA, the No Action Alternative should be characterized as a continuation of the current management direction and intensity. Guidance from the Council on Environmental Quality (CEQ) regarding the No Action Alternative provides that "'no action' is 'no change' from current management direction or level of management intensity Therefore, the No Action Alternative may be thought of in terms of continuing with the present course of action until that action is changed." ⁴ The U.S. Department of the Interior's Departmental Manual (DM) follows CEQ's guidance, stating that the NEPA No Action Alternative means "no change from a current management direction or level of management intensity." ⁵	
By characterizing the No Action Alternative as gradual abandonment of levee maintenance, the actual effects of the other alternatives analyzed are muted because the no action conditions closely resemble what would occur under the proposed alternatives. As the courts have recognized, "[a] No Action Alternative in an EIS is meaningless if it assumes the existence of the very plan being proposed." ⁶	PGE2-24 continued
Like NEPA, CEQA requires an EIR to identify a "No Project" alternative along with an analysis of the impacts of that alternative. ⁷ When the proposed project involves changes to existing plans, policies, or ongoing operations, the No Action Alternative must reflect continuation of the existing plans, policies, or operations. An accurate No Action Alternative is critical to allowing the agencies and the public to compare the impacts of a proposed restoration project to the impacts associated with taking no action. In the case of the SBSP Restoration Project DEIS/EIR, the comparison results in an analysis that is skewed because the No Action Alternative actually involves significant actions that have effects similar to those identified under the proposed restoration action alternatives. In fact, the DEIS/EIR acknowledges that the Initial Stewardship Plan (ISP) currently governs the operation and maintenance of the pond and levee system. The USFWS and the CDFG are currently committed to maintaining the ponds and levees and repairing any breaches to prevent unintended flooding. This maintenance represents the true No Action Alternative.	
The DEIS/EIR acknowledges at one point that "[t]he ISP could be completed and extended as a long-term management alternative," but also inexplicably assumes that future funding would be insufficient to support current levels of maintenance and repair. This assumption is not analyzed or supported by information in the DEIS/EIR. The DEIS/EIR simply states that the No Action Alternative "is based on the professional judgment of the landowners and Project planners with respect to future levels of funding." The DEIS/EIR fails to describe in sufficient detail each agency's funding sources for current activities or the assumed limitations on such funding sources into the future. The DEIS/EIR also does not analyze why the funding that would presumably be available to implement Alternatives B and C would not be sufficient to conduct the langement and extended in the ISP.	

the levee maintenance described in the ISP. In addition, it is not clear that the public agencies

⁴ 46 Federal Registrar 18026, 18027 (March 23, 1981)
⁵ DM 4.10(A)(6)
⁶ Friends of Yosemite Valley v. Scarlett, 439 Federal Supplement 2d 1074, 1105 (E.D. Cal. 2006)
⁷ Title 14 California Code of Regulations Section 15126.6(e)

could, as a legal matter, simply allow the existing dikes to deteriorate and flood out existing facilities. As part of the analysis, the No Action Alternative should acknowledge and evaluate the agencies' legal obligations, pursuant to contracts or federal and state constitutional and common law, to avoid any actions that could threaten any of PG&E's utility infrastructure.

PGE2-24 continued

III. Conclusion

Thank you for your consideration of these comments. We look forward to working with you to address how to balance the continued protection of the Bay Area's electrical system with the expanded habitats created by the Project. Please contact me at (415) 973- 5696 or by email at dpr5@pge.com so that we can arrange a time for our respective teams to meet.

Sincerely,

Diane Ross-Leech Manager, Environmental Policy Pacific Gas and Electric Company

Enclosure Exhibit A

Cc: Yvonne LeTellier, US Army Corps of Engineers, 1455 Market Street, SF, CA 94103 Clyde Morris, USFWS, Don Edwards SF Bay NWR, 9500 Thorton Ave., Newark, CA 94560 John Krause, CDF&G, PO Box 47, Yountville, CA 94599

Revisions
Requested
Comments and
1: Specific
Table

	_	PGE2-	PGE2
Specific Revision Requested	Revised Language	The Phase 1 actions are subject to the laws and regulations of the land- owning agencies, CDFG and USFWS, as well as the Bay Conservation and Development Commission (BCDC), and other regulatory agencies, and public utilities, including PG&E. The actions are also subject to the restrictions in the public utility easements owned by PG&E.	Regular forager (on other birds) in the study area, primarily during the migration and winter. Does not breed in the study area. <i>One breeding pair nested</i> <i>within the study area in</i> 2006.
Specific Revi	Existing Language	The Phase 1 actions are subject to the laws and regulations of the land- owning agencies CDFG and USFWS as well as the Bay Conservation and Development Commission (BCDC) and other regulatory agencies.	Regular forager (on other birds) in the study area, primarily during the migration and winter. Does not breed in the study area.
Summary of Comment or Requested Revision		The DEIS/EIR states that the Phase 1 actions are subject to the laws and regulations of the land- owning agencies. However, PG&E also owns easements for the transmission lines and should be included in this list.	As described on page 3.6- 30, American peregrine falcons nested on an electric transmission tower in the Alviso pond complex in 2006.
Paragraph#	or Table	2	Table 3.6-4
	Page #	2-82	3.6-38
	Section Name	Description of Alternatives	Biological Resources
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South Bay Salt Pond Restoration Project DEIS/EIR Pacific Gas and Electric Company Comments

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Specific Revision Requested	Revised Language	A PG&E overhead power	transmission line enters the	northeast corner of the Eden	Landing pond complex and	extends southeast over the	Eden Landing Ecological	Reserve Restoration Project	tidal restoration site and	Pond E6A. After crossing	the bay parallel to the San	Mateo Bridge, another	PG&E overhead power	transmission line crosses	Pond E10 and E11 before	continuing east.
Specific Revis	Existing Language	A PG&E overhead power	transmission line enters the	northeast corner of the	Eden Landing pond	complex and extends	southeast over the Eden	Landing Ecological	Reserve Restoration	Project tidal restoration	site and Pond E6A.					
Summary of Comment or	Requested Revision	The DEIS/EIR does not	mention that the	transmission line passes	through ponds E10 and E11.											
Paragranh #	or Table	4														
	Page #	3.16-2	2													
	Section Name Page #	Utilities														
	Comme nt #	3.														



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	_	PGE2-28	PGE2-29
Specific Revision Requested	Revised Language	One line enters Pond A6 from the northeast and the other forms a semi-circle around the Project perimeter, crossing over Ponds A22, and A23, and A18 and extending west and then north to reconvene with the first at Pond A3N as it extends south. It then continues west and north across Pond A3W to reconvene with the first at Pond A3N. From here, the transmission lines extend westward through Ponds AB2, AB1, and A2W and then exits the pond complex at Pond A1.	General Order 95 states that Rule 11 can be applied to areas where sailboating is prohibited and where other boating activities are allowed. <i>In addition</i> , <i>utilities may require</i> <i>different clearances if</i> <i>warranted by site-specific</i> <i>conditions.</i>
Specific Revi	Existing Language	One line enters Pond A6 from the northeast and the other forms a semi-circle around the Project perimeter, crossing over Ponds A22 and A23 and extending south, west and then north to reconvene with the first at Pond A3N. From here, the transmission lines extend westward through Ponds AB1 and A2W and then exit the pond complex at A1.	General Order 95 states that Rule 11 can be applied to areas where sailboating is prohibited and where other boating activities are allowed.
Summary of Comment or	Requested Revision	The DEIS/EIR does not mention that the transmission line passes through ponds A18, A3W, and AB2.	In addition to following the requirements outlined in General Order 95, PG&E sometimes requires additional clearances depending on site-specific conditions. This information should be added.
Paraøranh #	or Table	8	9
	Page #	3.16-4	3.16-6
	Section Name	Utilities	Utilities
Specific	Comme nt #	4	Ś



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	_	PGE2-30	PGE2-31
Specific Revision Requested	Revised Language	Substantially Reduce the ability to access PG&E towers, stations, or electrical transmission lines	Reduce the structural integrity of the marine foundations that support PG&E towers PG&E's utility infrastructure
Specific Revi	Existing Language	Substantially reduce the ability to access PG&E towers, stations, or electrical transmission lines	Reduce the structural integrity of the marine foundations that support PG&E towers
Summary of Comment or	Requested Revision	The word "substantially" should be deleted from the beginning of the criterion. This qualifier is inappropriate and unnecessary because it suggests that only a "substantial" reduction would lead to a finding of significance. The level of impact's significance should be evaluated rather than artificially limited by the wording of the criterion. The inclusion of this qualifier is also inconsistent with the wording of the other two criteria.	The second criterion is overly narrow because it is limited to the "marine foundations that support PG&E towers." In fact, the project not only has the project not only has the potential to damage portions of the towers other than the marine foundation; it also has the potential to damage other PG&E infrastructure.
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		_	PGE2-32	PGE2-33
	Specific Revision Requested	Revised Language	Reduce clearance between waterways and electrical transmission lines such that navigation of watercraft, <i>line integrity, public safety,</i> <i>or regulatory compliance</i> was substantially affected	SBSP Impact 3.16-1: Reduced access ability to access PG&E towers, and stations due to increased abundance of threatened and endangered species, or electrical transmission lines.
*** **	Specific Revi	Existing Language	Reduce clearance between waterways and electrical transmission lines such that navigation of watercraft was substantially affected	SBSP Impact 3.16-1: Reduced access to PG&E towers and stations due to increased abundance of threatened and endangered species.
	Summary of Comment or	Requested Revision	The third criterion is overly narrow as drafted because it is limited to a reduction in clearance "such that navigation of watercraft was substantially affected." A reduction in clearance could be a significant impact for reasons other than navigation, such as line integrity, public safety, and regulatory compliance. Also, the word "substantially" is an inappropriate and unnecessary qualifier as discussed above under comment $\#7$.	The heading should be changed to mirror the significance criterion. As the text of the introduction makes clear, there will be reduced access from physical changes (flooding of levees and boardwalks) as well as biological changes (the increased presence of endangered or threatened species).
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South Bay Salt Pond Restoration Project DEIS/EIR Pacific Gas and Electric Company Comments

South Bay Salt Pond Restoration Project DEIS/EIR Pacific Gas and Electric Company Comments

	_	PGE2-34	PGE2-35	PGE2-36						
Specific Revision Requested	Revised Language	The Alviso pond complex and the Ravenswood Substation are is the only pond complex areas where vehicular access for heavy equipment is required along the existing pond levee system for regular maintenance and emergency repairs.	The levees identified with input from PG&E as highest priority for maintenance would be repaired, but the remaining levees would be allowed to erode, re-introducing tidal inundation to some ponds.	In the Eden Landing and Alviso pond complexes, Ponds E6A, and A3W, <i>E10</i> , <i>and E11</i> , which contain PG&E towers and boardwalk access, would remain managed ponds, and thus physical access would be unaffected.						
Specific Revis	Existing Language	The Alviso pond complex is the only pond complex where vehicular access for heavy equipment is required along the existing pond levee system for regular maintenance and emergency repairs.	The levees identified as highest priority for maintenance would be repaired, but the remaining levees would be allowed to erode, re-introducing tidal inundation to some ponds.	In the Eden Landing and Alviso pond complexes, Ponds E6A and A3W, which contain PG&E towers and boardwalk access, would remain managed ponds, and thus physical access would be unaffected.						
Common of Common on	Requested Revision	The DEIS/EIR states that heavy equipment access is only required in the Alviso pond areas; however, heavy equipment access is also required to access the Ravenswood Substation.	The DEIS/EIR is missing input from PG&E on the priority levels for the levees in Alternative A.	The DEIS/EIR does not include Ponds E10 and E11 as managed ponds. PG&E's towers also cross through these ponds.						
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	Page #	3.16- 10	3.16- 11	3.16- 11						
	Section Name	Utilities	Utilities	Utilities						
Specific	Comme nt#	10.	11.	12.						



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South Bay Salt Pond Restoration Project DEIS/EIR	ific Gas and Electric Company Comments
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	_	PGE2-37	PGE2-38	PGE2-39	PGE2-40
Specific Revision Requested	Revised Language	USFWS and CDFG would have the ability to restrict or limit <i>public</i> boating within restored areas.	Although clearance below electrical transmission lines within breached ponds may not meet the 47-foot requirement in some instances, USFWS and CDFG would prohibit <i>public</i> boating in the newly opened channels as needed.	Over the short and long term, USFWS and CDFG would have the ability to limit <i>public</i> boating access within the restoring and restored ponds either seasonally or entirely.	Under Alternative B, long term sea level rise, <i>in</i> <i>addition to the SBSP</i> <i>Restoration Project</i> , would result in line clearance reductions over the tidal sloughs by approximately 0.5 foot (see Appendix J).
Specific Revi	Existing Language	USFWS and CDFG would have the ability to restrict or limit boating within restored areas.	Although clearance below electrical transmission lines within breached ponds may not meet the 47-foot requirement in some instances, USFWS and CDFG would prohibit boating in the newly opened channels as needed.	Over the short and long term, USFWS and CDFG would have the ability to limit boating access within the restoring and restored ponds either seasonally or entirely.	Under Alternative B, long term sea level rise would result in line clearance reductions over the tidal sloughs by approximately 0.5 foot (see Appendix J).
Summary of Comment or	Requested Revision	The DEIS/EIR states that the USFWS and CDFG have the ability to restrict or limit boat access. This should not apply to PG&E maintenance			The DEIS/EIR states that reduction in waterway clearance is not a result of the SBSP Restoration Project, but is a result of sea level rise. However, if levees that are currently in use to hold back the bay
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	Page #	3.16- 12	3.16- 13	3.16- 13	3.16- 13
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	PGE2-40 continued									PGE2-41								PGE2-42				
Specific Revision Requested	Revised Language	As with Alternatives A and D motor levels in clouchs	b, water reversion and stoughts are expected to increase in	these regions due to sea	level rise; these reductions	in line clearance are not,	therefore, are only partially	a result of the SBSP	Restoration Project.	Unplanned levee breaches	would reduce vehicular	access around the perimeter	of Pond A6, but this is not	essential since the primary	location for power line	restringing is in Pond A3W.		Vehicle access to Pond A6	structures is not essential	since the primary location	for power line restringing is	in Pond A3W.
Specific Revi	Existing Language	As with Alternatives A and D motor locale is clouche	b, water revers in stoughs are expected to increase in	these regions due to sea	level rise; these reductions	in line clearance are not a	result of the SBSP	Restoration Project.		Unplanned levee breaches	would reduce vehicular	access around the	perimeter of Pond A6, but	this is not essential since	the primary location for	power line restringing is in	Pond A3W.	Vehicle access to Pond A6	structures is not essential	since the primary location	for power line restringing	is in Pond A3W.
Summary of Comment or Requested Revision		waters are breached as part	ot use project, use project would be resulting, at least	in part, in the reduction in	line clearance. The	discussion should be revised	as suggested.			PG&E would like to	maintain access to Pond A6.	The DEIS/EIR should	provide a solution to allow	PG&E vehicles to cross over	the levee breeches that will	be opened. Pond A3W is not	the primary location for	power line restringing.	Ponds A3N, A2W, A19 and	A22 are also used.		
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Response to PG&E

PGE2-1: Impacts associated with SBSP alternatives are discussed generally, as appropriate given the programmatic nature of coverage. In the absence of detailed information, and as appropriate given the programmatic nature of the coverage of alternatives, the EIS/R discusses the types of potential upgrades that may be necessary to avoid disruptions to PG&E's facilities. Where specific information is available relative to Phase 1 actions, these data have been factored into the impact assessment of Phase 1 actions. As information regarding transmission facilities within specific ponds becomes available, this will be incorporated into future project-level designs.

Modifications to PG&E's infrastructure or operations and maintenance that are caused by the Project are considered elements of the Project. These modifications are incorporated into Chapter 2, Description of Alternatives, in the EIS/R and will be incorporated into future project-level analyses. Sections 2.4.3 and 2.4.4 have been revised to include the following in the descriptions of long-term Alternatives B and C.

Each phase of restoration would analyze potential impacts to PG&E infrastructure and to PG&E's access to perform O&M activities. On a pondby-pond basis, the Project proponents would be responsible for ensuring that any changes to PG&E infrastructure (such as raising, replacing or relocating boardwalks, reinforcing or replacing tower footings, or raising towers or transmission lines) would be implemented as part of the implementation of each phase of restoration. The Project proponents will evaluate the costs and benefits of restoring ponds where restoration would significantly affect utility infrastructure on a project-by-project basis. In addition, where a project phase would eliminate or substantially alter a current access route across either USFWS or CDFG land to PG&E's facilities, the Project would provide alternative, equivalent access. Finally, where the numbers of individuals or species or habitat increase as a result of the Project, USFWS and CDFG will work collaboratively with PG&E to develop appropriate measures that will avoid or minimize impact to threatened or endangered species. These measures will be documented (*i.e.* a special use permit) and will be part of the Section 7 consultation under the ESA. To avoid or minimize impacts to PG&E facilities and access, the Project will involve PG&E at the earliest practicable date in planning and design of restoration actions at the project level.

The EIS/R does not explicit assign responsibility for imposing mitigation on PG&E, but the discussions of Impacts 3.16-1, 3.16-2, and 3.16-3 have been revised (see paragraph below for the modifications made to 3.16-1 as an example) to avoid implying that the required specific improvements would be imposed on a third party. The Project proponents would ensure that any improvements or modifications required to reduce

impacts below a level of significance are completed prior to implementation of restoration actions.

The restoration would be designed to minimize <u>or eliminate</u> impacts to PG&E access, which may require upgrades to existing boardwalks, the creation of additional access routes, or potential tower relocations prior to breaching. <u>On a pond-by-pond basis, the Project proponents would ensure</u> that any of these potential improvements would be implemented as part of each phase of restoration actions. As the Project adaptively progresses along the staircase of tidal restoration, implementation of restoration actions at specific ponds may differ from the long-term alternatives identified in the EIS/R pending resolution of potential improvements required to protect PG&E facilities within the former salt ponds. To avoid or minimize impacts to PG&E facilities and access to those facilities for maintenance and repair, the Project will involve PG&E at the earliest practicable date in planning and design of restoration actions at the project level.

As with other construction activities associated with implementation of Phase 1 or future actions, temporary impacts to existing biological habitats related to improvements to electrical transmission facilities within the former salt ponds would be considered small relative to the beneficial impacts of the overall restoration program (*i.e.*, specific restoration actions would not be pursued if the cumulative biological impacts were not considered beneficial). Please refer to the response to Comment PGE2-7 for a discussion of how USFWS will formalize current best management practices and the relationship to the PG&E Habitat Conservation Plan (HCP).

The lead agencies reviewed the comments received during the public comment period with respect to the potential for recirculation under NEPA and CEQA. Based on this review, the lead agencies have determined that the EIS/R complies with NEPA and CEQA guidelines and as thus, recirculation is not warranted.

PGE2-2: The Alternative Development Framework discussed in Section 2.2.1 considered PG&E's need to access specific locations for re-conductoring (*e.g.*, the southeast levee of Pond A3N, adjacent to Guadalupe Slough; and the eastern levee of Pond A2W, adjacent to Stevens Creek) as programmatic restoration alternatives were formulated. Please refer to the response to Comment PGE2-1 for additional discussion of level of detail included the programmatic evaluation of the long-term alternatives. The EIS/R has been revised to include a discussion of specific access methods for each PG&E facility at every Phase 1 location, and how access is expected to change (see Phase 1 descriptions of Ponds A8, A6, and SF2 in Section 2.5).

Please refer to the response to Comment PGE2-30 for a discussion of threshold of significance used in the analysis of access impacts.

Please refer to the response to Comment PGE2-1 for a discussion of potential structural modifications that would reduce impacts to a less-than-significant value and how these modifications would be integrated with Project design and implementation.

PGE2-3: SBSP Impact 3.16-1 acknowledges that access to PG&E transmission facilities within the former salt ponds may be limited to certain seasons due to the presence of restored sensitive species habitat. The method of access may change depending on the specific facility, but in that event equivalent access will be provided. SBSP Impact 3.16-1 in Section 3.16, Utilities has been revised to include this discussion as follows:

Restoration of tidal habitat would affect access to PG&E facilities within the ponds for routine operations and maintenance due to physical and biological changes. Although heavy equipment access points would be largely unaffected, access to other locations currently provided by perimeter or internal levees would be reduced by tidal inundation and require alternative methods to reach boardwalks. Where the method of access is impacted by breached ponds, alternative equivalent access will be provided by the Project proponents.

PGE2-4: Under current practices, USFWS and PG&E collaborate effectively to provide for routine operation and maintenance as well as emergency repair to transmission towers and lines and related facilities that are adjacent to sensitive species habitat. In addition to its facilities within the Project Area, PG&E operates and maintains transmission towers in tidal marshes at other locations on the Refuge. Over recent years, PG&E and USFWS have developed best management practices (BMPs) that have reduced or eliminated impacts to threatened and endangered species while allowing PG&E to meet its operation and maintenance needs at its facilities throughout the Refuge. An example of this collaborative approach to providing adequate operation and maintenance access is the collection of transmission towers at Bair Island, which are located adjacent to sensitive species habitat. During the winter of 2006, the Refuge provided PG&E with access to conduct emergency repairs to one of these towers which had collapsed during a windstorm. Please refer to response to Comment PGE2-7 for a discussion of how USFWS will formalize these BMPs to avoid or minimize Project-related impacts to PG&E's operation and maintenance, whether emergency or routine.

SBSP Impact 3.16-1 in Section 3.16, Utilities, has been revised as follows to specify that CDFG would also provide emergency access to PG&E facilities:

<u>The</u> Presence of <u>threatened or endangered species</u> would restrict access during certain periods or require alternative methods of access, but USFWS <u>and CDFG</u> would continue to allow access for emergency repairs.

PGE2-5: SBSP Impact 3.16-1 has been revised to include access methods and needs described by the commenter.

PGE2-6: The potential improvements to PG&E electrical transmission facilities required to implement Phase 1 or future actions are considered Project elements for the purposes of the EIS/R. Section 2.5 of the EIS/R has been revised to include a discussion of potential modifications to PG&E facilities at the Phase 1 locations. Regarding the potential need to raise existing high ground around the PG&E Ravenswood Substation, this will depend on the timing of tidal restoration at Pond R2, the future expected sea level at the time of that action, and required free board. Since restoration of Pond R2 is not a Phase 1 action, the impacts to the Ravenswood Substation are treated programmatically. Subsequent environmental review will assess the impacts to this facility at the project level.

Please refer to the response to Comment PGE2-1 for a discussion of how potential modifications to PG&E facilities would be integrated into Project design and implementation.

PGE2-7: The Project proponents agree that the HCP cannot serve as mitigation for Project-induced impacts. The EIS/R has been revised (see below) to avoid implying that the HCP would serve as mitigation, and to describe how USFWS will document existing BMPs to avoid significantly reducing PG&E's access to its facilities. Please refer to the response to Comment PGE2-1 for discussion of construction-related impacts. SBSP Impact 3.16-1 in Section 3.16, Utilities, has been revised as follows:

USFWS and PG&E have developed best management practices (BMPs) that have reduced or eliminated impacts to threatened or endangered species while allowing PG&E to meet its operation and maintenance needs in a practical manner throughout the Refuge. Collaborating with PG&E, the Refuge will document these BMPs in special use permits ("SUPs" issued by USFWS) in order to avoid and minimize Project-related impacts to PG&E's operation and maintenance, whether emergency or routine. Each SUP or modification to an existing SUP will help document what BMPs are necessary and which are a result of the Project. The SUPs will be included in the federal ESA Section 7 consultation for the Project. In this way, PG&E will receive legal assurances that its operation and maintenance activities are in compliance. Initially, USFWS will issue a SUP to PG&E for its facilities in the Phase 1 ponds -- A6 and SF2 -- that will include existing BMPs and any new requirements or modifications caused by the Project. USFWS will also issue a SUP (or as part of the one discussed above) for PG&E facilities on the Refuge outside of the Phase 1 ponds. This second SUP will serve as a reference point to understand how, or if, the Project may have any impact on PG&E during future phases of the Project.

<u>Separate from the SBSP Restoration Project, PG&E is currently in the</u> process of developing a Habitat Conservation Plan (HCP) under the federal ESA that would provide a regional framework for permitting PG&E's routine operation and maintenance activities as well as minor new construction for the nine Bay Area counties over the next 30 years. Objectives of the HCP are to: identify avoidance and minimization measures (AMM) that would reduce potential effects on wildlife and plant species; identify a range of approaches to compensate for 'take' of species; and provide an institutional structure for the training on AMM and coordination of compensation across the San Francisco Bay Area. The BMPs developed for PG&E's facilities on the Refuge (both the current BMPs and any additional ones needed because of changes caused by the Project) could be incorporated into the HCP once it is finalized and implemented.

- PGE2-8: Under existing conditions, Pond SF2 provides snowy plover nesting habitat within 100 ft of boardwalks due to seasonal ponding and drying. The PG&E boardwalk would be located within the western cell of the Phase 1 action Pond SF2 restoration design (see Section 2.5 of the EIS/R) and this cell would be operated in a manner similar to existing conditions to provide snowy plover nesting and breeding habitat in the summer. Therefore, the proposed Phase 1 action at Pond SF2 would not be expected to significantly alter access from existing, or baseline conditions. 'Buffer' distances are factored into the design of nesting islands in ponds that contain PG&E boardwalks.
- PGE2-9: Please refer to the response to Comment PGE2-1 for discussion of construction-related impacts and issues related to the entity responsible for improving the required facilities.
- PGE2-10: The land-based access locations identified in Alternatives B and C present the Project proponents' understanding of restringing location based on a meeting with PG&E staff engineers on August 23, 2006. These communications suggested that the perimeter levees access at Ponds R1 and A3N would be needed to pull lines unless towers are relocated to higher ground at the Ravenswood Substation. Note that Alternatives A, B and C proposed to maintain the perimeter levee of Pond A3N and other locations. Also, please see response to Comment PGE2-1 for discussion of early involvement of PG&E in Project planning and design.
- PGE2-11: The EIS/R has been revised (see below) to limit public access, as required for public safety, along trails used also for PG&E access. Note that under baseline conditions, USFWS and CDFG do not maintain salt pond levees with the expressed intent of providing access to heavy equipment (*e.g.*, PG&E contractors improved portions of the salt pond levees recently so that heavy vehicle equipment could access Pond A6 for construction of new towers). Therefore, mitigation to provide maintenance of these access routes is not required. SBSP Impact 3.16-1 in Section 3.16, Utilities, has been revised as follows:

Parts of the levees currently supporting vehicular access to PG&E's restringing access points in Ponds A2W and A3N (Figures 3.16-1 through 3.16-3) would be maintained as public access trails or otherwise improved as

necessary. <u>If required to maintain public safety</u>, <u>USFWS and CDFG would</u> <u>suspend public access as needed along trails during periods of heavy vehicle</u> <u>use by PG&E crews</u>.

PGE2-12: The commenter is correct that, under baseline conditions, evaporation of rainwater results in Pond SF2 being dry much of the summer and fall. Section 2.5 of the EIS/R has been revised to correct this error (see below). As noted in Section 2.5, most of the PG&E boardwalk would be located in the western cell of the Pond SF2 restoration action. This cell would be operated in a manner similar to existing conditions to provide snowy plover nesting and breeding habitat in the summer. Therefore, any change in summer water surface elevations from baseline summer conditions would be minimal. Outside of the snowy plover nesting and breeding season (*e.g.*, in the winter), water levels in the western cell could be periodically raised to inundate the edges of the nesting islands as a vegetation management technique. Water levels may also be raised to manage the western cell for alternate bird use or habitat goals outside of the nesting season. Water levels would be similar to, or lower than, those described in the ISP.

The PG&E boardwalk along the edge of Pond SF2 would cross the intake canal. Since water surface elevations in the intake canal would be higher than water levels in the cells or outtake canal, there is the potential for the need to raise the boardwalk for this relatively small length. Please refer to the response to Comment PGE2-1 for a discussion of early PG&E involvement in design. Section 2.5.4 of the EIS/R, under the subheading Water Management has been revised as follows:

The western cell would be periodically or seasonally inundated for vegetation management and/or to manage the area for alternate bird use or habitat goals outside of the nesting season. Water levels would be similar to, or lower than, those described in the ISP.

For typical operations, target average water depths in the two eastern cells would be approximately six inches (15 cm), with some deeper and shallower areas and muted-tidal fluctuations of up to approximately 6 in. The typical operation and periodic or seasonal management of Pond SF2 would not substantially increase winter-time water levels in Pond SF2 relative to Cargill or proposed ISP operations (Life Science! 2003).

Section 2.5.4 of the EIS/R, under the subheading Infrastructure, has been revised as follows:

The Pond SF2 restoration is not expected to affect PG&E access to the existing PG&E power towers because the restoration would not increase water levels in Pond SF2. The existing PG&E power towers and most of the existing boardwalk would be located within the western cell, where the pond bed would remain dry during the nesting season as it does under existing

conditions. Up to 400 linear ft of the existing PG&E boardwalk may be modified to allow continued access across the proposed canal and ditch at the ends of the existing boardwalk within Pond SF2. Modifications may include raising, replacing, removing, and/or installing new sections of the boardwalk. Specifications for PG&E boardwalk modifications would be refined in the design phase in coordination with PG&E.

- PGE2-13: The ability to test various water depths and island configurations is built into the design of the Phase 1 action, specifically the variable bed topography of Pond SF2 which will provide a range of water depths for a fixed water surface elevation. See the response to Comment PGE2-12 for a discussion of impacts expected from the Phase 1 water management at Pond SF2. Future changes in water management will be constrained by the amount of freeboard between Phase 1 water levels and unimproved portions of the boardwalk and PG&E tower foundations.
- PGE2-14: Please refer to the response to Comment PGE2-1 for a discussion of how potential modifications to PG&E's facilities would be integrated into Project design and implementation.
- PGE2-15: As described in the response to Comment PGE2-1, the Project proponents will collaborate with PG&E early in planning and design in future phases of the Project to avoid and minimize clearance impacts. USFWS will continue to prohibit public boating within restored areas <u>except where it is expressly allowed for waterfowl hunting</u>, and CDFG will restrict public boating as needed in the Reserve. Where conductor lines do not meet applicable regulatory requirements for sailboating and the lines are not planned to be raised, restoration elements would be designed to physically block access to breached ponds. Proponents of the SBSP Restoration Project would evaluate the costs and benefits of restoring ponds where line clearances need to be raised because of Project actions on a project-by-project basis (*i.e.*, at each future phase of implementation).

Please refer to the response to Comment PGE2-1 for a discussion of construction related impacts associated with improvements to PG&E facilities and for a discussion of early PG&E involvement in planning and design. The programmatic analysis of SBSP Impact 3.16-2 has been revised as follows to reflect the possibility of physically blocking boating access to restored ponds under Alternatives B and C.

The potential for impacts would depend on existing line clearances, (some lines meet the 47 foot criterion without improvements), whether any lines would be raised to meet the required post-breach clearances, and whether public boating access would be restricted withing the restored marsh channels. USFWS and CDFG would continue to prohibit have the ability to restrict or limit public boating within restored areas except where it is expressly allowed for waterfowl hunting. CDFG would restrict or prohibit public boating within restored areas as necessary. Additionally, restoration

elements would be designed, to the extent practical, to physically block boating access to restored ponds where conductor line clearances to not meet regulatory requirements. Proponents of the SBSP Restoration Project would evaluate the costs and benefits of restoring ponds where line clearances need to be raised because of Project actions on a project-by-project basis (*i.e.*, at each future phase of implementation).

PGE2-16: Please refer to SBSP Impact 3.16-2 for a discussion of restrictions on public boating in breached ponds. The EIS/R has been revised as follows to make the discussion of Alternatives B and C more consistent with Alternative A, which explicitly states that boating would be limited as needed. SBSP Impact 3.16-2 in Section 3.16 of the EIS/R has been revised as follows:

Over the short and long term, USFWS and CDFG would <u>continue to have the</u> ability to limit <u>prohibit public</u> boating access within the <u>restoring and</u> restored <u>areasponds except where it is expressly allowed for waterfowl</u> <u>hunting either seasonally or entirely</u>. <u>CDFG would restrict or prohibit public</u> boating within restored areas as necessary. Additionally, where needed, restoration elements would be designed to physically block public boating access to restored ponds where conductor line clearances do not meet applicable regulatory requirements.

Also see the response to Comment PGE2-15.

- PGE2-17: The decision of whether or not to raise conductor lines will be informed by existing elevations of the lines relative to the expected tidal elevations, costs, potential impacts associated with construction activity, and other criteria such as height restrictions due to the proximity to airports. An evaluation of these trade-offs will be made on a pond-by-pond basis as part of the project-level planning process. As discussed under Phase 1 Impact 3.16-2, PG&E replaced the eleven existing transmission towers with nine new towers and reconductored two of the three transmission lines to protect its existing facilities in Pond A6,. In addition, PG&E has previously replaced its boardwalk that it uses to service the transmission towers and lines in Pond A6. As described in the response to Comment PGE2-1, the Project will collaborate with PG&E early in planning and design in future phases of the restoration to avoid and minimize clearance impacts.
- PGE2-18: Detailed assessments of changes to pond water levels will occur at the project-level, and the need to improve tower foundations will be determined at that time. Future restoration actions will include improvements to tower foundations as needed. In cases where these improvements are not made, either due to engineering or economic feasibility, restoration actions will not be implemented.

Appendix G-2 provides pond bed elevation data for each Phase 1 location with annotations of bay tidal datums. Anticipated changes to bay tidal datums under extreme

conditions (assuming no phasing) are provided in Appendix J (the Hydrodynamics Modeling Report). The potential for impacts related to unplanned levee failure on PG&E facilities is discussed in the programmatic evaluation of Alternative A for SBSP Impact 3.16-3.

Detailed survey information is expected to be collected by PG&E in 2007 and will be factored into the design of Phase 1 actions at Pond A6 and SF2 if made available to the Project. The Project will collect any supplemental survey information required to determine boardwalk elevations and tower foundation elevations in Pond SF2. This information will also be incorporated into the planning and design of future phases, including the data collected by PG&E if these data are made available. The Project anticipates that these data will be available as part of collaboration with PG&E in planning and design of future phases.

- PGE2-19: Please refer to SBSP Impact 3.16-3 for a discussion of changes to the structural integrity of tower foundations, specifically tidal scour and contact with marine water, with implementation of restoration actions. Also, please note that *net* sedimentation, not scour, is expected in breached ponds. However, as noted by Impact SBSP 3.16-3, there will be locations of localized scour along relict channels and where new marsh creeks form. Please refer to the response to Comment PGE2-1 for a discussion of early PG&E involvement in design.
- PGE2-20: Disturbance of mercury-contaminated soils as a result of construction related activities is addressed in the Adaptive Management Plan. This is discussed in detail under SBSP Impact 3.4-3. The triggers and adaptive management techniques developed the SBSP Restoration Project's Adaptive Management Plan would be accessible to anyone engaging in construction activities, including the commenter. It is expected that triggers and adaptive management techniques would be implemented through the normal Waste Discharge Requirements / 401 certification process affecting such projects. This should satisfy the mitigation measures requested by the commenter. Also, please refer to the response to Comment PGE2-1 for a discussion of early PG&E involvement in design of future phases.
- PGE2-21: Phase 1 actions and future phases of the SBSP Restoration Project would incorporate in their design elements such as the construction of levees to protect people and any modification of PG&E facilities that may be required to protect the integrity of their facilities. Evaluation of the economic effects of the Project on PG&E electric customers would not be necessary. Also, please refer to the response to Comment PGE2-1 for a discussion of early PG&E involvement in design of future phases.
- PGE2-22: Please note that the towers referenced by the commenter occur on the former SR 237 Landfill (*i.e.*, the Legacy Landfill), well above the influence of the highest tides. Other PG&E towers on the southern edge of Pond A8S occur on existing tidal marsh along the

fringe of Guadalupe Slough. The proposed Phase 1 action at Pond A8 will not affect these facilities.

- PGE2-23: The Project will share engineering information with PG&E relative to the anticipated water levels in the intake canal and interior cells. Our preliminary assessment is that the water surface elevation in the intake canal will be lower than ground elevations of SR 84. Based on conversations with PG&E staff, it is the understanding of the Project proponents that this is where the minimum conductor line elevation occurs presently. Also, please refer to the response to Comment PGE2-1 for a discussion of early PG&E involvement in design.
- PGE2-24: As stated in Section 2.4.2 of the EIS/R, the No Action Alternative is the most likely outcome in the absence of a long-term restoration plan. The No Action Alternative is based on the professional judgment of the Project proponents with respect to future levels of funding for land management, the expected lifetime of existing levees and hydraulic structures, and other factors that are inherently difficult to estimate over a 50-year period.

Section 2.4.2 of the EIS/R acknowledges that there are various ways that Alternative A could play out. Text has been added to Section 2.4.2 to elaborate on the range of possible Alternative A outcomes. Please see the response to Comment SCVWD-2 for these text revisions.

The commenter notes that, according to CEQA guidance, the No Action Alternative may be thought of in terms of continuing with the present course of action until that action is changed. Under the No Action Alternative, both CDFG and USFWS would continue to manage their properties in a manner similar to the ISP and other current management and in accordance with their agencies' goals and mandates. Both CDFG and USFWS currently manage their lands with limited funding and their management decisions must balance certain trade-offs. Detailed information on future funding for the agencies is not available, but it is possible that sufficient funding would be available to maintain all of the levees within the Project Area, including all of the levees that protect existing PG&E facilities, in absence of implementation of the SBSP Restoration Project. However, the No Action Alternative scenario presented in Section 2.4.2 is considered to be the most likely scenario.

Furthermore, the No Action Alternative scenario presented in the EIS/R and illustrated in Figure 2-4b (and Figure ES-2b) indicates that all of the levees that protect PG&E facilities would be maintained with the exception of the levee at Pond A6. The Project proponents are committed to maintaining existing flood protection for inboard areas. As noted in Section 2.4.2, the outboard levees along Ponds A1 and A6 are more prone to erosion and failure than other levees within the Alviso pond complex. Levees would be repaired and/or maintained as funding allows. In the event that insufficient funding is available to maintain all of the levees, higher priority levees along Ponds A1 through A3W that provide some level of flood protection for Moffett Federal Airfield and other

highly developed areas immediately landward of the former salt ponds would be maintained, while the levee along Pond A6 would be allowed to erode and thus restore the pond to tidal action. It should be noted that to protect its existing facilities in Pond A6 from the effects of unintentional breaching, PG&E replaced the eleven existing transmission towers with nine new towers and reconductored two of the three transmission lines. In addition, PG&E has previously replaced its boardwalk that it uses to service the transmission towers and lines in Pond A6. This management decision would maintain coastal flood protection in areas where it is most important to protect neighboring properties.

PGE2-25: The Project proponents consider the existing phrase "... and other regulatory agencies.." to include those entities governing public utilities (*e.g.* General Order 95 of the California Public Utilities Commission). The text in Section 2.5.1 under the subheading Recreation and Public Access, has been revised as follows:

> The Phase 1 actions are subject to the laws and regulations of the landowning agencies CDFG and USFWS as well as the Bay Conservation and Development Commission (BCDC) and other regulatory agencies, <u>and to the</u> <u>property rights of parties adjacent to or within the Project boundary (such as</u> <u>PG&E easements)</u>.

- PGE2-26: Please see the response to Comment SCVWD-129.
- PGE2-27: The discussion of PG&E infrastructure has been revised per commenter's suggestion to include mention of the overhead transmission lines that pass through Ponds E10 and E11. Section 3.16.1 in Section 3.16, Utilities, under the heading Eden Landing, has been revised as follows:

A PG&E overhead power transmission line enters the northeast corner of the Eden Landing pond complex and extends southeast over the Eden Landing Ecological Reserve Restoration Project tidal restoration site and Pond E6A. <u>After crossing the Bay parallel to the San Mateo Bridge, another PG&E</u> <u>overhead transmission line crosses Pond E10 and E11 before continuing east.</u> There are no PG&E access points for restringing within the pond complex.

PGE2-28: The discussion of PG&E infrastructure for the Alviso pond complex under the Project Section 3.16.1 in Section 3.16, Utilities, under the heading Alviso, has been revised as follows to include mention of the overhead transmission lines that pass through Ponds A18, A3W and AB2:

One line enters Pond A6 from the northeast and the other forms a semi-circle around the Project perimeter, crossing over Ponds A22<u>, and A23 and A18</u> and then extending west and then north to reconvene with the first at Pond A3N as it extends south. It then continues westerly and reenters the Project

<u>Area north across Pond A3W to reconvene with the first transmission line at</u> <u>Pond A3N.</u> From here, the transmission lines extend westward through Ponds <u>AB2</u>, AB1 and A2W and then exit the pond complex at Pond A1.

- PGE2-29: It is acknowledged that on a site-specific basis, PGE sometimes maintains additional clearances for its lines. PGE, however, has not identified any additional regulatory requirements and the Project proponents are unaware of any additional requirement. Therefore, the text in the EIS/R is unchanged.
- PGE2-30: Previously successful tidal restoration projects that included towers in their affected areas (*e.g.*, Cooley Landing, Outer Bair Island) and the number of towers that presently occur in tidal bay habitats (including salt marsh) suggest that the PG&E is able to maintain boardwalks and towers in tidal environments without major disturbances to delivery of electricity. Given the history of managing the electrical transmission facilities in the tidal environment, it is not accurate to say that *any* changes to the existing access would be significant, particularly if the change only requires a different method of access. The word "substantially" was maintained in the discussion of significance since incremental impacts will not be deemed significant.
- PGE2-31: The discussion of significance criteria (Section 3.16.3 of the EIS/R) pertaining to the integrity of PG&E's marine foundations was broadened per the commenter's suggestion to include all PG&E infrastructure.

Reduce the structural integrity of the marine foundations that support PG&E towers PG&E's utility infrastructure;

PGE2-32: The discussion of significance criteria in Section 3.16, Utilities, of the EIS/R pertaining to the clearance between waterways and electrical transmission lines for navigation was broadened per the commenter's suggestion to pertain to the clearance required for regulatory compliance as well. PG&E did not identify (and the Project proponents are unaware of any) additional standards regarding "line integrity" or "public safety" that are not already covered by "regulatory compliance." Text in Section 3.16.3 of the EIS/R, under the heading Significance Criteria, has been revised as follows:

Reduce clearance between waterways and electrical transmission lines such that navigation of watercraft <u>or regulatory compliance</u> w<u>ereas substantially</u> affected;

PGE2-33: SBSP Impact 3.16-1, which addresses effects on access to PG&E towers and stations due to increased abundance of threatened or endangered species, was broadened per the commenter's suggestion to include tower, station and electrical transmission line access reductions as a result of any changes due to the Project.

SBSP Impact 3.16-1: Reduced <u>ability to</u> access to PG&E towers<u>, and</u> stations<u>, due to increased abundance of threatened and endangered species-or</u> <u>electrical transmission lines</u>.

PGE2-34: The text has been modified to include the Ravenswood Substation, at the commenter's request. SBSP Impact 3.16-1 in Section 3.16 of the EIS/R has been revised as follows:

The Alviso pond complex is and Ravenswood substation are the only pond complex areas where vehicular access for heavy equipment is required along or near the existing pond levee system for regular maintenance and emergency repairs.

- PGE2-35: Comment acknowledged. The Project proponents acknowledge that coordination with PG&E will be necessary in prioritizing levees for maintenance. Specific changes to the text were not made as suggested because the issue as presented is intended to be broad. There are many groups who have an interest in the prioritization of levee maintenance other than PG&E (*i.e.* Alviso residents) and therefore, PG&E is not specifically called out.
- PGE2-36: The discussion of potential impacts resulting from Alternative B to the ability to access PG&E infrastructure has been modified based on the commenter's suggestion. Ponds E10 and E11 were added to the list of managed ponds which contain PG&E infrastructure however the distinction between those ponds containing towers and boardwalks and those ponds containing only towers is also made. SBSP Impact 3.16-1 in Section 3.16 of the EIS/R, under the subheading Alternative B Managed Pond Emphasis, has been revised as follows:

In the Eden Landing and Alviso pond complexes, Ponds E6A, E10, E11, and A3W, all of which contain PG&E towers and some (E6A and A3W) of which contain boardwalk access, would remain managed ponds, and thus physical access would be unaffected.

PGE2-37: The discussion of USFWS and CDFG's authority to restrict boating has been modified per the commenter's suggestion to state that the restriction applies only to public boating, and therefore, PG&E would not be restricted from using boat to access infrastructure for maintenance and repair work. Text in SBSP Impact 3.16-2 in Section 3.16 of the EIS/R has been revised generally as follows:

> USFWS and CDFG would <u>continue to prohibit</u> have the ability to restrict or <u>limit public</u> boating within restored areas <u>except where it is expressly</u> <u>allowed for waterfowl hunting</u>. <u>CDFG would restrict or prohibit public</u> <u>boating within restored areas as necessary</u>.

PGE2-38: The discussion of USFWS and CDFG's authority to restrict boating has been modified per the commenter's suggestion to state that the restriction applies only to public boating, and therefore, PG&E would not be restricted from using boat to access infrastructure for maintenance and repair work. Please see the responses to Comments PGE2-15 and PGE2-16 for additional discussion of physically blocking boating access to restored ponds. SBSP Impact 3.16-2 in Section 3.16 of the EIS/R, under the subheading Alternative A No Action, has been revised as follows:

Although clearance below electrical transmission lines within breached ponds may not meet the 47-ft requirement in some instances, USFWS and CDFG would continue to prohibit public boating in the newly opened channels as needed except where it is expressly allowed for waterfowl hunting. CDFG would restrict or prohibit public boating within restored areas as necessary.

PGE2-39: The discussion of USFWS and CDFG's authority to restrict boating has been modified per the commenter's suggestion to state that the restriction applies only to public boating, and therefore, PG&E would not be restricted from using boat to access infrastructure for maintenance and repair work. See response to Comments PGE2-15 and PGE2-16 for additional discussion of physically blocking boating access to restored ponds. SBSP Impact 3.16-2 in Section 3.16 of the EIS/R, under the subheading Alternative B Managed Pond Emphasis, has been revised as follows:

> Over the short and long term, USFWS and CDFG-would have the ability to limit continue to prohibit public boating access within the restoring and restored ponds areas except where it is expressly allowed for waterfowl hunting either seasonally or entirely. CDFG would restrict or prohibit public boating within restored areas as necessary.

PGE2-40: The commenter suggests a change to SBSP Impact 3.16-2 to reflect that the SBSP Restoration Project, in addition to sea level rise, results in a reduction in line clearance in the tidal sloughs. However, as shown the hydrodynamic simulations results presented in the Hydrodynamic Modeling Report (Appendix J), line clearances would increase as result of tidal restoration. Opening ponds to tidal action increases the tidal prism in the sloughs and results in a decrease in high water levels. Under long-term (Year 50) conditions, modeled high water levels in the tributary sloughs are lower under Alternative C than under Alternative A. The following table presents modeled slough water levels under Alternatives A and C (Year 50 long-term conditions) at spring tide higher high water (HHW). Modeled high water levels are consistently lower under Alternative C. Therefore, the suggested change was not made in the EIS/R.

STATION NAME	JUNE 22 SPRING TIDE HHW WATER SURFACE ELEVATION (CM NAVD88)		
	ALTERNATIVE A	ALTERNATIVE C	
Coyote Creek Power Tower	14	10	
Coyote Creek Railroad Bridge	26	13	
Coyote Creek/Island Ponds	28	11	
Coyote Creek Upstream	28	8	
Mud Slough Downstream	24	9	
Mud Slough Upstream	28	7	
Alviso Slough Downstream	11	6	
Alviso Slough Upstream	2	-19	
Guadalupe Slough Downstream	13	13	
Guadalupe Slough Upstream	-7	-11	
Stevens Creek Downstream	13	11	
Stevens Creek Upstream	14	10	

PGE2-41: The No Action scenario for Pond A6 reflects the continued management practices of USFWS. Since the 1980s, USFWS has invested minimal effort in maintaining the perimeter levees to this pond. Due to expected limited funds, future levee maintenance is expected to focus on ponds where levee failure would pose greater flood risk due to their proximity to highly urbanized areas (*i.e.*, Ponds A1 to A3W).

The commenter suggests that the Pond A6 levees be maintained and a solution to allow PG&E vehicles to cross over the levee breaches be included in the EIS/R. Maintenance of the Pond A6 levees, with the inclusion of bridges (or an alternate solution) that span the Pond A6 levee breaches, would not be consistent with the long-term restoration plan of restoring Ponds A5 and A7 to tidal action. The EIS/R has been revised to include a discussion of specific access methods for each PG&E facility at every Phase 1 location, and how access is expected to change (see Phase 1 description of Pond A6 in Section 2.5).

The EIS/R has been revised (see below) to properly refer to other ponds in the Alviso pond complex used for restringing. Impact 3.16-1 in Section 3.16 of the EIS/R, under the subheading Phase 1 No Action, has been revised as follows:

Unplanned levee breaches would reduce vehicular access around the perimeter of Pond A6, but this <u>access route</u> is not essential since the primary locations for power line restringing in the Alviso pond complex is are in Ponds A3 $\frac{W}{N}$, A2W, A19 and A22.

PGE2-42: Please refer to the response to Comment PGE2-41 for a discussion of ponds used for restringing.

Message-Id: <<u>20070413184329.B45DC240073F@mail.sfei.org</u>> Date: Fri, 13 Apr 2007 11:43:29 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Joshua Last Name: Moore Organization: Responsible Organized Mountain Pedalers Street Address: 2111 Latham St #305 Street Address2: City: Mountain View State: CA Zip Code: 94040 Country: USA Email: president@romp.org

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment: The Responsible Organized Mountain Pedalers (ROMP) would like to endorse option C in the EIR for the South Bay Salt Ponds Restoration Project.

ROMP are the oldest off-road cycling advocacy group in the Bay Area. Presently, we have about 400 members who are concerned with trail access in the San Francisco South Bay and Peninsula regions. To accomplish our mission of leading the participation of mountain cyclists in the trail community, we work with local cycling industry leaders, government agencies, and other trail user groups. Such work is necessary to protect our rights to our public parks and open space.

ROMP is made up of volunteers, not paid professionals. We give our time because of our love for the sport and belief that we can make a difference in our community.

ROMP is a tax exempt 501.c(3) organization. Your membership and donations to ROMP are tax deductible. Our tax ID or EIN is 14-193 1867.

I'd like to state that while our focus is primarily recreation, we also consider ourselves environmentalists. I am also delighted to see that there is an opportunity to complete the gap in the Bay Trail around Moffat Field. In your study, we favor option C, which provides for the most habitat restoration, and the best biking route north from Alviso into Fremont along the train track alignment.

Option B with more options for recreation, but poorer regional connecting trails is also a viable alternative in our opinion.

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

ROMP-1

Response to Responsible Organized Mountain Pedalers (ROMP)

ROMP-1: Comment acknowledged. This comment expresses support for SBSP Restoration Project Alternative C and does not address the adequacy of the EIS/R.



Building citizen-stewardship among diverse communities in support of wildlife and National Wildlife Refuges.

May 2, 2007

Mr. Clyde Morris Manager, Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Ave. Newark, CA 94560

RE: Draft Environmental Impact Statement/Report for the South Bay Salt Pond Restoration Project

Dear Mr. Morris:

This letter is submitted to provide improvements the draft Environmental Impact Statement/Report (EIR) issued in March 2007. The comments are submitted on behalf of Wildlife Stewards.

We have chosen to focus on issues relevant to public access components of the South Bay Salt Pond Restoration Project (Project).

As preface to those comments, readers should know that several general points apply. Wildlife Stewards is in agreement with the guideline that wildlife and wildlife habitat compatibility is the central guidance for any public access decision of the Project. We recognize that flood control is a critical element relevant to public access decisions. Finally, it is understood that the Project's progression toward Alternatives B and C is unknown as would be the associated public access.

The comments that follow are therefore given within context of these factors.

Visual Resources (3.17)

In its discussion of visual resources, the EIR limits the resources described to those solely within the Project borders. This is in contrast to a practice seen in other sections of the EIR where impact outside the Project's borders is discussed. We believe this is an omission that should be corrected.

As restoration proceeds, the current, commercial salt pond landscape will transform to the quiet, restful aesthetics of marshes and ponds, punctuated by the grace and color of wildlife. Adjacent communities will be enriched in ways that range from personal enjoyment to the market value of adjoining real estate.

In some situations, such as the bridge causeway entries to Menlo Park and Hayward, the implied ambience of the community can change for the better. In other locations, business opportunities may develop utilizing the view, such as is common for Bayside restaurants in the Central and North Bay.

Other unique opportunities are the landfills, closed and active, adjoining all three pond groups. With the exception of the Coyote Hills Park, landfills provide the sole, open-space alternatives for elevated viewpoints adjacent to the Project. Placed in historically flat landscapes and typically WS1-1

isolated due to the nature of their formation, they provide unique opportunities for dramatic 360° views. Indeed, that characteristic led to the Phase I plan to place an interpretative site on the closed landfill known today as Bayfront Park.

In decades hence, active landfills will close, adding to the bank of available viewpoints along the South Bay's shoreline. In each case, the landfill owner and community will have Project lands as a visual resource factor in land-use decisions.

The EIR should discuss the fact that the Project will, itself, become a visual resource in the South Bay.

Socioeconomics (3.11)

An extension of the visual resource value is economic. As suggested above, the altered visual landscape may promote the creation of restaurants with new marsh views on property that has gained location-enhanced value.

The EIR mentions that restaurants and recreation-oriented businesses may flourish as a result of restoration and bring some jobs with them. But the report constrains its comments to services provided to local residents. The omission here is the potential impact of tourism as the South Bay becomes a more attractive place for such visitation. Implementation of Alternatives B and C may indeed produce new tourist dollars. Convention Centers may entice new business with the opportunity of a side trip to enjoy restored wetlands. The local hotel industry would directly benefit and, doing so, produce more jobs. The EIR should include the potential of tourism.

A social issue not discussed is the multi-lingual and multi-heritage characteristic of communities of the South Bay. Clearly, new generations of migrants carry with them wildlife concepts of their homelands and birth cultures, creating unique situations for law enforcement to resolve and challenging design of interpretative facilities and outreach programs. As restoration of these lands should be a pride and enjoyment for all residents, it appears that the challenges of uniform public communication should at least be mentioned. Additionally, Wildlife Stewards believes the Project should make it a Phase I objective to generate a plan to address this issue.

Trails and Drawbridge

All in all, we find the EIR is thorough in discussing trails and many factors important to their role in public access. In the discussion of Alternative C (2.4.4, Table 2-14), we find one trail option that we believe should be deleted. This option suggests running the Bay Trail through Drawbridge.

For an array of reasons, it is inappropriate for this document to espouse any expectation that putting the San Francisco Bay Trail (Bay Trail) through Drawbridge is a reasonable consideration. The obstacles to such a trail are enormous and well known by its land owner and partner in this project, the U.S. Fish and Wildlife Service. During a Project of decades, the old town will continue to fade into the marsh. When and if Alternate C is achieved, there may well be little left to see. And if enough of it is still visible, the costs and public safety logistics would be overwhelming. Why include an outcome that will never occur?

WS1-1 continued

WS1-2

WS1-3

We do recommend that an alternate option be included. By the time Alternative C status is achieved, WS1-4 landfills near Station Island are likely to be closed. We recommend routing the Bay Trail across the closed landfill, securing for trail users the visual opportunities discussed earlier. Elsewhere (2.4.3) there is discussion of a Drawbridge observation platform near Pond A17. Wildlife Stewards does heartily endorse actions that appropriately allow the public to enjoy Drawbridge, while it lasts. The suggested location is suitable, even if only during a transition period of the WS1-5 restoration process. However it is well known that the site's remote location and adjacency to the UPRR bridge introduce significant public safety and law enforcement problems. We believe the managers of the Project are fully aware of the problem and the related and required expenses. As such the EIR should mention the requirement for suitable precautions or state that access to this area will be limited to guided tours. Historic Red Barn (2.4.3, Table 2-9) We believe the text of the EIR needs to be corrected. This section describes the potential use of WS1-6 this building as an interpretative site. In the text and the table it refers to working in cooperation or as a partner with the City of Menlo Park. We have confirmed that this piece of land and the building on it, a pump house, are owned by Cargill, the party that should be mentioned. It is not obvious to us why the City of Menlo Park would be considered a party in this activity. Dogs and people Wildlife Stewards supports keeping dogs out of wildlife-protected lands. At the same time we recognize that there is a large segment of the public for whom walking or running without their dog is unthinkable. Inevitably, there will be public challenges to dog access limitations. For that reason, we believe the EIR missed an opportunity. WS1-7 Recreation Resources (3.7) has substantial detail about recreation facilities both regionally and within Project lands. One notable difference between the two listings was the topic of dogs. The Project's descriptions specified where dogs were prohibited or allowed e.g. for hunting. The regional listings made no mention of dog access whatsoever. We suggest it might have been good to list dog walking and dog park locations in the list of available choices at the various non-Project, regional recreational facilities. By listing both, the EIR can demonstrate that alternate locations are available. This information has additional use. Where regional facilities are adjacent to the Project, the information would help plan for needs like signage where interconnected trails might bare differing sets of dog rules. In summary and overall, we are enthusiastic supporters of this Project and know that our comments here refer to a very limited portion of the topics covered by the intensely detailed EIR. We tip our WS1-8 hats to all who have reviewed those issues, many highly technical. We realize that upcoming working groups will finesse Phase I plans and hope to be participants in that process. We plan to continue our work as a partner to both the Project and the Refuge.

Sincerely.

Eileen McLaughlin Project Director

Response to Wildlife Stewards

WS1-1: SBSP Impact 3.17-1 in Section 3.17 of the EIS/R evaluates the impacts associated with the alteration of views of the SBSP Restoration Project. SBSP Impact 3.17-2 evaluates the impacts associated with the alteration of the existing visual character of the Project and its surroundings, which encompasses areas outside the Project boundaries. Phase 1 Impacts 3.17-1 and 3.17-2 evaluates the visual-related impacts for Phase 1 action ponds. As discussed in SBSP Impact 3.17-2, the provision of a more lush and less industrial appearance would enhance the visual diversity of the overall shoreline by increasing the contrast of tidal habitat, managed ponds, and the colors of the ponds. The increase in texture and contrast of the overall visual landscape and the variation created by the contrast of tidal habitat and surrounding ponds would be considered less than significant/beneficial under CEQA and NEPA, respectively.

The enrichment to the surrounding communities in terms of socioeconomic effects is addressed in Section 3.11, Socioeconomics and Environmental Justice of the EIS/R. SBSP Impact 3.11-1 discusses Project effects on area businesses. Please refer to the response to Comment WS1-2 below regarding the scope of analysis for this issue.

The EIS/R focuses on those impacts that would result directly from implementation of the proposed Project. Landfill closures and the viewpoint opportunities such landfills would provide are not discussed in this EIS/R because it is outside the scope of the SBSP Restoration Project. However, they do provide additional viewing opportunities for the Project Area.

The discussion of the SBSP Restoration Project Area as a visual resource is discussed in SBSP Impact 3.17-1. People on trails and kayaks would have new visual experiences due to the alteration of views in the Project Area. The aerial view from planes would also be altered from the current views of the salt ponds.

WS1-2: As mentioned above, Section 3.11 of the EIS/R describes the Project effects on area businesses. The EIS/R recognizes that an increase in recreational opportunities would have a beneficial impact on local businesses that cater to the visitors, although the precise benefits are not known. The discussion of tourism would be outside the scope of this EIS/R as it would be speculative to suggest that either new conventions centers would be built or existing convention centers would attract businesses such as those that provide side trips to the restored wetlands. As such, the scope of analysis is focused on the increase in businesses that directly relate to visitations to the restored wetlands, rather than those indirectly related.

Chapter 2 of the EIS/R describes the proposed recreational features under Alternatives B and C. The specific design of each facility would be addressed during the design stage of each Project phase. However, the public access education messages and interpretive themes for future phases would be similar to those described for the Phase 1 actions in

Section 2.5.1 of the EIS/R. Table 2-18 shows the symbols and themes that would be used for the public access interpretation and education. Symbols have been developed to facilitate communication and understanding across different communities. The Project proponents will continue to evaluate its communication of interpretative facilities and outreach programs to consider the diversity of people who would use the site. The Project proponents would like to invite the Wildlife Stewards to continue to participate in the planning process for the SBSP Restoration Project.

- WS1-3: The Project proponents are aware of the challenges associated with the Bay Trail through Drawbridge. However, the Project proponents intended to explore the widest range of reasonable options for the recreation components in the EIS/R. This option was selected to provide the most direct connection between the existing trails in the north and south (see Figure 2-7b) and to provide a higher quality recreation experience than would be available if the existing trails were directed around Ponds A22, A23, and A19. This segment of the trail is not proposed as part of the Phase 1 actions, and as such would require further consideration in subsequent environmental review. This trail option would be evaluated in further detail in subsequent phases of the project.
- WS1-4: Please see the response to Comment WS1-3 above for a discussion of the trail through Drawbridge under Alternative C. The Project proponents appreciate the recommendation for an alternate trail segment through the landfills. However, as it is outside the SBSP Restoration Area, and the landfill is not yet closed, the Project proponents have not included it as a future trail option.
- WS1-5: As shown in Figure 2-5b, a new viewing platform is proposed at the northern edge of Pond A17 as part of Alternative B. The viewing platform would not extend across Coyote Slough to Drawbridge. Access to the proposed viewing platform would be provided by the existing trails that would remain around Ponds A16 and A17. As such, the location of the viewing platform is not considered to be remote. Issues of public safety and law enforcement are expected to be the same as existing conditions and are not expected to result in additional significant impacts.
- WS1-6: Per this comment, the following text changes were made to Chapter 2, Table 2-9 Proposed Ravenswood Recreation and Public Access Features under Alternative B:

Historic red barn; South of Bayfront Park by Pond S5 in cooperation with the <u>City of Menlo Park</u> Cargill (owners of barn)

The following text has also been added to Section 2.4.3, last paragraph:

An interpretive display would be offered at the historic Red Barn site, located in the southwest corner of Bayfront Park, which would require partnership with <u>the City of Menlo Park Cargill (owners of the barn)</u>.

- WS1-7: Comment acknowledged. A note identifying where dogs are allowed near the Project Area is presented in Table 3.7-1.
- WS1-8: Comment acknowledged. The comment expresses support for the overall SBSP Restoration Project and does not address the adequacy of the EIS/R. The Project proponents look forward to working with the Wildlife Stewards.

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saveSFbay.org

May 3, 2007

Clyde Morris US Fish and Wildlife Service Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, CA 94560

John Krause California Department of Fish and Game PO Box 47 Yountville, CA 94599

Dear Mr. Morris and Mr. Krause:

Save The Bay is pleased to offer comments on the Draft Environmental Impact Statement/Report for the *South Bay Salt Pond Restoration Project.*

As the oldest and largest membership organization working exclusively to protect, restore and celebrate San Francisco Bay, we recognize the *South Bay Salt Pond Restoration Project* is an unprecedented, historic opportunity to restore South San Francisco Bay wetlands, which are critical to the health and functioning of the entire Bay ecosystem. The extensive stakeholder process and outreach to diverse constituencies that preceded preparation of this DEIS/R have generated broad agreement that the Project can provide enormous benefits for wildlife and people in the San Francisco Bay region.

Save The Bay supports the overall purpose and objectives of the South Bay Salt Pond Restoration Project and Phase One actions, and finds that the plan is a beneficial balance of wetland restoration and enhancement, pond-associated species protection, flood control, and appropriate public use. The South Bay Salt Pond Restoration Project proposed actions will provide significant benefits to multiple species of wildlife through the restoration of multiple, diverse habitats.

STB-1

STB



Human-induced changes to the Bay over the past century, including the loss of tidal wetland habitat due to the construction of levees and conversion to salt ponds, have significantly altered wetland functions in the South Bay. This has caused loss of critical habitat for native wildlife, degraded water quality, decreased flood control capacity, and resident communities that have been cut off from their shoreline. Existing wetlands are being degraded by invasive species, inadequate ongoing maintenance and management, and polluted runoff from highly urbanized watersheds. The project area is adjacent to primary habitat for the endangered California clapper rail and salt marsh harvest mouse, and additional subtidal, tidal, and associated uplands that provide habitat for a variety of endangered and threatened fish, wildlife and bird species. This *Project* is an historic opportunity to restore a large band of tidal marsh bordering the entire South Bay.

Save The Bay commends the DEIS/R for emphasizing the following overarching project principles:

Takes an ecosystem approach

Save The Bay supports the DEIS/R's outlined ecosystem approach to restore critical resource habitats that benefit multiple species, native plant communities in wetland-grassland-riparian transition zone habitats, and other biological resources.

Phases restoration to allow study and development of best practices

Multiple, landscape-level unknown factors that may affect this project have been outlined in the DEIS/R. We agree that more research is needed in all areas and we support planning and implementation that proceeds carefully as best practices are developed. The phased approach also allows time to secure implementation funds.

Uses adaptive management to enhance success

We strongly support the proposed adaptive management plan and approach. The project's 50-year planning horizon requires a phased, carefully planned and studied set of diverse actions in order for the key uncertainties to be addressed or managed. The DEIS/R outlines a reasonably transparent process that includes multiple points of public involvement, clear decision-making, and oversight.

Balances public access with protection of critical habitat and endangered wildlife

We are confident that the scale of the *South Bay Salt Pond Restoration Project* can accommodate both species protection and a variety of public access uses and enhancements. New habitat created under both the 50:50 and 90:10 alternative designs will provide protected nesting habitat for clapper rails, snowy plovers, and other sensitive species. Some of this habitat will be close to already-developed areas and to public access created by the project; the vast majority of created habitat will be remote from human use and development. Save The Bay supports responsible public access, including trails, boat launches, environmental education, and community-based restoration in areas where it can be appropriately balanced with wildlife protection and management, as we understand that public access can have an impact on habitat and wildlife. To minimize any negative impact to habitat and wildlife, we strongly agree that

STB-2

2

STB-1 continued *Project* staff and consultants must incorporate information learned from applied studies into timely management decision-making.

Builds connections to the public with appropriate public access, communitybased restoration and education programs

The Bay Area community has a historic opportunity to get involved directly in the stewardship and restoration of thousands of acres of tidal marsh. Attaining the *South Bay Salt Pond Restoration Project* vision will require sustained effort and public support for restoration planning, implementation, as well as community involvement in restoration and monitoring projects, and ongoing maintenance.

Creates priority habitat for threatened and endangered species

We support the *Project's* plan to manage each complex to include a variety of managed ponds and tidal wetlands in different physical configurations, and incorporate various methods of restoration and seasonal management techniques for the benefit of multiple species, including the 51 federally and state listed endangered and threatened species that depend on the Bay.

Maintain some managed ponds for bird use

We support the techniques outlined in the plan for pond configuration and seasonal management to encourage bird use for foraging, nesting, and roosting. We encourage the best possible management of these species and uses consistent with the ultimate restoration objective of maximum tidal marsh.

Recommended EIS/R Modifications

We request that you give full consideration to the following comments and make appropriate modifications in the final programmatic EIS/R to reflect them.

1. Select 90:10 maximum tidal marsh habitat as the preferred alternative

While Save The Bay supports a phased approach to long-term restoration based on adaptive management, we strongly recommend that the lead agencies select the 90:10 Maximum Tidal Marsh Alternative as the *Project's* preferred alternative.

Since the 1850s, 150,000 acres of tidal marsh in San Francisco Bay have been lost to massive urbanization. The 90:10 alternative would allow for the restoration of up to 13,400 acres of tidal marsh, bringing back nearly 10% of the lost historic wetlands. This amount of tidal marsh restoration would also provide the maximum benefit to tidal marsh species and would improve Bay health through the re-establishment of slough channels, wetlands, mudflats, managed ponds, and other Bay habitats. Re-establishment of maximum tidal marsh would also provide flood control and water quality benefits, and improve wildlife viewing recreation opportunities in the South Bay. Restoring more tidal marsh will significantly reduce the costs associated with future operations and maintenance of managed ponds.

Further, restored tidal salt marshes capture carbon from greenhouse gases in the air efficiently and effectively, helping to counter global warming, providing natural flood control and reducing the need to build seawalls to protect developed shoreline areas when sea levels rise. The Intergovernmental Panel on Climate Change specifically recommends wetland restoration as a strategy to capture and hold carbon from the air.

2. Increase monitoring of fish and other aquatic species.

Save The Bay strongly supports increased planning for aquatic species in the overall project and additional aquatic species in the *Project's* monitoring protocol.

a. The estuarine fish target in the Adaptive Management Summary Table only mentions shiner surfperch. We recommend adding the following species to the monitoring list:
 Atherinops affinis Clupea pallasi Topsmelt
 Pacific herring

Lepidogobius lepidus Myliobatus californica Oncorhynchus tshawytscha Oncorhynchus mykiss Paralichthys californicus Platichthys stellatus Triakis semifasciata Topsmelt Pacific herring Bay goby Bay ray Chinook salmon Steelhead salmon California halibut Starry flounder Leopard shark

b. There are additional invertebrate species that should also be monitored to gauge impacts and improvements to their habitat, including:
 Cancer magister
 Dungeness Crab
 Bay Mussel

- Cancer productis Hemigrapsus oregonensis Pachygrapsus crassipes Crangon franiciscorum Cerithidea californica
- Dungeness Crab Bay Mussel Rock Crab Mud Crab Lined shore crab California Bay Shrimp
- California Horn Snail

3. Increase monitoring and planning for native oysters (Ostrea conchaphila)

- a. Include the native Olympia oyster (*Ostrea conchaphila*) in the aquatic species monitoring protocol.
- b. We encourage the *Project* to protect and enhance oyster bed habitat because it provides the ecologically important "edge" dynamics that are likely to lead to species richness and benefit the entire matrix of the San Francisco Bay ecological community. There appear to be native oyster larvae in many parts of the Bay, but studies, including those by Save The Bay, show that there are only few locations where they can successfully settle and grow. Observations over the last several years have indicated that native oyster habitat is used by many other species such as Pacific herring (*Clupea harrengus*), several species of gobies, bay shrimp, annelids, crabs, isopods, encrusting species and algae.

STB-3 continued

STB-4

4. Increase transition zone acreage to provide more habitat diversity

The *Project* should include more transition zone acreage with a minimum 10:1 slope in the restoration designs for specific ponds where feasible, including increased wetland-to-grassland border acreage at the upland edge of ponds. By increasing both the acreage and slope of this transition zone from mean tidal height to upland grassland habitats, the project will maximize diversity of habitat types and plant types, support natural management against invasive species, provide more refugia habitat at high tide for tidal marsh species such as the salt marsh harvest mouse, and increase nesting and foraging vegetation for the California clapper rail and other species.

5. Increase native plant species diversity and cover

The *Project* should include more vegetation diversity and cover in the mid-high marsh transition zone and associated riparian and grassland zones for critical refugia and nesting habitat for native fish, invertebrates, shorebirds, and wildlife. In addition to federally endangered or threatened native plant species, the *Project* should include additional native plant species that provide cover, habitat, food, nesting resources, and photosynthetic plant material to benefit a wide variety of birds, insects, fish, and other wildlife.

Because of Bay fill, erosion, pollution and water diversion, native plant species diversity has been greatly reduced around the Bay. Native plant diversity is essential to full ecosystem function, complex food chain interactions, and nutrient cycling in wetlands. This vegetation also boosts food source and nesting habitat diversity in aquatic and adjacent upland marsh and grassland areas, foraging, and high marsh refugia during extreme high tides or storm events.

The DEIS/R refers to hydroseeding and targeted native plantings, but names only pickleweed as a specific target species. Many projects are planned on the basis that native seedlings will come in and establish on their own, eliminating the need for active revegetation tasks. Our extensive direct experience in restoration of tidal marsh systems indicates that the "if you build it they will come" design concept is insufficient for the many plant species that do not re-establish themselves unaided, especially in severely altered sites. Non-native species can outcompete native species in restoration and growth rates than tidal marsh native species. Also, due to habitat fragmentation many of these species are not locally present so cannot establish on their own. While we support the establishment of pickleweed, the plan should include planting of many other important native plant species that do not establish on their own.

We recommend adding the following species to the restoration and management plans:				
Grindelia stricta	Marsh Gumplant			
Distichlis spicata	Salt Grass			
Frankenia salina	Alkali Heath			
Jaumea sp.	Jaumea			
Limonium californicum	Sea Lavendar			

STB-6

Triglochin maritima Baccharis douglasii Baccharis pilularis Scrophularia californica Sisyrinchium bellum Nassella pulchra Leymus triticoides Elymus glaucus Mimulus auranticus Rosa californica Artimesia californica Euthamia occidentalis Festuca rubra Aster subulatus Aster subulatus Aster chilensis Achillea millefolium Eriogonum nudum Eriogonum fasciculatum Hordeum brachyantherum Lupinus sp. Rhamnus californica	Seaside Arrowgrass Marsh Coyote Brush Common Coyote Brush California Bee Plant Blue-Eyed Grass Purple Needlegrass Creeping Wild Rye Blue Wild Rye Sticky Monkey Flower California Wild Rose California Sagebrush Western Goldenrod Red Fescue Water Aster Chilean Aster Common Yarrow Naked Buckwheat Buckwheat Buckwheat Meadow Barley Lupine California Coffeeberry	STB-7 continued
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6. Native revegetation should be site-specific whenever possible

Site-specific native plant propagation and plantings should be included in the EIS/R and should continue until plant communities reach a pre-defined threshold of percent cover and diversity of species. The *Project* should use restoration material and plant propagules grown from seed collected within the local watershed, wherever feasible. Site-specific native seeds help to maintain the integrity and robustness of population genetics within plant communities that are already heavily impacted by a variety of sources. We also recognize that there is fragmentation between these ponds, and that some introduction of seed from adjacent watersheds could be beneficial for some species such as windborne grasses like *Nasella pulchra*. We encourage the *Project* to consider revegetation plans in each pond area using these site-specific factors:

- tidal influence and hydrology
- marsh elevations
- adjacent land influences
- local non-native infestations
- amount of available native seed source
- habitat connectivity between marshes

7. Include a more active invasive species control plan for restored ponds

Vegetation management should be broadened to include areas outside of managed ponds and the lowest intertidal zone of tidal marsh. The DEIS/R provides significant attention to preventing vegetation establishment on some managed ponds used for snowy plover nesting, and on islands to prevent predation by Canadian geese. The *Project* should apply the same level of detail to managing invasive and native plant

STB-8

establishment in other vegetation types, including low, mid and high marsh plains, and associated grassland, riparian, and upland zones.

We recommend adding the following non-native species to the restoration and management plans:

Lonidium lotifolium	Demonial Depression	
Lepidium latifolium	Perrenial Pepperweed	
Carpobrotus edulis	Iceplant- Yellow Sea Fig	
Carpobrotus chilensis	Iceplant- Pink Sea Fig	
Mesembryanthemum crystallinum	Crystalline Iceplant	
Foeniculum vulgare	Fennel	
Centaurea solstitialis	Yellow Star-Thistle	
Brassica spp.	Mustard	STB-9
Raphanus sativus	Wild Radish	continued
Cytisus scoparius	Scotch Broom	Continued
Genista monspessulana	French Broom	
Picris echiodes	Bristly Ox-Tongue	
Salsola soda	Russian Thistle	
Cardus pycnocephalus	Italian Thistle	
Cirsium vulgare	Bull Thistle	
Lolium multiflorum	Annual Ryegrass	
Briza maxima	Quaking Grass	
Avena sativa	Common Wild Oats	
Bromus diandrus	Rip-gut Brome	
Bromus madritensis	Foxtail Chess	
Rubus discolor	Himalayan Blackberry	
8 Provide more detail on invasive plant control during the construction phase		

8. Provide more detail on invasive plant control during the construction phase

As the DEIS/R acknowledges, construction activities can result in the accidental transfer of non-native seeds from one pond area into another pond area. We recommend using best management practices to clean equipment and supplies to prevent the spread of invasive seeds and plant material. Construction contractors and subcontractors should receive basic training in species identification to avoid damaging existing native plant populations that provide critical habitat for threatened and endangered species.

9. Continue invasive plant control after initial restoration construction

The EIS/R should include a more detailed long-term plan to prevent the spread and overcompetition of invasive plants, specifically how the project design will reduce perennial pepperweed, fennel, bristly ox-tongue, radish, thistles, mustard, and iceplant, and control the spread of invasive plants in the tidal, grassland, riparian, and upland sections of the project area. Invasive control should reduce the need for herbicides by employing careful design of elevations and topography, and using natural methods and manual techniques. More detailed invasive plant control plans will protect the Project's investment in creating high-value habitat for wildlife.

STB-10

10. Levee maintenance should include active invasive plant control

The project area will continue include hundreds of miles of levees that surround already restored and future restoration projects. These levees, some of which are covered by 100% monoculture of invasive plants, do not provide good habitat value and can become corridors for the spread of invasive plants. The EIS/R should detail long-term plans for controlling invasive plants like *Lepidium latifolium* (perennial pepperweed) and other invasive plants that could outcompete important natives such as *Distichlis spicata* and *Salicornia virginica*.

11. Establish better baseline population numbers for named species, and add baseline population numbers for additional species

The Stakeholder Forum members and many of the consulting biologists recognize that existing baseline population numbers are limited and/or inaccurate. We recommend that specific baseline numbers be studied further, and that additional species be added, including those listed previously in our comments. We also recommend that shared, common monitoring protocols be developed and used by all *Project* consultants, so that the information about the species can be compared across sites to accurately inform future management decisions.

12. Enhance vegetation monitoring

Vegetation monitoring should be increased from once every five years to include preand post-construction mapping, mapping once every year for the first five years, biannual mapping for the second five years, and mapping every five years after year ten. This will allow for early detection and control of invasive species entering the project area, a much less expensive strategy than trying to eradicate non-native or hybridized cordgrass or other invasives once established. The EIS/R should include a list of key plant species to be monitored and vegetation goals for tidal marsh, midmarsh, upland grassland transition, riparian, and associated upland plant zones.

13. Promote and facilitate key restoration opportunities on adjacent sites

The EIS/R should design restoration of Ponds A2E, and possibly AB2, to allow for future restoration on the adjacent MidPeninsula Open Space District's Stevens Creek Nature Study Area and NASA's existing stormwater retention pond. Save The Bay advocated for and secured a commitment from the federal government for full cleanup of toxic pollution at Site 25 within NASA's existing stormwater retention pond to allow for possible future tidal marsh restoration there. Any action on Pond A2E should promote and facilitate the restoration of tidal marsh by NASA and the Open Space District's within these adjacent areas. The Open Space District has indicated it plans to restore its property to tidal marsh and NASA has not made a final decision on the use of its retention pond after contamination at Site 25 is remediated.

14. Develop a project funding strategy to ensure timely implementation

The *Project* requires significant implementation funding and may cost as much as \$1 billion over the next several decades. The DEIS/R lists the uncertainty of available future funding as one key unknown – the Final EIS/R should indicate the major

STB-12

STB-13

STB-14

STB-15

elements of a project funding strategy and the role of public project support in advancing that strategy.

15. Incorporate a community stewardship component in the restoration plan

The DEIS/R emphasizes the importance of including public access and educational programs in the project, but lacks a plan for effective involvement of community volunteers in habitat restoration and stewardship. Because community-based restoration is a specific type of access that results in improved habitat, helps with ongoing maintenance, and results in cost savings with operations and maintenance, we recommend that this specific type of access be considered differently than typical use access.

Save The Bay's Community-Based Restoration program has involved a total of 40,000 community members in environmental education, invasive plant removal and control, native seed collection, native plant propagation, revegetation plantings, trash removal, and long-term site monitoring at restoration sites in partnership with local resource agencies. These activities have engaged diverse members of the Bay Area community in Bay issues and solutions that they otherwise would not have access to, and have leveraged maintenance, restoration work, and funding for agencies that lack adequate budgets for such labor-intensive activities as manual invasive plant removal and site-specific native seed collection. The work also connects key constituencies to the Bay shoreline and broadens public support for the resources needed to implement restoration projects.

Incorporating opportunities for community organizations to participate in the restoration work, habitat maintenance and public education would significantly strengthen the *Project.* Save The Bay and other organizations can provide well-planned volunteer programs that advance restoration implementation and site stewardship in cost-effective ways while improving community support and public engagement in the project, its goals and funding strategy. The EIS/R should endorse and incorporate partnerships that increase community involvement and volunteer programs to restore habitat and provide environmental education.

16. Carefully limit the use of mitigation to fund project implementation

Any future mitigation proposal to fund the Project should be reviewed carefully, on a case-by-case basis, to ensure that avoidable damage to the Bay is not encouraged or permitted prematurely. It is not necessary to destroy one part of the Bay to restore or protect another area. Mitigation dollars for the restoration project should not be considered as a quid pro quo for the support of a development project still being planned. Acceptance of mitigation funding by the *South Bay Salt Pond Restoration Project* should be evaluated and considered only after a development project's impacts have been avoided or minimized to the maximum extent, and those impacts have been finally permitted by all appropriate agencies. We would be pleased to work with the agencies to develop careful limitation policies in this area.

STB-16

continued

STB-17

Thank you for the opportunity to comment on this plan. Please contact me or Habitat Restoration Director Marilyn Latta at 510-452-9261 or <u>dlewis@savesfbay.org</u>, <u>mlatta@savesfbay.org</u> if you have any questions.

Sincerely,

David Lewis Executive Director

Response to Save The Bay

- STB-1: Comment acknowledged. The comment expresses support of the overall purpose and objectives of the SBSP Restoration Project and does not address the adequacy of the EIS/R.
- STB-2: Comment acknowledged. The comment expresses support of various overarching Project principles of the SBSP Restoration Project and does not address the adequacy of the EIS/R.
- STB-3:Comment acknowledged. The comment expresses support of Alternative C of the SBSP
Restoration Project and does not address the adequacy of the EIS/R.
- STB-4: Monitoring approaches will evaluate the estuarine fish community and not just one species. Currently, no specific invertebrate-monitoring plan has been developed or is proposed. The estuarine invertebrate species listed by the commenter are all likely to increase as a result of tidal restoration associated with the Project, and thus impact to these species is not a "staircase" issue. However, some monitoring of invertebrates may be conducted by the Project in conjunction with studies of the Project's effects on waterbirds and fish (*i.e.*, potential predators of these invertebrates). Furthermore, the Project would encourage outside researchers to examine a number of issues not specifically proposed at this time, including potential effects of the Project on estuarine invertebrates. A list of such "encouraged" studies would be maintained on the Project's website on an ongoing basis.

Please see the response to Comment SCVWD-131.

- STB-5: Comment acknowledged. Restoration of native oyster beds may be a future SBSP Restoration Project activity. The Project will encourage outside researchers to examine a number of issues not specifically listed in Appendix D, including issues related to the native oyster beds. A list of such "encouraged" studies would be maintained on the Project's website on an ongoing basis. The Project will not be able to provide funding for all such studies, but Project Managers should assist to the extent they can with permits, letters of support, and other in-kind services, for valuable studies when appropriate. If demand is great for this type of research, the Project's science managers may develop a review system to help managers select research most likely to assist the Project.
- STB-6: Comment acknowledged. Restoration of high-quality upland transition habitat is a design element of the proposed tidal salt marsh restoration.
- STB-7: The Project proponents appreciate the comments from Save The Bay on this topic, as it is always valuable to receive input from practitioners. All of the plant species and recommended techniques will be considered in Project phases that include active revegetation, including the Phase 1 design of SF2. Plant species palettes will be determined during the restoration planning of subsequent phases and will be selected on

site conditions at the individual restoration sites and will focus on native plant diversity. Plant palettes will favor native species that often have difficulty establishing on their own over plant species such as pickleweed which are more easily restored due their ability to recolonize through natural recruitment. In addition, the SBSP Restoration Project is expected to improve conditions for most special-status plants, as well as others that occur primarily in upper tidal marsh habitat. Newly created upland transition zones represent an important habitat type largely absent from the South Bay currently, and would also provide the opportunity for the re-introduction of special-status plant species. Also, please see the response to Comment PB-8 below for additional information on invasive plant control.

- STB-8: Please see the response to Comment STB-7. Native revegetation will consider sitespecific factors such as tidal influence and hydrology, marsh elevation, adjacent land influences, local non-native infestations, available native seed source, and habitat connectivity.
- STB-9: The Project proponents appreciate the suggestions on invasive plant control in the restored ponds. The list of invasive species provided by the commenter is appreciated and will be used to help guide invasive plant management. Please see the response to Comment PB-8 below for additional information on invasive plant control.
- STB-10:SBSP Impact 3.6-20 in Section 3.6, Biological Resources, under the subheading Potential
SBSP Restoration Project Effects, has been revised as follows:

Thus, under this assumption, impacts under all alternatives are expected to be less than significant. <u>The Project is currently working with the Invasive</u> <u>Spartina Project to develop a set of best management practices for tidal</u> <u>marsh restoration to minimize the risk of spreading invasive Spartina and its</u> <u>hybrids. At a minimum, best management practices to clean equipment and</u> <u>supplies to prevent the spread of seeds and plant material of non-native</u> <u>Spartina and other invasive plants will be implemented during construction,</u> <u>restoration, and maintenance activities. In addition, discussion of potential</u> impacts in this section is presented in the event that smooth cordgrass and its hybrids are not controlled before the Project is implemented.

Text has also been added to SBSP Impact 3.6-21, under the subheading Potential SBSP Restoration Project Effects, (concerning invasive *Lepidium*) as follows:

Best management practices to clean equipment and supplies to prevent the spread of seeds and plant material of non-native *Lepidium* and other invasive plants will be implemented during construction and restoration activities.

STB-11: Please see the responses to Comments STB-9 and STB-10 above, and Comment PB-8 below.

- STB-12:The EIS/R contains plans to control perennial pepperweed (Please see Section 3.6-21,
Colonization by non-native *Lepidium*). Efforts will be made during monitoring activities
to identify potential problem areas of invasive species invasions.
- STB-13: Baseline vegetation acreages for much of the South Bay are available from ongoing studies that the City of San Jose has conducted since 1989. The SBSP Restoration Project is also planning to continue monitoring vegetation as part of the Adaptive Management Plan.
- STB-14: The vegetation monitoring presented in the EIS/R is based on the assumption that it will take at least five years (and possibly longer) for tidal mudflats and restored subsided ponds to reach elevations where vegetation can establish. Mudflats and restored ponds will be monitored for invasive species such as hybrid cordgrass in the initial years of the Project.
- STB-15: Comment acknowledged. As shown in Figure 2-5b (and Figure ES-3b), in the long-term Pond A2E would be a managed pond and Pond AB2 would be partially a managed pond and partially restored tidal habitat under Alternative B. Under Alternative C, both Ponds A2E and AB2 would be restored to tidal habitat. The Stevens Creek Nature Study Area has been identified as tidal habitat under both scenarios. Although these ponds have been categorized in the long-term, they have not yet been designed. The Project proponents will consider the status of adjacent ponds at each phase of implementation prior to design of the SBSP Restoration Project ponds. As such, the Project proponents would design Ponds A2E and AB2 with consideration of other nearby marsh restoration or other activities.
- STB-16: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding. As described in Section 1.5 of the EIS/R, public involvement is an integral part of the SBSP Restoration Project planning process. The Project proponents invite regional and local agencies, organizations, and interested public to participate in the development of the SBSP Restoration Project. In addition, the Adaptive Management Plan is designed to facilitate communication between various stakeholders. As described in Appendix D, under Stakeholder Forum and Local Work Groups, "Substantial public involvement is essential for support and stewardship of long-term restoration projects and is one of the four functions of the Adaptive Management Plan institutional structure. . ." Ongoing public involvement as part of the SBSP Restoration Project would garner public support in advancing the funding strategy.
- STB-17: Comment acknowledged. The SBSP Restoration Project provides for recreational features including but not limited to trails, interpretative/education stations and viewing platforms. The provision of these features as well as restored tidal habitat would offer opportunities for community organizations to participate in the SBSP Restoration Project (restoration, habitat maintenance, and public education). The Project proponents

welcome and appreciate ideas that increase community awareness, education, and participation. They look forward to continuing the working relationship with Save The Bay via the SBSP Restoration Project stakeholder group and informally in other forums, and exploring implementation of the suggested programs. In addition, CDFG hopes to continue its working relationship via the existing partnership that is already underway at the Eden Landing pond complex (*e.g.*, clean up, transitional habitat restoration activities).

STB-18: The Project proponents appreciate Save The Bay's involvement in the SBSP Restoration Project planning process and will continue to work with Save The Bay as the Project moves forward. The Project proponents agree with Save The Bay that any future mitigation proposal must be carefully considered to ensure that avoidable damage to the Bay is not encouraged or permitted.

Audubon CALIFORNIA

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May 1, 2007

Clyde Morris US Fish and Wildlife Service Don Edwards San Francisco Bay NWR 9500 Thornton Avenue Newark, California 94560

Dear Mr. Morris:

Audubon California and six of the local chapters from around the Bay (Golden Gate, Madrone, Napa-Solano, Ohlone, Santa Clara Valley, and Sequoia Audubon Society Chapters) are collectively providing comments on the South Bay Salt Pond Restoration Project EIS/EIR. The local chapters operating within the communities adjacent to the three pond complexes, Ohlone, Santa Clara Valley and Sequoia Audubon Society Chapters have been actively involved in the planning process since its inception. All of our Chapters have a keen interest in the conservation and restoration of our Bay. Audubon California and its Chapters represent 50,000 members statewide with 15,000 members just around San Francisco Bay.

The San Francisco Bay Area, within the Pacific Flyway, is a major region of endemism. The wetlands of San Francisco Bay support a half-million shorebirds during migration and winter months. The entire San Francisco Bay is nationally recognized for its significance as an Important Bird Area (IBA) by the American Bird Conservancy. The San Francisco Bay region received this designation for containing significant percentages of the global populations of several species including the Alameda Song Sparrow and California Clapper Rail. Greater than 10% of the Pacific Coast population of Snowy Plover occurs within the Bay, either during the breeding season or over-wintering, and more than 15 sensitive species of birds have been documented within the South Bay. In addition, this IBA is recognized for its major concentrations of shorebirds and waterfowl both during migration and during winter months.

We embrace the goal of creating, restoring and enhancing habitats within the 15,100 acres of former salt ponds to assist in the recovery of special-status species, to maintain the South Bay as a vital stopover on the Pacific Flyway and to support the increased abundance and diversity of all native species using the varied aquatic and terrestrial habitats of San Francisco Bay. We support Alternative B – Managed Pond Emphasis in the near-term as the best approach to maintaining the greatest diversity of South Bay bird species while beginning the process of expanding tidal marsh habitat. It will take decades for the mudflats to develop and for vegetation to colonize these new marshplains in the ponds proposed for tidal restoration. In addition, there are many external factors that create uncertainty surrounding the outcome of the restoration. Therefore, we believe it is important to continue to maintain managed pond habitats to support species diversity while the

	South Bay Salt Pond Restoration Project progresses and other restoration opportunities are identified around the Bay that could serve to support saline pond-dependent species.	AUDCA-1
	The South Bay Salt Pond Restoration Project (Project) will occur over decades in a changing and uncertain environment. We applaud the concept of employing adaptive management to respond to this changing environment and yet we maintain reservations about our ability to fully fund the	AUDCA-2
necessary w dependent u habitats that impacts. It i	necessary work ahead. We also believe that the success of the restoration will be partially dependent upon our ability to conserve and restore adjacent lands that will create a mosaic of habitats that offer a diverse and rich landscape that buffers the restoration from urban development impacts. It is for these reasons that our collective comments focus on cumulative concerns and the relationship of the Project to the South Bay landscape.	AUDCA-3

Related Projects and the Intended Uses of the EIS/EIR

Relationship between the SBSPR Project and the Shoreline Study – The EIS/EIR indicates that projects defined by the Shoreline Study are precedent actions for any future restoration efforts beyond the Phase 1 Actions of the SBSPR Project. Thus, it is clear that the conversion of additional salt ponds can only move forward as flood protection projects are implemented. The Shoreline Study boundary encompasses a far greater landmass than the Project. The Shoreline Study area is divided into four geographical areas each the subject of a future interim study. These study areas include many elements that were not the subject of this EIS/EIR. These study areas impact more and different communities and include many other habitat types and associated species not addressed in this environmental review. This EIS/EIR is intended to serve as a tiering document for subsequent project-level EIS/EIRs for the Project as well as the Shoreline Study. It seems as though the Shoreline Study will include a program of actions equal or even greater in scope to the Project. Please provide additional details on how this EIS/EIR will serve as a tiering document and explain to the extent possible what analyses have been deferred to future project-level EIS/EIRs.

Project Alternatives

Meeting the Restoration Objectives - Audubon believes that Alternative B – Managed Pond Emphasis is the most conservative approach for maintaining the existing diversity of South Bay species while expanding tidal marsh habitat. Over time, the conversion of the salt ponds to tidal marsh habitat will favor some species over others. As result, the Project restoration targets, which attempt to improve habitat for all species, will result in trade-offs and resulting conditions may not be equally desirable for all species. Thus, it is critical that the Project Sponsors continuously evaluate other South Bay lands for their potential to assist in meeting species recovery targets and restoration objectives that are not being fully achieved by the South Bay Salt Pond Restoration Project (Project).

Creating a Mosaic of Habitats - None of the Alternatives include goals for upland transition habitats. Some upland transition habitat is indicated on Alternatives B and C mapping, but no goals are set for this resource. Transition habitat provides refuge for roosting birds during high tides and must be included in the restoration project to supply this twice-daily habitat requirement. Audubon believes more explicit goals for transition habitat should be established within the Project. If little transition habitat can be achieved on these 15,100 acres, then the Project should provide comment on the significance of lands adjacent to the three salt pond complexes. Upland habitat lands remain AUDCA-4

AUDCA-5

in Newark, Fremont, San Jose and Redwood City. The vast majority of these lands are under threat of development. These lands currently provide transition habitat and a buffer between the salt AUDCA-6 ponds and the urban landscape. If these lands are lost to development the urban landscape will continued encroach on the Project and have the potential to directly and indirectly impact the success of this restoration effort. Please provide comment on other adjacent lands where preservation and/or restoration would enhance the goals of the Project. Impacts of Climate Change - New climate change reports will be available in May 2007. Do the projections for sea level rise change significantly from the assumptions used in the EIR/EIS? If yes, AUDCA-7 how will the new projections for sea level rise impact the restoration potential of the Project? Will the Project "bookends" of 50% tidal/50% managed ponds and 90% tidal/10% managed ponds change? Will the timeframe for developing tidal marsh be altered for Phase 1 or for future Phases? Will even greater uncertainty impact the Project? Long-Term Alternatives and Phase 1 Actions - Please clarify sponsorship of public access projects. For example, the boat launch on Alviso Slough is part of Alviso County Park owned and operated by Santa Clara County Parks and Recreation Department. This launch ramp was planned AUDCA-8 prior to the initiation of the SBSPR Project. The Eden Landing Ecological Reserve Restoration Project initiated in 1999 includes a public access trail listed on the SBSPR Project maps. What public access projects are parts of this Project as opposed to projects of other agencies with separate time frames and funding sources? Please clarify text and maps to more clearly define the scope of this Project. Long-Term Alternatives and Phase 1 Actions - Please identify trail segments that are a part of a larger, continuous trail system with regional significance such as the Juan Bautista De Anza AUDCA-9 National Historic Trail (Alviso Pond Complex), the San Francisco Bay Trail (all three pond complexes), etc. These routes may have a higher priority for construction due to regional significance and connectivity around the Bay. **Phase 1 Actions Impact 3.6-18** – Potential recreation-oriented impacts to sensitive species and their habitats. In Phase 1 a 2.25-mile segment of the Bay Trail (spine), which has been desired by public access organizations around the South Bay for years, is proposed to extend along the levee behind Moffett Field from the Sunnyvale Treatment Ponds to the Stevens Creek Nature Area. The levee is bordered by Ponds A3W, AB2 and A2E. Ponds A3W and the adjacent Sunnyvale Treatment Ponds are a known breeding location for the Western pond turtle (*Clemmys marmorata*), a California species of special concern. Few breeding populations of Western pond turtles remain in the vicinity AUDCA-10

Turtle populations have been extirpated from areas after public access trails have opened in woodland areas. In a 20-year study Garber and Burger (1995) documented the extirpation of the wood turtle (*Glyptemys insculpta*) from a park in Connecticut. It was hypothesized that this turtle population decrease resulted from increased nest predation from raccoons (whose population increases are supported by human factors), predation and harassment by dogs, and collection by visitors to the park.

of the Project and therefore a high priority should be given to protecting this declining species.

Consideration should be given as to how the Western pond turtle will be protected along this stretch of the trail. This species is not considered a target species of the restoration effort and yet some research suggests that public access may be detrimental to the long-term success of this species. We would recommend that this species be considered a target species with a management trigger within the Adaptive Management Plan. We also recommend that monitoring of the Western pond turtle population should accompany the opening of this public access facility as part of the Phase 1 Project.

AUDCA-10 continued

Impacts and Mitigations

Impact 3.6-3 – Potential habitat conversion impacts to western snowy plover. It appears that the Project has the potential to impact the declining South Bay snowy plover population. The Project relies heavily upon active management of the snowy plover habitat, which will require financial input to support these activities for an undetermined length of time. Phase 1 of the Project assumes retention of some plover habitat (Ponds A22, E6A and E6B), enhancement of other plover habitat (Ponds E12, E13 and SF2) and creation of new habitat (Pond A16) will potentially make up for the conversion of existing plover habitat to tidal action (Ponds A8 and E8A). The effectiveness of this approach and the need for long-term management activities will be evaluated through Applied Studies as part of the Adaptive Management Plan. The results of these studies will direct future phases of the Project. Under both Alternatives B and C additional ponds that currently provide snowy plover habitat would be converted to tidal habitat further consolidating the breeding sites of the snowy ployer within each pond complex. It is possible that the snowy ployer population will not respond as hoped and a management trigger will be "tripped" requiring close examination of the Project targets associated with this species. As a result, Audubon feels that the Applied Studies focusing on the snowy plover should be expanded to evaluate other criteria associated with ployer success and that all data needs to be integrated into the species recovery plan so that the lands within the Project can continue to provide some snowy plover habitat and that other lands around the South Bay can be identified for species recovery. Ultimately, the conversion of salt ponds to tidal marsh more directly benefits other listed species and trade-offs within the Project are inevitable over time. Audubon encourages the Project Sponsors to closely monitor the effects of the Project on the snowy plover population and to seek alternate strategies and other lands to meet the goals of the species recovery plan.

3.6-5 – Potential reduction in the numbers of non-breeding salt-pond associated birds (phalaropes, eared grebes and Bonaparte's gulls) as a result of habitat loss. There has been a decline in these species within the three salt pond complexes since the implementation of the Initial Stewardship Plan (ISP), which aimed to reduce salinity in most of the ponds to <40 ppt. There has also been a decline in the South Bay populations over the last 20 years. The Adaptive Management Plan indicates that a management trigger would be reached when these species decline by more than 25% from the NEPA/CEQA baseline levels, which are based upon total South Bay populations of these species, for a period of three consecutive years or when these species decline by more than 50% from NEPA/CEQA baseline levels in any single year. The threshold for significance indicates an impact would be observed only when these species decline by more than 50% from the NEPA/CEQA baseline for a period of three consecutive years. The NEPA/CEQA baseline data for these species is based upon 2006 data. It is clear that these species are also using other ponds still actively used for salt production, as well as the Sunnyvale Water Pollution Control Ponds. Additional consideration should be given to other locations throughout the South Bay that might be best suited to maintaining these Pacific Flyway species. It is possible that some ponds

within the three pond complexes might be best suited to long-term management for these highsaline pond dependent species or that other sites around the South Bay could fulfill this habitat niche. We request more description on where habitat for these birds might be best located given the potential for other future restoration efforts.

Impact 3.6-18 - Potential recreation-oriented impacts to sensitive species and their habitats. The Project proposes four kayak launch points, one each at Eden Creek, Alviso Slough, Guadalupe Slough and Ravenswood Slough, as part of the San Francisco Bay Water Trail, a recreation project still in the planning stages. These launches are intended to provide non-motorized small boat access to the Bay. The Water Trail Plan will address wildlife sensitivities and provide guidance for managing small boat recreation along the shores of San Francisco Bay. Small boat activity has been very limited in the South Bay. Much of the South Bay is disconnected from the shoreline and access to the Bay is challenging. This Project will improve both trail and small boat access. Breeding birds are sensitive to disturbances caused by small boats. Shorebirds roosting in high tide refugia areas and rafting ducks on the Bay may also be disturbed by boating activity. Small boats are also known to create disturbance at harbor seal haul out locations (Surynan and Harvey, 1998). The capability to quietly approach allows kayakers to get quite close to a haul out locations before detection by seals (Borhorquez et. al., 2000). A recently completed monitoring study of three major San Francisco Bay haul outs supports these findings. At two of sites, kayaks caused 15% and 20% of watercraft-related disturbances and usually approached closer to the haul outs (Allen, et. al, 2006). Mowry Slough, located between Eden Creek and Guadalupe Slough, is a key haul out site for harbor seals and is used for pupping and molting. This site is believed to have been used for decades. Small boaters traveling between launch sites would pass by this critical haul out location. During high tides boats could be in close proximity to this site. In addition, the prevailing winds have a tendency to move boaters closer to the eastern shoreline causing the potential for even the most conscientious boaters to be blown off-course and toward the haul out site.

Studies of impacts suggest that watercraft are less likely to disturb harbor seals if they (1) do not get too close to a haul out site, (2) make a parallel (as opposed to a head-on) approach to seals, (3) travel at constant, slow speed and avoid erratic behavior and noises. Suitable approach distances are context dependent. For example, seals are more sensitive to disturbance during molting and breeding seasons from mid-March through July (Allen, et. al, 2006). Although the Adaptive Management Plan lists a range of management actions to be taken should management triggers be tripped, this is one area where a conservative approach to the resource may be needed from the onset of the Project. Consideration in the EIS/EIR should be given to seasonal closures of the water trail near Mowry Slough, the need for and funding to support education, management and enforcement, and the potential to provide additional cues to boaters to prevent inadvertent disturbances to the Mowry Slough haul out. Implementation of the Project should consider the placement of buoys in the Bay to indicate to small boaters the water trail alignment or minimum buffer distance around sensitive shoreline areas including harbor seal haul outs, high tide roosting refugia and rafting locations. The buoys would function in a similar manner to buoys placed at harbor entrances. It appears reasonable that these restrictions would be put in place at the beginning of the Project and potentially be removed over time as more habitat is restored and/or populations shift around the South Bay. The Project should identify significant haul outs, refugia and rafting locations and carefully consider the effects of small boat access in the previously inaccessible areas. In addition, development of the kayak launches and water trail should reflect the goals and practices being developed as part of the Water Trail Plan (draft to be released in May 2007) and associated environmental review documents (to be conducted in the fall/winter 2007).

AUDCA-12 continued

Impact 3.6-20 – **Colonization of mudflats and marshplain by non-native** Spartina and its **hybrids.** The Project assumes that the ongoing eradication efforts of the Spartina Control Program will reduce the potential for colonization of new mudflats in restored ponds. The Project assumes there is no cordgrass growing in the salt ponds because they have not been opened to tidal influence. As a result, the threshold for significance is any confirmed presence of non-native Spartina in a restored pond opened to tidal action. Any Spartina would be eradicated. It is also noted that more will be learned about non-native Spartina and the efficacy of eradication efforts over time. Monitoring protocols and management actions may need to be adpated as more is learned from the current efforts. Audubon urges focused eradication efforts in the areas adjacent to future Phase 1 Actions to minimize the potential of this invasive species to move into restored ponds.

Impact 3.6-21 – **Colonization by non-native** *Lepidium.* The Project sets a 10% colonization of *Lepidium* in the brackish marsh or upland transition zones of the restored ponds as the threshold of significance. This percentage of cover has been documented in other marshes in the South Bay. Audubon encourages further study of this invasive species and additional actions if dictated by new knowledge.

Impact 3.7-1 – Provision of new public access and recreation facilities, including the opening of new areas for recreational purposes and completion of the Bay Trail spine. The Project proposes the creation of new trails, viewing platforms, interpretive stations, waterfowl hunting access, non-motorized small boat lunch sites and associated staging and parking areas. Some of the new trails replace in-kind existing trails that will be lost as a result of the restoration, particularly under Alternative C. Some of the new spine and spur trails of the Bay Trail are indicated on the maps in orange with a note stating "Denotes trails that were identified during the alternatives development process as being of particular concern to the permitting agencies for potential to disrupt habitat." The EIS/EIR does not clearly indicate why these routes are of concern to the permitting agencies. The EIS/EIR should clarify the general nature of these concerns and indicate what restoration target(s) would need to be achieved to assuage the concerns of the permitting agencies so that these public access facilities could be constructed.

Cumulative Impacts

4.2.2 Project Level Cumulative Setting (Near-term) – City and County Development Projects The EIS/EIR includes a cumulative impact analysis that very generally characterizes the types of city and county development projects (Table 4-7) that are foreseen in the near-term (5 to 10 years). This approach to identifying near-term projects mutes the location and scale of these proposed developments and how these projects might cumulatively have impacts on the Project. We would urge a different methodology for identifying, analyzing and communicating the impacts of these near term projects. We believe that by providing more detail about the large-scale projects proposed by the cities and counties, particularly those projects immediately adjacent to the three pond complexes, a more comprehensive cumulative analysis could be performed. We also believe that some large-scale projects proposed within the South Bay, although not directly adjacent to the three pond complexes, have the potential to cumulatively impact restoration targets.

We request that these potential cumulative impacts be clearly illuminated to the public. The SBSPR Project EIS/EIR will become a reference document for years to come and the cumulative analysis is critical to future phases of the Project and to ways of thinking about local projects

AUDCA-15

AUDCA-16

proposed by the cities and counties. We suggest the use of a map to indicate the locations of large land areas proposed for development by the cities and counties. We also recommend a chart to indicate the type and scale of development as described in the city and county general plans. The same summary chart should provide a general sense of how these land uses when combined with the Project might have cumulative impacts on the restoration targets. For example, large recreation venues are proposed in Santa Clara (49ers stadium on San Tomas Aquino Creek near the ponds bordered by Guadalupe and Alviso Sloughs), Fremont (A's stadium near the Mud Slough ponds) and Newark (18-hole golf course near the Mud Slough ponds). These facilities have the potential to attract and support the expansion of corvid and gull populations, which cumulatively could place additional predation pressures on breeding birds. This is one example of how the potential impacts of city and county development projects are lost in the current cumulative impact analysis.

We suggest that most development projects located within the built environment of the local cities and counties have less potential to impact the Project than the developments that are proposed on the fringes of these cities on lands directly adjacent to the three pond complexes. Residential developments of more than 1,000 homes each are proposed on the remaining open space lands around the South Bay. In Fremont the A's Ballpark Village (adjacent to wildlife refuge lands and Mud Slough) and Patterson Ranch (adjacent to Coyote Hills Regional Park) developments combined have the potential to add 3,800 homes to the edges of the Project. In Redwood City the Pete's Harbor project, Peninsula Park project (800 homes) and Syufy Theatre conversion have the potential to add more than 1,000 homes. Cargill's bid to redevelop 1,400 acres in Redwood City has the potential to bring more urban development to the edge of the Bay. The Newark General Plan calls for 1,024 homes in Areas 3 and 4 (located on Mowry Slough). These large conversions of bayfront lands adjacent to the three salt pond complexes have the potential to cumulatively impact numerous restoration targets. These local projects will introduce human activity, traffic, domestic pet predation on native species, night-time lighting, high rise buildings, urban runoff to the Bay to mention just a few impacts that could collectively impair the ability to meet restoration targets. The potential for cumulative impacts from these adjacent large land conversions on the restoration targets must be more comprehensively identified, analyzed and communicated to the public.

Thoughts on the Future of the South Bay Salt Pond Restoration Project

2.6 Future Actions and Long-Term Uncertainties – The EIS/EIR indicates that future actions beyond Phase 1 would be determined based upon a number of decision criteria. One of the criteria is the "value of building Project support." We would suggest that building support requires the continued input from the public, land management agencies and jurisdictional agencies and that the stakeholder forums and public workshops should be maintained as needed to provide direction on all future phases of the Project. In addition, Audubon offers and suggests the following thoughts:

Citizen Science and Volunteerism – Audubon has a history of engaging, educating and empowering its members to be environmental advocates for the conservation and restoration of natural ecosystems. The implementation of the Project is strongly supported by the local Audubon Chapters and by Audubon California. We encourage the Project Sponsors to continue to outreach to the community through the stakeholder forums and public workshops. More importantly, we urge you to expand upon this effort to include citizen science and volunteerism in as many aspects of Phase 1 as practical. We believe the long-term success of the Project will be directly

AUDCA-17 continued

related to the connection the public has to all facets of the restoration effort. As the Phase 1 planning moves forward we encourage you to seek more ways to involve the community. This might include volunteering to build public access improvements, monitoring the restoration efforts, providing tours of accessible areas, etc.

The local Audubon Chapters offer to assist you in this public outreach and are available to discuss ideas for involving the community. We believe our local Chapters are a source of volunteers. We can recruit volunteers and provide a forum for training volunteers. We are supportive of this far-reaching effort to restore critical habitat and look forward to providing community support.

Coordination with Land Management Agencies – Audubon believes that additional outreach will also now be needed with the land management agencies who currently, or may ultimately, own and operate the ponds, public access facilities and flood control improvements. Although the planning process worked to engage all parties, such a long-range planning effort may not have always received the full attention of these agencies. More coordination will be needed to make the Phase I Actions successful. The recent Working Group Invitation is one step in this direction.

Project Funding – Monies are needed to support the Phase 1 Actions inclusive of all the monitoring, applied studies and modeling needed to assess the Phase 1 Actions and plan for future phases. It is critical that Phase 1 proceed with sufficient funds to carry out the restoration effort without placing a financial burden upon agencies who currently, or may ultimately, own and operate the ponds. Funding for the monitoring and applied studies is important to assessing the effectiveness of the restoration and for communicating these findings to the public and potential funders. The public, private funding organizations and all levels of government must have confidence that the restoration is working despite the many uncertainties described throughout the planning process. Funding will also be needed to support future flood protection improvements, which must precede all future phases of tidal restoration. Funding must be secured if the Project is to continue on a timely trajectory.

All involved in the South Bay Salt Pond Restoration Project are to be commended for the development of the Project from the management team, scientific team, national science panel, consultant team and many stakeholders who gave of their time and knowledge. Audubon eagerly anticipates the restoration project moving cautiously forward, continuously evaluating the restoration targets, and monitoring the management triggers of the Adaptive Management Plan. In the future, it would be truly glorious to look out over this landscape and view a healthier and more vibrant ecosystem supporting greater abundance and wider range of biodiversity.

We thank you.

Sincerely,

Graham Chisholm/bp Audubon California Director of Conservation

AUDCA-18 continued

AUDCA-19

AUDCA-20

Gerald D. Karr/bp Board Member – Audubon California Representing the Bay Area Audubon Chapters

Elizabeth Murdock/bp Executive Director Golden Gate Audubon

Veronica Bowers/bp President Madrone Audubon Society

Cheryl Harris/bp President Napa-Solano Audubon Society

Evelyn Cormier/bp President Ohlone Audubon Society

Carol Masterson/bp President Sequoia Audubon Society

Bob Power Executive Director Santa Clara Valley Audubon Society

References

Allen, S.A., H. Markowitz, D. Green, E. Grigg. 2006. Monitoring the Potential Impact of the Seismic Retrofit Construction Activities at the Richmond San Rafael Bridge on Harbor Seals (Phoca vitulina): May 1, 1998 – September 15, 2005. Richmond Bridge Harbor Seal Survey.

Borhorquez et al. 2000. Concluded from the first portion of the Richmond Bridge Harbor Seal Survey monitoring that "A higher proportion of kayaks elicit a disturbance response from the seals than all other types of watercraft within 200m of the haul-out sites. Kayaks within 200m also caused a higher proportion of flushes.

Borhorquez, A.S., M.J. Galloway, D.E. Green, E.K. Grigg, S.G. Allen and H. Markowitz. 2000. Differential Response of Pacific Harbor Seals (Phoca vitulina richardsi) Towards Kayaks Compared to Other Watercraft. Animal Behavior Society Conference, Georgia, August 5-10, 2000. Abstract.

Garber, S.D. and J. Burger. 1995. A 20-year study documenting the relationship between turtle decline and human recreation. Ecological Applications. 5:1151-1162.

Suryan, R.M. and J.T. Harvey. 1998. Variability in reactions of Pacific harbor seals Phoca vitulina richardsi, to disturbance. Fish. Bull. 97:332-339.

Response to Audubon California

- AUDCA-1: Comment acknowledged. This comment expresses support of the goal of the SBSP Restoration Project and Alternative B. This comment does not address the adequacy of the EIS/R.
- AUDCA-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.
- AUDCA-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of the EIS/R. Also please see responses below related to Audubon's concerns regarding the relationship between the Project and the South Bay landscape.
- AUDCA-4: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Shoreline Study.
- AUDCA-5: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the preferred alternative.

The EIS/R recognizes the trade-offs of the Project alternatives, including the trade-offs between tidal and managed pond species and habitat restoration and public access/recreation opportunities (see Section S.7, Areas of Controversy, of the Executive Summary).

Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of the EIS/R and consideration of other lands for habitat restoration. As discussed, the Project proponents will assess the status of lands outside the SBSP Restoration Project Area at the beginning of each phase to determine if they are available for restoration.

AUDCA-6: Newly created upland transition zones represent an important habitat type largely absent from the South Bay currently, and would provide the opportunity for the re-introduction of special-status plant species as well as important habitat component for wildlife species. The restoration of this missing element in the South Bay tidal ecosystems is a priority for the Project, and large areas of this habitat type (totaling approximately 250 acres for Alternative B and 750 acres for Alternative C) have been included in Alternatives B and C. Text has been added highlighting that the creation of upland transition habitat is an important component of achieving the Project's habitat creation goals.

> Preservation of this habitat type outside of the Project boundary is beyond the scope of the EIS/R for this Project. However, the Project proponents will assess the status of lands outside the SBSP Restoration Project Area at the beginning of each phase to consider for restoration. Upland transition habitat in the Warm Springs Unit of the Refuge is already protected and managed for its ecological value. Other lands adjacent to the SBSP

Restoration Project Area, such as those at Shoreline Park in Mountain View and Moffett Federal Airfield, as well as lands in Newark and Redwood City outside the immediate Project Area, could also serve as upland transition habitat following restoration of tidal habitats in adjacent areas.

- AUDCA-7: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.
- AUDCA-8: Program-level (long term) actions for the SBSP Restoration Project are listed in Chapter 2 in the following tables:
 - Table 2-7
 Proposed Eden Landing Recreation and Public Access Features under Alternative B
 - Table 2-8
 Proposed Alviso Recreation and Public Access Features under Alternative B
 - Table 2-9
 Proposed Ravenswood Recreation and Public Access Features under Alternative B
 - Table 2-13
 Proposed Eden Landing Recreation and Public Access Features under Alternative C
 - Table 2-14
 Proposed Alviso Recreation and Public Access Features under Alternative C
 - Table 2-7
 Proposed Ravenswood Recreation and Public Access Features under Alternative C

Project-level (Phase 1) actions for the SBSP Restoration Project are a subset of what is provided in the above noted tables and are summarized in Chapter 2 in:

- Table 2-17Proposed Recreation and Public Access Phase 1 Actions General
Characteristics
- AUDCA-9: The response to Comment AUDCA-8 provides information regarding which trail segments are part of the Bay Trail spine. Information provided in Chapter 3 in Table 3.7-1 indicate where the Project Area interfaces with adjacent regional trail connections. The proposed Juan Bautista de Anza National Historic Trail does not fall within the Project Area or adjacent park and open space areas, however trail facilities built within the Project Area will be able to be used to connect with this National trail. Text has been added to the second column of Table 3.7-1 in the section for Alviso Complex, under the heading Additional Trails:
 - Bay Trail Spur (surrounding City of Sunnyvale WPCP)
 - <u>Bay Trail Reach 7A (County Marina to UPRR)</u>
 - Juan Bautista de Anza National Historic Trail.

- AUDCA-10: Please refer to the response to Comment NASA-4 for a discussion of western pond turtle issues.
- AUDCA-11: Comment acknowledged. Contributing to the recovery of the western snowy plover is an important Project objective, and both numbers and reproductive success will be monitored by this Project (including lead agencies, partners and collaborators) to ensure that the Project not only does not result in significant impacts to the species, but rather contributes to its recovery.
- AUDCA-12: Habitat for salt-pond associated birds such as Eared Grebes and phalaropes will be managed in some of the managed ponds; for example, the small-scale "salt pond complex" to be created in Phase 1 at Ponds E12 and E13 will provide foraging habitat for these birds. Ongoing monitoring of bird numbers throughout the South Bay will determine other areas where these birds are concentrated and determine trends in South Bay numbers, helping to inform management decisions regarding the location and extent of pond habitat managed for high-salinity conditions.
- AUDCA-13: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife, including expanded, more explicit consideration of public access issues by the Adaptive Management Plan. The recommendations for measures to minimize adverse effects on harbor seals proposed by the commenter will be considered in the array of adaptive management options available if monitoring reveals adverse effects of public access on harbor seals.
- AUDCA-14: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of invasive *Spartina* issues. In addition, areas adjacent to future Phase 1 actions are currently being monitored as part of the baywide effort to eradicate Spartina by the Invasive Spartina Project.
- AUDCA-15: The Project will continue to pursue current research and monitor colonization by nonnative *Lepidium*. As part of the Adaptive Management Plan, the Project will modify the ten percent colonization threshold if new knowledge dictates that such a modification is required.
- AUDCA-16: Trails shown on the alternative maps in orange are presented to indicate that future phases of the program alternatives will require a more detailed project-level analysis under CEQA/NEPA and are subject to future permitting requirements and funding allocations. To assist in future determinations about potential wildlife disturbance related to public access and recreation the Adaptive Management Plan has been expanded to incorporate public access elements. New information obtained from monitoring of the wildlife responses to changes in public access will directly influence decision-making related to existing public access elements and future Project phases as understanding of the ecosystem response improves. Potential adverse environmental impacts can thus be avoided as decision makers better understand how public access actions affect the

biological attributes of the South Bay ecosystem. The specific adaptive management elements of the Phase 1 actions can be found in Section 2.5 and Figure 2-3b, The Adaptive Management Staircase of Recreation and Public Access.

AUDCA-17: As discussed in Section 4.2.2 of the EIS/R, the cumulative setting must consider planned, recently completed, and probable future projects within many local jurisdictions throughout the South Bay. Each jurisdiction has an extensive list of projects ranging from individual home remodeling projects to large-scale residential and commercial development to industrial and infrastructure projects. Most of the projects on these lists were either recently completed or will be completed within five years. While this information is relevant to the EIS/R, it only characterizes the short-term cumulative setting.

To assemble a more complete picture of the cumulative setting over the Project's 50-year planning horizon, regional planning documents were reviewed. Regional plans present long-term development trends and projections that are based on Census data and economic data as well as on the General Plans of South Bay cities and counties.

Section 4.2.1 of the EIS/R provides population and household projections for the cities within the SBSP Restoration Project Area from ABAG Projections 2005, as well as other regional trends from the Metropolitan Transportation Commission, California Air Resources Board, and Bay Area Air Quality Management District. These trends represent the best available information for changes that are anticipated to occur over the Project's 50-year planning horizon, and supplement the list of cumulative projects provided in the EIS/R.

This approach is consistent with the CEQA Guidelines, which states that an adequate analysis of cumulative effects would require either of the following:

A. A list of past, present, and probable future projects producing related or cumulative impacts; or

B. A summary of projections contained in an adopted general plan or related planning document. (Section 15130[b][1])

CEQ Regulations for Implementing NEPA, while less specific than CEQA, describes cumulative impacts in a similar fashion:

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. (Section 1508.7)

Because city and county development projects would likely change by the time future phases of the Project are proposed, a discussion of the types of projects that could occur throughout the planning horizon is appropriate. As discussed in Section 1.7, subsequent project-level EIS/Rs would be required for future Project phases. Although this EIS/R would serve as a tiering document for future project-level EIS/Rs prepared for future phases of the SBSP Restoration Project, it is likely that cumulative impacts would be re-evaluated to address changing conditions over the long term.

The commenter states that a number of specific projects should be included in the EIS/R cumulative setting. Two of the projects identified by the commenter are included on current city project lists and have been added to the cumulative setting: Patterson Ranch and the Peninsula Park Project. The Patterson Ranch development, an 428-acre residential project with open space, school and retail uses, is identified on the City of Fremont's current development activity list, although its status is considered incomplete. The Peninsula Project, a 33-acre residential/retail/park development, is included on the City of Redwood City's Community Development Services list of proposed projects.

The Oakland Athletics Baseball Company submitted an Application for a Community Specific Plan and an amended Development Agreement Application for the Cisco Field & Ballpark Village Project on November 8, 2007. Ballpark Village, located within the City of Fremont, would consist of development of a 32,000-seat ballpark with ancillary facilities, office uses and a few dwelling units, retail, a boutique hotel, residential units and ballpark parking spaces. This project has been also added to the EIS/R cumulative setting.

The commenter notes that the City of Newark's General Plan calls for 1,024 homes in Areas 3 and 4. Sobrato Development submitted an application for the Areas 3 and 4 Specific Plan, located southwest of Cherry Street between Mowry Street and Stevenson Boulevard (Grindall 2007). The plan proposes an 18-hole championship golf course and between 1,000 to 1,400 housing units. This project has been added to the EIS/R cumulative setting.

The other projects identified by the commenter were not specifically added to the EIS/R cumulative setting because they are considered speculative. Specifically, the proposed 49ers stadium in Santa Clara is considered speculative because the July 6, 2007 Agenda Report for the City of Santa Clara states that "[t]he City is continuing the feasibility study process, and no commitment has been made to date to a [49ers] stadium project nor has there been a commitment to any level of funding."

The Syufy Theatre Conversion is speculative. According to the Redwood City Daily News on July 7, 2007, the City of Redwood City is negotiating with the Syufy family to close down the 12-screen Cinemark Theatres complex and replace it with an auto mall. According to the article, the Syufys had indicated they would like to build housing on the site, although the site is zoned for industrial uses. No specific development plan is currently proposed.

Available information concerning the Pete's Harbor project indicates that it is not reasonably foreseeable. The Pete's Harbor project in Redwood City was part of the Marina Shores project, which was rejected. It is not identified on the City's most recent Community Development Services list of proposed projects.

- AUDCA-18: Section 1.5 of the EIS/R discusses the SBSP Restoration Project Planning Process, which includes a description of the stakeholder forum, work groups, and public outreach. The forums and groups would allow for continued participation by interested organizations and individuals, in addition to local and regional public and resource agencies. The Project proponents invite all ideas to engage the public, such as participation by the public to build recreation improvements, monitoring the restoration efforts, or acting providing tours. The Project proponents appreciate greatly Audubon's interest and willingness to engage in public outreach that involves the local community.
- AUDCA-19: Comment acknowledged. Land management agencies are invited to work group meetings. The Project proponents have also been meeting with land management agencies to discuss opportunities for land agencies to operate future recreational facilities.
- AUDCA-20: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.
- AUDCA-21: Comment acknowledged. This comment does not address the adequacy of the EIS/R.

Law Offices of

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May 3, 2007

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HAND DELIVERED AND U.S. MAIL Brenda Buxton California Coastal Conservancy 1330 Broadway, 13th Floor Oakland, CA 94612 VIA U.S. MAIL Yvonne Le Tellier United States Army Corps of Engineers 1455 Market Street San Francisco, CA 94103

John Krause California Department of Fish and Game P.O. Box 47 Yountville, CA 94599

Re: Comments of Citizens Committee to Complete the Refuge and Marin Audubon Society on South Bay Salt Pond Restoration Draft Environmental Impact Statement/Report

Dear Messrs. Morris and Kraus and Ms. Le Tellier and Buxton:

On behalf of the Citizens Committee to Complete the Refuge and the Marin Audubon Society, we submit the following comments on the Draft South Bay Salt Pond Restoration Project Environmental Impact Statement/Report ("SBSPRP EIS/R") dated March, 2007.

THIS PROJECT-LEVEL EIS IS TOO NARROW IN SCOPE TO SERVE AS A PROGRAM-LEVEL EIS

The SBSPRP EIS/R declares itself to be <u>both</u> a 50-year programmatic (or tier 1, program-level EIS/R for the South San Francisco Bay Shoreline Study, and also a <u>project-level</u> EIS/R to support its own wetland restoration project implementation. It asserts that "[t]his EIS/R will serve as the tiering document for future phases of both the SBSP Restoration Project and the Shoreline Study." *Id.* at ES-15. The EIS/R defines its geographic range of alternatives, however, narrowly at the project level as merely three

VOLK-1

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<u>"salt pond clusters" now ripe for wetland restoration</u> (two owned by the Refuge, one owned by the California Department of Fish and Game ("CDFG")), rather than the entire south San Francisco Bay. All its alternatives are confined to the three salt pond clusters currently available for project implementation. The EIS/R does not assess programmatic alternatives for restoration within the geographic scope of the much larger Shoreline Study area.

Although the EIS/R does make passing reference to areas outside the three project-level salt pond clusters in a general discussion of "environmental setting," it treats these areas unevenly and superficially. It fails to present a rigorous assessment of the indirect and cumulative long-term impacts of project implementation on salt pond and tidal marsh areas within the Shoreline Study boundaries that are outside the currently defined restoration project. Consequently, it provides no program-level comparison of reasonable alternatives in the 50-year horizon for salt ponds outside the project-level "pond clusters."

As a <u>program-level</u> EIS/R, the document also proposes to provide initial NEPA/CEQA compliance for another <u>project-level</u> EIS of the same joint federal lead agencies, the U.S. Army Corps of Engineers ("USACE") and U.S. Fish and Wildlife Service ("USFWS"). With the California State Coastal Conservancy, they have jointly issued a Notice of Preparation for the South San Francisco Bay Shoreline Study (SSFBSS) EIS/R (January 2006 NOP).

The geographic scope of the Shoreline Study, in contrast with that of the SBSPRP EIS/R, is <u>comprehensive</u>, <u>covering all the South Bay salt ponds and all areas within the</u> approximate 100-year floodplain from Redwood Creek to Eden Landing. The far greater geographic scope of the Shoreline Study is shown graphically in Figure ES-1 to the SBSPRP EIS/R.

The <u>program-level</u> (tier 1) SBSPRP EIS/R thus has a <u>narrower</u> geographic scope and <u>narrower</u> range of potential alternatives than the Shoreline Study, even though the latter is proposed as a project-level EIS. The geographic scopes of the program-level and project-level EIS/Rs are thus <u>inverted</u>: the (nominally) program-level, "tier-1" EIS/R has a smaller geographic focus than the project-level, "tier-2" Shoreline Study. This inversion violates both NEPA and CEQA, as we explain below.

This threshold error in methodology impermissibly narrows the initial scope of environmental analysis, at the very time when it should be the broadest. The gap between the scope of the nominal "tier 1" EIS/R and the project-level Shoreline Study excludes the majority of federally-owned salt ponds in the East Bay from programmatic review of alternatives. The excluded ponds are primarily USFWS Refuge-owned ponds outside the "pond clusters" currently proposed for restoration. The excluded ponds also include important non-federal (privately owned or publicly owned) salt ponds and diked baylands that may become available for restoration within the 50-year planning horizon. The EIS/R offers no explanation for this nonsensical and self-defeating exclusion.

VOLK-1 continued

Many of these omitted lowlands and baylands within the Shoreline Study boundary have highly important potential roles in region-wide restoration planning. Some provide unique or rare opportunities to supply the restoration program with distinct habitat types, resilience to sea-level rise, and optimal configurations for wetland habitats in relation to existing populations of sensitive species or remnant mature wetlands and terrestrial habitats. Many <u>potentially significant long-term (50 year) impacts of the</u> <u>proposed project could be lessened or avoided by including these omitted geographic</u> areas in the program-level range of alternatives.

Moreover, some <u>potentially significant long-term environmental impacts may be</u> <u>induced by</u> the narrow project-level focus on discrete salt pond clusters, and <u>elimination</u> <u>of the larger salt pond system from long-term programmatic planning and evaluation</u>. Mitigation options and alternatives that could lessen or eliminate some impacts may be found in restoration alternatives that embrace the entire South Bay salt pond complex in the 50-year horizon.

The EIS/R also <u>fails to compare the obvious potential advantages in terms of</u> <u>feasibility for restoring salt ponds outside the proposed pond clusters</u>. Rigorous programmatic assessment of the cost and temporal benefits (e.g., faster restoration of less subsided salt ponds) of the excluded salt ponds, and their chances of successful restoration, is essential for informed comparison of reasonable 50-year programmatic alternatives. This scoping gap <u>precludes a meaningful programmatic comparison</u> <u>between 50-year restoration plan design alternatives for the SBSPRP's publicly owned</u> <u>salt ponds within the Shoreline Study area</u>. The SBSPRP EIS/R fails to consider programmatic alternatives for potential 50-year restoration plan designs that could take into account all the lands included in the Shoreline Study. This defect is particularly acute for the omitted salt ponds that are within the Refuge and thus within the direct regulatory jurisdiction of the Fish and Wildlife Service. For a programmatic EIS/R, this is clearly a fatal flaw.

A repeated major factual error in the EIS/R exacerbates the impact of this omission: the EIS/R_repeatedly <u>misrepresents federally-owned salt ponds outside the</u> <u>currently available "pond clusters" as "Alameda County-owned</u>," suggesting to EIS/R reviewers that these ponds are outside the jurisdiction of USFWS and CDFG for planning and project implementation. This error stymies meaningful and informed public comment on the greater South Bay salt pond system's integration within a 50-year restoration plan.

THE SBSPRP EIS/R INVERTS THE TIERING HIERARCHY

The SBSPRP EIS/R purports to provide the initial, or "first-tier," programmatic analysis on which subsequent EIS/Rs will be based. In NEPA or CEQA parlance, tiering refers to sequential EIS/R treatment of a broad ("programmatic") plan or policy statement in which narrower subsequent site-specific actions ("projects") within the program are addressed in later, narrower environmental reviews. 40 C.F.R. § 1502.28; 14 C.C.R. § 15385. The stated NEPA/CEQA purposes of tiering are to "provide increased efficiency"

VOLK-1 continued

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and "eliminate repetitive discussions of the same issues and focus on the actual issues ripe for decision at each level of environmental review". *Id.* The regulations on tiering expressly refer to the site-specific action EIS/Rs as <u>subsequent</u> to the initial and broader programmatic EIS/R. The relationship is plainly hierarchical, "tiering" down from broader levels of evaluation to the narrower focus or scope of site-specific actions. A key purpose and advantage of program EIR review in the CEQA Guidelines is to "provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action" and "allow the lead agency to consider broad policy alternatives and program-wide mitigation measure at an earlier time when the agency has greater flexibility to deal with basic problems or cumulative impacts." 14 C.C.R. § 15168(b)(1), (4).

These NEPA and CEQA regulations provide the standards for program EIS/R review of reasonable alternatives and impact assessment. The SBSPRP EIS/R departs from these standards, as we explain below.

THE SBSPRP EIS/R FAILS TO CONSIDER A REASONABLE RANGE OF ALTERNATIVES

The range of alternatives an EIS/R must evaluate includes "all reasonable alternatives" from the perspective of the project's purpose and the broad goals of NEPA/CEQA. "Forty Most Asked Questions" concerning CEQ's NEPA Regulations, 46 Fed. Reg. 18026 (March 23, 1981) as amended 51 Fed. Reg. 15618 (April 25, 1986). In making this case-by-case determination, agencies are expected to narrow an initially wide spectrum of different alternatives to a manageable number of representative ones (1b, 2a). According to the CEQ, "reasonable alternatives" include "those that are practical or feasible from the technical and economic standpoint and using common sense, <u>rather than simply desirable from the standpoint of the applicant.</u>" *Id.* The scope of alternatives cannot be based merely on "whether the proponent or applicant likes <u>or is itself capable of carrying out a particular alternative</u>." *Id.* at 2a; emphasis added. The CEQ distinguishes between the "agency's preferred alternative" (the one the agency proposes to implement) from NEPA's "environmentally preferable alternative," in order to alert Congress to alternative projects with greater environmental benefits. *Id.* at 4a, 4b, 4c, 6a, 6b.

The foregoing point highlights the significance of the geographic "scope gap" between the SBSPRP EIS/R and the SSFBSS EIS/R. As the governing CEQ policy guidance (Question/Answer 2b) explains:

An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, <u>because the EIS may serve as the basis for modifying the</u> <u>Congressional approval or funding in light of NEPA's goals and policies</u>. Section 1500.1(a). [emphasis added] VOLK-3 continued

Id., emphasis added. *Accord*, *Environmental Defense Fund v. Corps of Engineers* (5th Cir. 1974) 492 F.2d 1123, 1135 (an agency may not restrict the range of alternatives considered to those that the agency can adopt or put into effect or that are within the agency's regulatory control).

The rule under CEQA is the same: alternatives may not be rejected for consideration "merely because" they are beyond an agency's authority. Bass, et al., *CEQA Deskbook* (2nd ed. 1999) p. 112; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 575 fn. 7.

The SBSPRP EIS/R violates this guidance because it fails to provide a programlevel EIS/R evaluation of the entire South Bay, including all federally owned salt ponds, for purposes of long-term planning of integrated flood control and wetland restoration projects. It contravenes NEPA's and CEQA's clear command that an EIS should evaluate all reasonable alternatives even if they are beyond those that are immediately available, or within the existing authority or funding, of a lead agency, if environmentally preferable and otherwise "reasonable" alternatives exist beyond those bureaucratic constraints. The purpose of evaluating such alternatives is to alert Congress and other decision-makers to modify their authorizations or funding to improve environmental results when it is in the public interest to do so. This is a fundamental function of the EIS/R, especially a programmatic EIS/R.

THE SBSPRP EIS/R SUFFERS FROM A SIGNIFICANT GAP IN ITS GEOGRAPHIC RANGE OF ALTERNATIVES.

The SBSPRP EIS/R states that it is "both a Programmatic EIS/R covering the 50 year long-range plan as well as a Project-level EIS/R...[for]...implementation of Phase 1." EIS/R Cover Sheet; ES-15; 1-1; 1-4. There are two (joint) federal lead agencies for NEPA, the U.S. Fish and Wildlife Service (USFWS) and the U.S. Army Corps of Engineers (USACE). These agencies are simultaneously preparing a flood control feasibility study and future project for the South Bay known as the South San Francisco Bay Shoreline Study. This study will recommend and implement one or more multipurpose flood damage reduction projects with ecosystem restoration and public access components. EIS/R 1-1. "Because the two projects [SBSPRP and SSFBSS] are closely interconnected the shoreline study EIS/R will <u>tier from</u> this SBSP Restoration Project EIS/R" *Id.*, emphasis added. The SBSPRP EIS states that the two projects have "similar objectives and geographic scope" *Id.*

The NOP for the SSFBSS EIS/R (January 2006) states that "[i]t will function as a project-level EIS/EIR under that programmatic EIS/EIR [the SBSPRP EIR] and will be issued subsequently to that programmatic document. But the SBSPRP EIS/R did not reveal its narrow geographic scope of <u>project</u> alternatives, and corresponding <u>omission of programmatic alternatives</u> matching the geographic scope of the SSFBSS, until the March 2007 release of the Draft EIS/R. Thus, agencies and the public were not made aware of the gap between the geographic coverage of the Program and Project EIS/Rs until publication of the SBSPRP EIS/R. Indeed, following the publication of the SSFBSS

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EIS/R Notice of Preparation, agencies and the public had reason to expect that the programmatic geographic coverage of the SBSPRP EIS/R would include the entire South Bay salt pond complex.

The Shoreline Study Interim Feasibility Study Boundaries are shown in Figures ES-1, 1-3 and 1-5 of the SBSPRP EIS/R. These figures also delineate the "SBSP Restoration boundary" (pond clusters proposed for wetland restoration). Specific geographic areas comprising the gap between the (nominally) "programmatic" SBSPRP EIS/R and the SSFBSS EIS/R can be inferred from these figures. They include the following areas that may be important sites for planning long-term wetland restoration and flood control alternatives:

- All Newark system ponds (N-numbered ponds) south of Alameda Creek Flood Control Channel to the Hetch Hetchy aqueduct;
- All Mowry system ponds (M-numbered ponds) south of Hetch Hetchy aqueduct to Mud Slough;
- All Newark crystallizer beds (both within the Refuge and on private lands);
- All Redwood City crystallizer beds and bittern ponds; and
- Other diked baylands and many undeveloped low-lying areas adjacent to historic tidal marshes, including Patterson Ranch, derelict waterfowl hunting club lands.

The significant extent of the N- and M-numbered ponds that are excluded from the SBSPRP's "restoration boundary," and the significantly greater geographic area of the Shoreline Study boundary, are shown in Figures ES-1 and 1-3.

The SBSPRP EIS/R offers no explanation for its omission of the N and M ponds, crystallizers, and other baylands relevant to programmatic comparison of long-term restoration and planning alternatives. Indeed, there is no explanation at all for the utter lack of programmatic planning alternatives: the alternatives analysis focuses exclusively on the areas *within* the currently proposed (project, site-specific) pond restoration clusters. This omission appears to be <u>either</u> an arbitrary executive agency decision or an error of Draft EIS/R preparation and review.

The EIS/R and particularly its alternatives analysis thus fail to provide any programmatic guidance. Its range of alternatives is identical with the narrow project-level EIS/R functions, and even at this level it neglects to consider other alternatives that are clearly within federal jurisdiction. The absence of the stated tiering relationship of the SBSPRP and SSFBSS EIS/Rs and the narrow project coverage of the SBSPRP EIS/R begs explanation, but the EIS/R provides none.

VOLK-5 continued

THE SBSPRP EIS/R MISREPRESENTS THE OWNERSHIP OF AFFECTED LANDS

The SBSPRP EIS/R affirmatively and systematically misrepresents facts of feetitle ownership of salt ponds in the areas comprising the geographic gaps between the SBSPRP and SSFBSS boundaries. For example, the discussion in Section 1.4.3 of "salt Ponds Acquisition" covers only the California purchase of "land and salt production rights" culminating in 2003, and makes no reference at all to the 1979 fee-title acquisition of all the other salt ponds within the Refuge with industrial/mineral rights retained by the private solar salt industry (Leslie Salt/Cargill).

To make matters worse, the EIS/R states that the salt ponds that lie north of the Alviso Ponds and south of the Alameda Flood Control Channel are "comprised of <u>Alameda County-owned salt ponds</u>." *Id.* 1-23; emphasis added. This error is repeated graphically in Figure 1-5, and compounded by the EIS/R's misdescription of "Cargill Ponds" as owned by "Alameda County." These misstatements are nowhere corrected or contradicted in the EIS, even in sections (such as on Salt Pond Acquisition) where the joint lead agency, the Refuge, would be expected to describe and delineate its own lands.

The "Alameda County" ponds are the same Newark (N) and Mowry (M) ponds that are omitted in the alternatives analysis (program or project level). They are in fact owned by the Refuge; industrial production and mineral rights are retained by Cargill. This fact of Refuge ownership is not only obscured to agency and public readers, it is confused by counterfactual graphics and text that have the effect of discouraging their evaluation as restoration alternatives. This is important because the EIS/R avers that "[t]he Corps has not identified where any of the preliminary actions presented above would occur Shoreline Study alternatives will be determined through the Corps's [*sic*] plan formulation process as part of future Interim Feasibility Studies." *Id.* 1-23. This critical error in identifying pond ownership may thus bias public comments addressing (and thus affecting) the programmatic EIS/R's control of future project site selection for subsequent restoration plans within the Refuge over 50 years, where contemporary industrial salt-making rights may or may not be asserted in the future.

The questionable legal and economic viability of the industrial saltmaking/mineral rights in the long-term is a key aspect of the 50-year planning horizon for the N, M, and R salt ponds, but this issue is not addressed in the EIS/R. The SBSPRP EIS/R refers to the Interim Stewardship Plan (ISP) EIS, and the ISP's objective to "cease salt concentrating processes within the ponds." But the EIS/R says nothing of the "independent utility" of salt production within the Refuge-owned/industrial operated N and M ponds, not even in its discussion of the Cargill Operations. *Id.*, section 1.4.2. Instead, the EIS merely states that "Cargill will continue to operate the Newark Ponds and Newark and Redwood City processing plants," without regard to whether the entire cumbersome process of bay water intake, evaporation/concentration ponds, brine, pickle, and crystallization is even feasible in the long-term (50 year planning horizon). The EIS/R does not even identify whether new bay intake (initial stage new brine production)

is in progress in Refuge ponds, or whether current production is merely moving previously formed brines through late concentration and production stages.

This issue is highly relevant to long-term and even near-term planning of restoration and flood control design. The EIS/R fails to address whether salt production may continue indefinitely in reconfigured N and M ponds disconnected from the rest of the system, or whether the economic viability or industrial productivity of the reduced, isolated salt ponds is impaired in the long-term. This information is essential to a reasoned assessment of long-term programmatic alternatives covering Refuge-owned salt ponds.

For the "Ravenswood Ponds" (Redwood City), the SBSPRP EIS/R refers only to USFWS ownership of ponds, and omits reference to privately-owned (Cargill) crystallizers that are plainly shown within the Ravenswood Pond boundary in Figure 1-5, and distinguished from Refuge-owned (red-lined) ponds in Figure 1-3. *Id.* 1-21.

On the whole, these errors of omission and affirmative errors of fact inject profound confusion into the geographic scope of program-level and project-level evaluation of alternatives in the SBSPRP EIS. They thwart informed public review and comment.

THE SBSPRP'S INVERTED GEOGRAPHIC SCOPE OF THE PROJECT-AND PROGRAM-LEVEL COMPARISONS OF ALTERNATIVES CREATES CRITICAL GAPS AND ERRORS IN ENVIRONMENTAL REVIEW

The omission of large geographic areas (primarily Refuge ponds) from the SBSPRP EIS/R's comparison of alternatives at the programmatic level may result in significant potential adverse impacts that could be avoided or minimized with alternative configurations of long-term wetland restoration projects within the Shoreline Study boundaries. The EIS/R recognizes potential conflicts between shorebird and waterfowl habitats (including federally-listed western snowy plovers and California least terns, which nest on emergent hypersaline flats of dry salt pond beds) and tidal marsh restoration. The EIS/R also recognizes the potential to mitigate these impacts to pond-dependent shorebirds and waterfowl by modifying the depth, duration, and seasonal timing of pond flooding.

But these potential conflicts and mitigations are never related to the ponds – and management options – outside the SBSPRP's 3 pond clusters. Many of the operational constraints for pond management, and also tidal restoration, relate to pond bed elevation, and efficiency of drainage. The large contiguous acreages of salt ponds (and crystallizers, a type of pond) in the N, M, and R complexes are among the least subsided in the South Bay, and occur adjacent to some of the largest existing breeding populations of federally-listed wetland birds. In contrast, many or most of the Alviso (A) ponds are deeply subsided, requiring long periods of sedimentation and relatively larger volumes of sediment to develop tidal marsh, or relatively greater operation effort to drain to shallow managed pond depths.

VOLK-6 continued

Alternative long-term programmatic configurations of managed salt pond and tidal marsh across the entire South Bay could take better advantage of existing pond topography, elevation, and configuration, compared with the current project acreage dominated by Alviso ponds. Adding crystallizers to long-term restoration plans may reduce long-term conflicts between habitat restoration requirements to recovery salt flatdependent birds (snowy plover, least tern) and tidal marsh species.

Unfortunately, the EIS/R fails to disclose and discuss these essential points regarding the potential use of lands outside the 3 pond clusters to mitigate ecologic harm. This omission stymies informed public review and agency decision-making.

THE SCOPE OF THE SBSPRP EIS/R MUST BE BROADENED TO ADDRESS PROBABLE OR FORESEEABLE FUTURE PROJECTS

Because the Shoreline Study is intended to generate future projects, these must be treated as "probable future projects" or "reasonably foreseeable future actions" for assessing cumulative impacts under CEQA (14 C.C.R. § 15130) and NEPA (40 C.F.R. § 1508.7). A "future project" may be "probable" even though it may not be built; the criterion for "probable future project" is whether it is foreseeable at the time of EIS/R preparation. Adequate assessment of cumulative impacts could not be feasible without assessing at a programmatic level the potential future configuration of salt ponds and diked baylands within the <u>entire</u> Shoreline Study area.

Because the EIS/R fails to provide this essential assessment, it must be revised.

THE LEAD AGENCIES FOR THE SBSPRP SHOULD CORRECT THE EIS'S IMPROPER TIERING, SCOPE, OWNERSHIP DESCRIPTIONS AND GEOGRAPHIC COVERAGE

For the reasons discussed above, the SBSPRP EIS/R "is so inadequate as to preclude meaningful analysis." Its profound errors and omissions have (1) arbitrarily eliminated most program-level assessment of alternatives and impacts, (2) confused the public about the proper tiering functions of the SBSPRP EIS/R, and (3) misled the public about the nature and ownership of federal lands within the study area. We urge your adoption of the first of the following remedies:

<u>Reverse the tiering relationship of the SBSPRP and SSFBSS EISs</u>. The SSFBSS has a much larger geographic scope, a longer time-line, and far broader purposes. It is therefore better suited to serve as the programmatic EIS. Yet it will emerge subsequent to the SBSPRP. The SBSPRP "tail" would then wag the SSFBSS "dog." The geographic and temporal deficiencies of the project-level SBSPRP alternatives analysis could not be adequately addressed in a supplemental draft EIS/R, or even in a recirculated (new) draft EIS/R (40 C.F.R. § 1502.9(a)-(c)). If the SBSPRP laudably attempts to reverse its programmatic relationship to the SSFBSS EIS/R, it will require notice in the Federal Register, and re-scoping of the Shoreline Study EIS/R to partially

VOLK-7 continued

VOLK-8

compensate for the deficient (absent) program-level comparison of alternatives of the SBSPRP EIS within the Shoreline Study boundaries. Other, far less acceptable options include the following: Recirculate the Draft EIS/R, maintaining tiering relationships. Recirculate the current SBSPRP EIS/R with enough meaningful discussion of program-level alternatives VOLK-9 within the full geographic scope of the SSFBSS to partially mitigate the gaps with the continued SSFBSS EIS/R. Suspend the Draft EIS/R and issue a supplemental program-level SBSPRP EIS/R focusing on long-term, area-wide alternatives, impacts, and mitigation. This approach would attempt to correct the deficient program-level EIS content through a separate, supplemental document. The EIS/Rs (draft and supplemental) could proceed to final after comments on the supplemental document that adequately addresses program-level issues. **CONCLUSION** VOLK-10 For the reasons set forth above, the SBSPRP EIS/R is fatally flawed. The only proper remedy is to withdraw the document and prepare a programmatic EIS/R for the South San Francisco Bay Shoreline Study first, and subsequently tier from that document a project-level EIS/R for the SBSPRP. Thank you for considering our comments on this important matter.

Respectfully submitted,

/s/ Stephan C. Volker

Stephan C. Volker Attorney for Citizens Committee to Complete the Refuge and Marin Audubon Society

SCV:taf

Response to Citizens Committee to Complete the Refuge and Marin Audubon Society

- VOLK-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussions on tiering from the SBSP Restoration Project EIS/R, the relationship between the SBSP Restoration Project and the Shoreline Study, and the scope of the EIS/R.
- VOLK-2: Section 1.6.1 of the EIS/R incorrectly states that Alameda County owns salt ponds. The EIS/R has been revised accordingly.

This Interim Feasibility Study area is comprised of the <u>salt ponds within</u> Alameda County -owned salt ponds that lie north of the Alviso Pponds and south of the Alameda Creek Flood Control Channel.

- VOLK-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Shoreline Study and tiering from the SBSP Restoration Project EIS/R.
- VOLK-4: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of the EIS/R.
- VOLK-5: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussions concerning the relationship between the SBSP Restoration Project and the Shoreline Study and the scope of the EIS/R (which explains why the SBSP Restoration Project Area is confined to the three complexes).
- VOLK-6: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussions concerning the relationship between the SBSP Restoration Project and the Shoreline Study and the scope of the EIS/R.

Please see the response to Comment VOLK-2 regarding the text "Alameda Countyowned ponds."

- VOLK-7: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of the EIS/R.
- VOLK-8: As described in Section 4.1 of the EIS/R, projects that were considered in the cumulative impact analysis include related projects discussed in Chapter 1, Introduction, including the Shoreline Study. The descriptions of the related projects are not presented in Chapter 4, Cumulative Impacts, to avoid redundancy.
- VOLK-9: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussions concerning the Shoreline Study and tiering from the SBSP Restoration

Project EIS/R, the relationship between the SBSP Restoration Project and the Shoreline Study, and the scope of the EIS/R.

VOLK-10: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussions concerning the relationship between the SBSP Restoration Project and the Shoreline Study and the scope of the EIS/R.



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May 2, 2007

RE: Comments on Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) for the South Bay Salt Pond Restoration Project

Dear Mr. Morris, Mr. Krause and Ms. Le Tellier:

Thank you for the opportunity to comment on the above referenced DEIS/DEIR. This document makes a valiant attempt to analyze potential impacts of one of the most complex wetland restoration projects ever undertaken. However, we believe that this document significantly underestimates the potential impacts of substantially increased public access on wildlife species and is apparently biased towards providing an abundance of public access far beyond what is necessary to achieve public access goals and in amounts that may jeopardize wildlife populations.

We are strong supporters of appropriate public access but recognize its potential impacts and thus urge you to revise this DEIS/DEIR to reflect those impacts and to present access alternatives that are more conservative and more protective of the wildlife resources that are the main purpose of this project.

That public access may cause significant impacts to wildlife is well recognized and substantiated in many peer reviewed journal articles. The DEIS/DEIR recognizes this on page 3.6-126:

CCCR-1

Human disturbance of nesting birds can result in abandonment of nests and chicks, resulting in decreased reproductive success (Rodgers and Smith 1995, Carney and Sydeman 1999, USFWS 2001, Ruhlen and others 2003, Lafferty and others 2006). Disturbance can also lead to decreased abundance or behavioral alteration of non-breeding birds (Burger and Gochfeld 1991, Schummer and Eddleman 2000, Lafferty 2001, Burger and others 2004).

And many more references could have been included. There are many studies demonstrating the impacts of public access on ducks, for example. There is a reason why the National Wildlife Refuges Improvement Act lists public access as a potential compatible use not a primary use, and similarly for DFG Ecological Reserves (see below).

The evidence of bias in this document towards public access over wildlife protection is evidenced by the inclusion of a detailed discussion of the Trulio and Sokale (2002, 2006) study (a full long paragraph) that indicated a lack of impact on shorebirds from public access on adjacent trails. In contrast, other studies that clearly identify negative impacts from public access are simply listed with short phrase descriptions (see paragraph from 3.6-126 above).

The Trulio/Sokale study has been highly controversial with many arguing that the "control" sites were flawed because they were also subject to human use, thus negating their value as control sites and thus invalidating the study. While it may be asserted that the Trulio/Sokale study is apt because of local origin, the DEIS/DEIR ignored a 1989 study by Dr. Michael Josselyn (Public Access and Wetlands: Impacts of Recreational Use, Romberg Tiburon Centers Technical Report #9) that showed that public access resulted in impacts to all waterbirds including shorebirds.

We believe that because of this evident public access bias, Alternatives B and C provide, with the exception of the Alternative B Eden Landing component, a greater amount of public access trails than is prudent. This is especially so in light of the potential impacts the entire project may have on shorebirds and diving ducks that is indicated by the PRBO analyses that suggest potential significant declines in populations of those diving ducks and shorebirds as a result of habitat changes that are an essential part of the project.

We ask that each of the pond clusters in each of the restoration Alternatives B and C, be provided with distinct "maximum" and "sufficient but restrained" public access alternatives (we are not saying "minimum" because we do not want to appear to be saying no access at all, that is not our intent) rather than the present DEIS/DEIR mechanism of putting different access abundance scenarios in single alternatives.

The present DEIS/DEIR provides decision-makers with no information for choosing public access alternatives because: 1) none is provided and, 2) Adaptive Management is proposed to solve all problems and thus abundant public access is proposed as a proper alternative with impacts to be corrected later.

CCCR-1 continued

CCCR-2

Another example of an excessive public access bias is found in the DEIS/DEIR's Significance Criteria for Recreation.

Significance Criteria For the purposes of this EIS/R, the Project would cause a significant impact to recreational resources if it:

• Would not provide maximum feasible public access, consistent with the proposed Project (BCDC);

• Would not be consistent with local and regional laws and recreation plans including CDFG and USFWS missions and regulatory requirements;

- Would not be consistent with existing recreational uses;
- Would substantially reduce recreational opportunities at existing facilities;
- Would substantially displace public recreation activities or opportunities and comparable recreation opportunities would not be available;

• Would cause an increase in the use of existing recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated; or

• Would include recreational facilities which might have an adverse physical effect on the environment. (pg 3.7-27,28)

The first significance criteria is correct in stating that BCDC requires maximum feasible public access, but it is derelict in not further stating that such access must be compatible with wildlife as is explicitly stated in BCDC Public Access and Wildlife Compatibility Policy 4: *Public access should be sited, designed and managed to prevent significant adverse effects on wildlife*.

In fact, none of the Significance Criteria address public access impacts to wildlife other than by vaguely referencing agency policies: "Would not be consistent with local and regional laws and recreation plans including CDFG and USFWS missions and regulatory requirements"(bullet 2) In fact by preceding "...including CDFG and USFWS..." with the words "recreation plans" it implies that that is what those agencies policies and plans address rather than the actual fact that those agencies policies restrict public access to appropriate levels to avoid impacts to wildlife.

While it is true that previously in the Recreation Section the agency policies are described, it is also true that in a multi-thousand page document readers are apt to skip many paragraphs and instead, will focus on sections such as bulleted "Significance Criteria" and in this case they will find no specific reference of the need to address wildlife impacts caused by public access nor any indication that recreational opportunities must come second to wildlife protection. This is a flawed presentation and analysis. It puts an emphasis on loss of recreation as an impact and suggests that such a loss is the only significant impact rather than addressing the agencies' legal requirements that recreation be compatible with wildlife protection and that recreation can have a negative impact. We in fact, believe that there needs to be a reduction in public access. For example, the Bay Trail's Spine trail is located on the outboard levees in the Alviso Loop (Ponds A9 to A 16) in the Alternative B map and in Table 3.7-4. We believe this will significantly and detrimentally impact wildlife. We believe this trail should be eliminated and replaced by spur (or point) trails to reach the Bay's open water and that the Bay Spine Trail should be placed solely on inboard levees. This realignment will not have a negative impact on recreation since the DEIS/DEIR does not demonstrate a demand that cannot be satisfied by a lesser but still ample array of trails.

The missions and goals of both landowning agencies, the California Department of Fish and Game (DFG) and the U.S. Fish and Wildlife Service (FWS) for these lands is primarily for the conservation of wildlife resources with public access composing an important but secondary interest. For example as described in the DEIS/DEIR, for the DFG,

"Ecological reserves are established to provide protection for rare, threatened or endangered native plants, wildlife, aquatic organism and specialized terrestrial or aquatic habitat types. Public entry and use of ecological reserves shall be compatible with the primary purposes of such reserves (DEIS/DEIR pg. 3.7-17)", and for the FWS,

"...the mission of the NWRS is to conserve fish, wildlife, and plant resources and their habitats. The [NWR] Improvement Act requires that, before allowing a new use of a refuge, or before expanding, renewing, or extending an existing use of a refuge, the Secretary must determine that the use is compatible (pg. 3.7-18).

Thus it is disturbing that instead of proposing a conservative approach to a reasonably foreseeable impact, the majority of the public access alternatives in the DEIS/DEIR propose maximum amounts public access and thus potentially a maximum degree of impacts on wildlife. The DEIS/DEIR then relies on adaptive management to correct those impacts if they occur. Considering that the likely impacts public access will have will be on species that will already be potentially impacted by the project's change of South Bay habitats (reduction of managed ponds likely having negative impacts on shorebirds and diving ducks and other waterbirds), it is irresponsible to also propose a maximum amount of public access and thus add potential additional stress to those waterbirds, when that is the one impact that can be controlled by the agencies while still attempting to restore tidal wetlands and reduce managed wetland habitat. We believe that is putting access first and wildlife second, a violation of both DFG's and FWS's mandate.

A better solution is to restrict access at first to a few well-designed and attractive trails, monitor the impacts and if none are detected, expand the access by a few more trails and continue monitoring. If no impacts are ever found a maximum public access scenario may be created but with the certainty that its impacts are minor. The DEIS/DEIR route on the other hand is to propose maximum access and then try to make amends once impacts are detected. This is in direct opposition to the AMP staircase scenario for changing

CCCR-6

CCCR-5

CCCR-7

managed ponds to tidal. In that process a few ponds are opened up and impacts monitored and only once impacts are determined to be acceptable are more ponds to be opened to tidal action.

We ask that the DEIS/DEIR follow the AMP Staircase approach for public access in the same way it approaches habitat modification, in small steps at each cluster followed by intensive monitoring. Each of the Alternatives should be revised to provide this variation.

That this staircase approach is not being proposed for public access is clear from Alviso Alternative B. Even in this 50/50 Alternative approach to restoration the Alviso Loop public access trail completely surrounds managed ponds A9 through A17 with these outboard levee public access trails identified as the Bay Trail Spine (Table 3.7-4, pg 3.7-12). Under this scenario that there is no section of those pond outboard levees that are not open to public access and thus there is no outboard levee that allows for undisturbed passage by wildlife between the Bay and/or outboard fringe tidal marshes and the levee surface or the interior of the managed ponds.

There are a variety of impacts that may result from over abundant public access. With trails on all outboard levees (at least as proposed in Alternative B in Alviso) there is no corridor from either open bay waters or from outboard fringe marshes onto adjacent levees or even into adjacent ponds that is not disrupted by human access for wildlife as discussed above for Alternative B.

If fringe marshes exist in an area, Clapper rails may be found there. At highest tides when the fringe marshes are submerged, the rails may attempt to go from the tidal marsh into the managed ponds or are least onto the levee (as was found to be the case on the Redwood Shores levees near the water treatment plant). If all of the levees are open to public access that movement of the rails will be restricted.

Shorebirds, waders, ducks and all other waterbirds may either roost or nest on levees. Islands are proposed in the DEIS/DEIR to provide alternate roosting habitat but the success of the islands is, of course, unproven and the ability to keep islands devoid of vegetation has proven problematic in most, if not all attempts to create roosting and nesting islands. Vegetation on islands removes the island's value in providing roosting or nesting habitat for many waterbirds. Thus islands may not prove as valuable as hoped. Levees are, on the other hand, must be maintained to be fairly free of vegetation to allow for access for maintenance and monitoring and thus retain their value for roosting and nesting as long as they are free of public access. Thus, by allowing public access on levees surrounding managed ponds there will be a potentially significant reduction in roosting and breeding habitat.

The success of the SBSPRP project depends upon the managed ponds functioning at a maximum support rate for the species mentioned above. Any disturbance may prove significant to those species but such disturbance is almost certain if access is maximized

CCCR-8

CCCR-7

continued

page 5

as is suggested in the DEIS/DEIR.

We ask that the Alternatives be rewritten so that in all three pond clusters there are outboard levees that are not proposed for public access. As an Alternative for the AMP these levees could be considered in the future for public access if it can be proven that the created islands discussed above provide all the roosting and nesting habitat necessary for the South Bay's waterbird species and that the islands will remain unvegetated and that outboard levees are not needed by other species that may suffer impacts from public access.

Another potential significant impact of public access is off leash dogs. There is ample history of the impacts of off leash dogs. Dogs chase birds and can do so persistently for many minutes thus creating significant energy losses. They can force birds off nests and they can kill birds (there is documentation that a dog ate a snowy plover in Southern California).

Managing off leash dogs is very difficult and requires intensive management, this was evidenced at Bair Island as an example, and my own experiences as a member of the San Francisco Recreation and Parks Departments Dog Advisory Committee and a stakeholder in the GGNRA's Negotiated Rulemaking process for off leash dogs in GGNRA confirm that difficulty. The extensive trails proposed in most of Alternatives B and C will make management and enforcement of off leash dog prohibitions infeasible. There is simply not enough staffing or funding for that purpose. This problem is almost completely ignored in the DEIS/DEIR. In particular, around the shallow ponds that will be managed for shorebirds and diving ducks in Alternatives B and C a lack of enforcement will allow dogs to reach the islands and disturb nesting and roosting birds and disturb foraging birds in shallow water.

By first establishing a few trails next to the shallow ponds enforcement of a no dog, or certainly a no off leash dog, policy would be made more feasible and that may, over time, enable the dog community to develop a recreational ethic for those ponds that would through community interaction reduce off leash dog presence.

This is not proposed in the DEIS/DEIR. We ask that Alternatives be proposed that address staffing needs for enforcement of off-leash dog policies and align the amount of public access proposed for each pond cluster to be commensurate with that enforcement capability.

Human's too can disturb and harm birds. The Alternatives should also be rewritten to discuss the ability of the agencies to enforce regulations on human users of the trails.

Our greatest concern occurs in the 90/10 Alternative C. In this Alternative nearly every managed pond is entirely surrounded by public access trails. At Eden Landing about half the managed ponds will be completely surrounded by public access trails (ponds E12 and

CCCR-8 continued

CCCR-9

CCCR-10

E13) and there are very few ponds to begin with. While these trails may have seasonal closures, shorebirds are present in the Bay Area almost ten months out of the year making a seasonal closure unrealistic. If the closure is only for the Western snowy plover breeding season impacts to other species may well take place the rest of the year when the trails are open to the public. In Alviso nearly all the managed ponds, A3W and A16 will be completely surrounded by public access trails. At Ravenswood pond SF2 will be 3/4 surrounded by trails and R5 and S5 essentially completely surrounded. These are unacceptable levels of access as explained above.

We believe that the DEIS/DEIR does provide one example of appropriate levels of public access trails and that is the trail access proposed for the Eden Landing pond cluster in Alternative B. Here,

- the Bay Trail spine trail is located on the inboard levees,
- a single spur trail access is proposed that allows users to experience the interface between open Bay waters and managed ponds (although that trail follows a slough that may have significant Clapper rail habitat and may not be appropriate for use until other rail habitat is established)
- a loop trail experience is provided around a small segment of the managed ponds.
- there are substantial amounts of managed ponds that have very limited public access (E6A, and E8) and one pond has no access (pond E6B).
- other ponds have access only on one side (ponds E10. E11 and E14).

This surely provides sufficient opportunities for excellent viewing and hiking experiences while leaving many pond levees and the ponds themselves undisturbed for roosting, foraging and nesting birds.

We believe that this formula for access should be repeated in revised Alternatives for the Alviso and Ravenswood pond clusters, with limited spur (point) access to the managed pond/open Bay interface, very limited amounts of loop trails, and the Bay Trail spine trail established on the inboard levees not the outboard levees.

While we appreciate the goals of the Adaptive Management Plan (AMP) we have doubts about the agencies' ability to adequately implement it. The monitoring costs will be substantial and absent adequate monitoring the AMP is useless. For that reason the agencies should make conservative decisions on those elements of the project that may have significant impacts on wildlife that the agencies can actually control. Public access is one of them.

Even with adequate monitoring the triggers for the public access component of the AMP are vague. For example, one AMP trigger for Access is, "[F]or species with population targets, reduction in abundance or density of breeding/or non-breeding animals due to public access (pg. 2-24)."

It is generally impossible to determine that a species population decline is due to public access. Access impacts are slow and distant. Energy depletion due to public access

CCCR-10 continued

CCCR-11

disturbance can mean death during a migratory journey far from the site of energy displacement or the failure to have successful reproduction on a duck or shorebird's northern breeding grounds. These are non-detectable impacts. All one can determine from on-site studies are whether there are disturbances. Not the effect of that disturbance (unless the disturbance results in immediate death or injury- a very rare occurrence). However, those disturbance impacts are real and do have long-term effects on waterbirds. For example, ducks usually use only approximately 10% of their time in discretionary behavior. Thus any extra activity (e.g., flushing, swimming away, alert behavior rather than feeding) resulting from public access means less time or less energy for other necessary activities and/or a depletion of energy reserves.

Therefore, we believe that for any species with a population trigger, if that trigger is reached one of the AMP actions must include an immediate constraint on public access as a probable cause. Population declines are probably not the result of one single effect and if there are significant population declines that should be sufficiently alarming to require immediate action on many levels and not just studies. One immediate action would be to reduce public access where it might be disturbing that species in decline. If population levels stabilize or increase then an AMP action would be to allow for limited public access in some of the areas where it was previously eliminated and see if there is any impact on the populations. We ask that these actions be incorporated into the AMP.

Another AMP trigger is, "Adaptive Management Triggers. Triggers for some individual wildlife species or groups are described in the Adaptive Management Plan and in other impact sections. For species or guilds without specific population targets, substantial or statistically significant changes in abundance, species richness, breeding success, or behavior at sites with high public use, compared to control sites with more limited use or access, would trip a trigger."

This is a more reasonable trigger since it compares public access sites with control sites and is looking at impacts that are more identifiable than population declines, e.g. breeding success (lack of which may be a result of access impacts especially from off leash dogs) and behavior. But, again, all this will show is that public access is causing disturbance

Thus, again, we believe that a new trigger and action for the AMP should be that if monitoring demonstrates consistent disturbance is occurring due to public access, that public access segment should be closed.

The AMP also states, "Adaptive Management. If monitoring results trip a trigger, the first step in adaptive management would be to determine if the observed effect is likely the result of increased human disturbance. This determination may involve review of data on relevant applied studies (see Appendix D) or initiation of additional applied studies of behavioral responses of specific species to human disturbance or different types and levels of disturbance. If it is determined that there are actual negative effects of

CCCR-13

CCCR-14

CCCR-12 continued

recreational access on wildlife in the SBSP Restoration Project area, adaptive management actions would be undertaken to attempt to reverse the adverse effect and/or to plan future phases of restoration to minimize this effect. Adaptive management actions would include seasonal closures of certain trails to some or all human access, providing edge conditions (e.g., fencing) to prevent off-trail use, and erecting educational signage to discourage violation of access restrictions and guidelines. If species goals are met, public access could potentially be increased." The trouble here is that studies take time and with species in decline time is limited. A more appropriate action is the one we have suggested. Recognize that most studies indicate that public access causes disturbance, accept that disturbance impacts wildlife and reduce access where disturbances are identified. Then use AMP to see where access can be reinstated. This puts a probable solution first and a study after. The way it is presently written it puts a study first (and a study of what is already for the most part known) and then take action. The study should have already been taking place, i.e., monitoring the trails to see if access if causing disturbance. If there is disturbance there is an impact.	CCCR-14 continued
Another issue with the above AMP statement is that full closure of trails is not identified as an Action option. We ask that in the AMP full closure of trails be included as an action alternative, not just seasonal closure.	CCCR-15
If we haven't already done so, we state now that we believe that as part of the AMP public access trails should be constantly monitored for wildlife disturbances. This should be incorporated into a revised AMP and alternatives.	CCCR-16
The following statement is repeated frequently in the DEIS/DEIR: "Public access has considerable potential to result in long-term benefits to sensitive species in the South Bay by improving public education concerning the importance of the SBSP Restoration Project, and habitat restoration and South Bay conservation in general. Such education and public enjoyment of the South Bay's biological resources may be important in maintaining public support for adequate funding for future phases of restoration and long-term monitoring and management of SBSP Restoration Project-area habitats. (3.6-184 and elsewhere)"	CCCR-17

The statement quoted above does not provide any evidence that a reduced but adequate (e.g. Alternative B Eden Landing) amount of public access would not achieve the goals of generating public support. The DEIS/DEIR needs to justify the full access alternative in relation to its potential impacts on wildlife. It presently fails to do this and thus does not give decision-makers any rationale for choosing the full access alternatives that are more likely to have detrimental impacts on wildlife compared to lesser amounts of access that might result in the same amount of public support.

Finally, we address boating access.

The DEIS/DEIR states, "...Impacts from trails and kayak launching areas on wildlife are expected to be minor if users respect guidelines for use of these facilities. However, there is uncertainty as to the amount of use of these trails, the degree to which wildlife would tolerate or habituate to such recreational use, and the degree to which users would adhere to guidelines for recreational use of SBSP Restoration Project facilities with respect to avoidance and minimization of adverse effects (including restrictions related to dogs). For this reason, impacts of recreational access would be addressed in the Adaptive Management Plan (Appendix D). Under the Adaptive Management Plan, potential effects of human disturbance would be monitored, and adaptive management would be implemented to prevent impacts from reaching a significant level. (pg 3.6-130)

This again puts the likelihood of impacts as a question rather than as a fact. There are too many studies showing impacts to not conclude that to be conservative one must assume such impacts. The most recent study was performed by Jules Evens of Avocet Research (Aquatic Park, Berkeley, California: Waterbird Population and Disturbance Response Study, 2004 A report prepared for the City of Berkeley By Avocet Research Associates). *In the Executive Summary this study states*,

"...Average flush distances (31-36 meters) were similar among three classes divers, dabblers, and waders [includes shorebirds]. The closest distance at which birds will not flush 95 percent of the time (upper 95% quantile of standard normal flush distance), was calculated as 63-70 meters."

The disturbance was a single kayaker on 22 research trips.

Thus, for harbor seal haul-out areas, for rafting duck locations and for nearby shorebird foraging habitat small non-motorized watercraft (SNMW) can cause significant disturbances. Yet, boating access is just about everywhere in all Alternatives.

We believe that Alternatives should be rewritten so as to prohibit SNMW in sensitive locations and an AMP trigger should be "Monitoring reveals disturbance of rafting ducks and/or shorebirds and other waders by SNMW." The AMP action would not be a study but a restriction of access in that area.

To conclude, we agree that public access is an essential component of the SBSPRP. It must not, however, take precedence over the main purpose of the project, restoration of

CCCR-17 continued

CCCR-18

CCCR-19

habitats and the sustaining of wildlife populations. The DEIS/DEIR as written fails to recognize and, in fact, inverts these objectives. We ask that new Alternatives be developed that recognize the impacts of public access and provide for each pond cluster in each alternative a maximum and a sufficient (minimum) public access alternative.	CCCR-19 continued
We also ask that the AMP be revised to include faster reactions to bird population declines, remove triggers for public access that depend upon identifying public access as the specific cause of population declines (an impossible task) and instead develop triggers that entail a reaction to repeated disturbances of wildlife due to public access and that also take into account the recognized impacts that non-motorized boating may have on wildlife.	CCCR-20
The SBSPRP is the most exciting restoration project in the nation, but it will be a disaster if done poorly. An accurate DEIS/DEIR is necessary for the project's success. We hope you will address our concerns and create a truly great DEIS/DEIR. Thank you for your attention to our letter.	CCCR-21

Sincerely yours,

Arthur Feinstein Citizens Committee to Complete The Refuge

Response to Citizens Committee to Complete the Refuge

- CCCR-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife
- CCCR-4: As described under the subheading Significance Criteria in Section 3.7.3. Environmental Impacts and Mitigation Measures of Section 3.7, Recreation Resources, the discussion of human disturbance on wildlife is presented in SBSP Impact 3.6-18 and Phase 1 Impact 3.6-18 in Section 3.6, Biological Resources. As such, public access impacts to wildlife are not repeated in Section 3.7.

Section 3.6 identifies a detailed list of the thresholds of significance used in determining potential impacts for this issue. These thresholds include the following:

- The abandonment of a primary harbor seal haul-out or pupping area;
- The mortality of, or loss of active nests of, western snowy plovers or California least terns;
- A reduction in California clapper rail populations;
- The loss of substantial numbers of nests of non-listed pond-associated birds (specifically, terns, avocets, and stilts); or
- Substantial, long-term declines in numbers of waterbirds in the South Bay due to recreational disturbance.

The interaction of people and wildlife is a subject of concern for the Project proponents. As such, the Project proponents have included public access as part of the Adaptive Management approach. Table 2-3 in Chapter 2, Description of Alternatives, specifies the restoration target, monitoring parameter, management triggers, and potential management actions for this issue area. The Project proponents have therefore not placed emphasis on the loss of recreation as an impact over impacts to biological resources resulting from recreation-oriented activities. In addition, please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife

CCCR-5: As described in the Executive Summary chapter of the EIS/R, Alternatives B and C are intended to be bookends representing the possible outcomes of tidal and managed pond habitat for the SBSP Restoration Project. These alternatives have inherent trade-offs that are identified in Section S.7, Areas of Controversy, in the Executive Summary chapter. These include the trade-offs between habitat restoration and public access/recreation opportunities. Although Alternative B is intended to provide maximum recreational features compared to Alternative C, as described in Chapter 2, Description of Alternatives, certain features identified as part of Alternative B or C may be interchangeable prior to Project approval, or adaptively as the Project is implemented.

It should be noted that if the Adaptive Management approach finds that impacts to biological resources would occur due to recreation, then management actions (*e.g.*, adjustment of the Project design) would be implemented to avoid significant impacts to species. Figure 2-3b shows the staircase of how adaptive management would be implemented for Recreation and Public Access. As such, if applied studies show that potential impacts to wildlife species would occur from implementation of recreational features (*e.g.*, Alviso Loop) proposed under the Project, these features would be adjusted. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife

- CCCR-6: As described in the Executive Summary chapter of the EIS/R, one of the six objectives of the SBSP Restoration Project is to "provide public access and recreational opportunities compatible with wildlife and habitat goals." The Project proponents have always intended to address both issues simultaneously and are not intending to prioritize public access/recreation over wildlife protection. Please also see the responses to comments CCCR-4 and CCCR-5 above as well as Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife
- CCCR-7: Please refer to the response to Comment CCCR-5 for a discussion of the Adaptive management approach for recreation and public access. The staircase approach would continually evaluate the potential effects of the recreation components of the Project on wildlife species and make adjustments as necessary to avoid or reduce impacts to sensitive biological resources. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife
- CCCR-8: All alternatives include outboard levees in at least some areas (including significant lengths of such levees in Alternative B) that will not have public access trails. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-9: As discussed for SBSP Impact 3.6-18, existing restrictions on dog access to the SBSP Restoration Project Area will remain in place. The comment regarding the importance of, and difficulty of, enforcement of these restrictions are acknowledged. Both CDFG and Refuge staff are committed to enforcing these restrictions.
- CCCR-10: In Phase 1, only one new trail that will completely surround a pond (at E12/E13) is planned. This trail and additional sites will be studied to determine potential impacts on

wildlife, and these trails will be modified if substantial adverse effects are detected. The information on public access effects obtained from monitoring will be used to determine where or if other new loop trails are acceptable. The public access adaptive management staircases for each complex show that, after Phase 1, the design or even whether any particular additional public access feature is implemented will be based on information from studies and monitoring on the effects of the features on wildlife. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

- CCCR-11: See the response to Comment CCCR-1 above.
- CCCR-12: If numbers of a given species or group decline to the point that an adaptive management trigger is tripped, the Project proponents will evaluate the full range of effects that the Project may be having on that species, including public access effects. Where data on impacts are lacking, the Project proponents will seek such information, but while doing so, will take a reasonable and precautionary approach by reducing or eliminating important impacts if activities, such as public access, are thought to be a potential cause of the decline. Recommendations for actions the Project could take to protect species from impacts will be developed by expert panels as part of the Science Program for the Project. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-13: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-14: Please refer to the response to Comment CCCR-12 and to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-15: Full closure of any trail, except the Bay Trail Spine, with concomitant compensation for public access quality and quantity elsewhere is a management option. See the response to Comment CCCR-1 above.
- CCCR-16: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-17: The Project's monitoring program will determine how well the public access provided in Phase 1 satisfies public access needs, achieves environmental education, and increases support of the Project. This information, in addition to information collected on public access effects on wildlife, will be used to determine where, what type, or even if future public access features are needed or appropriate. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

- CCCR-18: To assess effects on rafting ducks and foraging shorebirds, the applied studies will be undertaken to determine such factors as the areas of boater use and the extent to which they impact important foraging/resting areas for waterbirds and harbor seals. Results from these studies will be used by experts to develop recommendations to the Project Managers for protecting species and sensitive areas (such as additional restrictions on areas accessible to boaters). Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- CCCR-19: See the response to Comment CCCR-1 above.
- CCCR-20: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife. Regarding the commenter's request for adaptive management actions that respond more rapidly and definitively to "tripping of a trigger", the type and urgency of the adaptive management responses will be commensurate with the strength of the evidence of a problem and the sensitivity and importance of the species, population, or habitat in question. Adaptive management triggers have been set to be sensitive enough that they are more likely to be tripped due to inherent, natural variability in populations (*i.e.*, rather than resulting from SBSP Restoration Project impacts) than to not be tripped when an impact is actually occurring. It should also be noted that the trigger for public access impacts on species is not a decline in overall populations of the species, but rather more immediate species responses in areas accessible to the public versus control areas.
- CCCR-21: Comment acknowledged.



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May 3, 2007

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SUBJECT: South Bay Salt Pond Restoration Project DRAFT Environmental Impact Statement/Report - comments

Ms. LeTellier, Mr. Morris, Mr. Krause:

Please consider the following comments on the draft Environmental Impact Statement/Report (EIS/R) for the South Bay Salt Pond Restoration Project (SBSPRP), which you also propose to serve as the programmatic EIS/R for the South San Francisco Bay Shoreline Study. My qualifications to comment are cited as an attachment. These comments are submitted on behalf of the Citizen's Committee to Complete the Refuge, Palo Alto, and with the Citizen's Committee's approval, but they are based entirely on my independent professional judgment and expertise. I am responsible for any misunderstanding or inaccuracy of these comments.

I wholeheartedly support the objectives of the SBSPRP, particularly its objectives for ecological restoration of the South Bay's estuarine wetlands and native species diversity. There is clearly overwhelming public interest in implementing these objectives. I recognize the challenges facing a project of this unprecedented scale, complexity, and cost, given many profound scientific uncertainties and sometimes conflicting public, private and scientific recommendations. I do provide many critical comments on the EIS/R's NEPA and CEQA compliance, and technical analysis of impacts, mitigation, and project design alternatives, but I do so with the goal of improving the long-term success and administration (40 C.F.R 1500.1(b))of the 50-plus year restoration program.

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1. NEPA and CEQA Regulatory Issues

1.1 Tiering, range of alternatives, and geographic scope of analysis.

For purposes of NEPA, the comparison of alternatives is the heart of the EIS (40 C.F.R. 1502.14). For the alternatives analysis to be meaningful, its geographic scope must be commensurate with the scope of the project or program, and its purpose. The EIS/R states repeatedly that it is both a Programmatic EIS/R covering the 50 year long-range SBSPRP and South San Francisco Bay Shoreline Study (SSFBSS; same joint lead agencies), as well as a project-level EIS/R implementation of Phase 1 of the SBSPRP. See draft EIS cover sheet; pp., 1-1, 1-4, 2-3, 2-4, 3.1-6, ES-15. The project boundaries for the SBSPRP and SSFBSS are delineated in Figures ES-1 and 1-2. The SSFBSS boundary is plainly larger and includes all of the SBSPRP. A programmatic range of restoration/flood control alternatives for the SSFBSS pursuant to NEPA (CEQ 1981, Q&A 1-2; 40 C.F.R. 1502.14) must therefore consider all reasonable program-level configurations of restoration/flood control.

In contrast, the SBSPRP EIS/R constructs only project alternatives within the SBSPRP project boundary. It neither discusses, evaluates, nor provides rationale to eliminate from detailed analysis (40 C.F.R. 1502.14) programmatic restoration/flood control alternatives beyond the current project boundary, within at the geographic scope of the SSFBSS. Thus, despite claims to serve as a program-level NEPA document for the SSFBSS, this draft EIS's alternatives analysis in fact is at most merely a project-level EIS for the Eden Landing, Alviso, and Ravenswood salt pond clusters. The public participation of the elaborate SBSP Alternative Development Process (p. 2-6), which was apparently initiated before the decision to tier the SSFBSS from the current EIS (see Notices of Preparation for both projects), has no bearing on the proper NEPA scope of the range of alternatives demanded by the EIS tiering structure determined by lead federal agencies.

The failure to look at "off-site" alternatives for the SBSPRP within the scope of the SSFBSS is a serious flaw for several reasons. First, even apart from the tiering relationship with the SSFBSS, nearly all the salt ponds in the East Bay are now owned fee-title by either the State of California (Department of Fish and Game) or the U.S. Department of Interior (U.S. Fish and Wildlife Service), contrary to the misleading figures and text of p. 1-23 ("Alameda County-owned salt ponds that lie north of the Alviso Ponds...") and repeated graphically in Figure 1-5. Almost all of the salt ponds in the South Bay are in fact within the jurisdiction of the lead NEPA/CEQA agencies. The Refuge-owned ponds in the (erroneously titled) "Alameda County Cargill Ponds" are entirely omitted from any programmatic alternatives analysis. These areas are actually "graved out" in most of the EIS/R figures, making them irrelevant to impacts and alternatives evaluation. The true Refuge boundaries enclosing almost all the "grayed out" Newark and Mowry (N, M numbered ponds) are not shown in the EIS/R. The overall effect of these systematic omissions and errors is to arbitrarily confine the review of both programmatic 50-year and nearterm project-level alternatives to the confines of the salt pond clusters made available by the 2002-3 transfer. The Newark and Mowry Refuge ponds are not currently within federal control, owing to retained mineral production rights of the local solar salt industry after the Refuge's feetitle acquisition of the ponds in 1979. This is not explained in Section 1.4.3., p. 1-12, which describes only the post-2000 public land acquisition and transfer of industrial salt production rights. These Refuge ponds may, however, become ripe for restoration planning within the long 50-year planning horizon, and so are "foreseeable" under NEPA.

33660 Annapolis Road Annapolis, California 95412 The inclusion of the Newark, Mowry ponds in a programmatic alternatives analysis is essential to a reasonable range of alternatives. These salt ponds are significantly less subsided (closer in elevation relative to the intertidal marsh zone) than the deeply subsided Alviso ponds. Therefore they have the inherent potential to develop tidal salt marsh habitat faster, and with less demand for limited sediment inputs (smaller sediment sink) per unit area, than the Alviso Ponds. They are also closer (contiguous with) the largest tracts of natural tidal marsh supporting endangered California clapper rails in the South Bay. They have a greater inherent feasibility to regenerate stable tidal marsh in the face of significant uncertainty over near-term and long-term accelerated rates of sea-level rise. They are also not significantly influenced by massive year-round urban wastewater discharges, as are most or many Alviso ponds.

The EIS/R should apply the restoration prioritization/sequencing principle of Phase 1 (p. 2-80: "...begin with areas that are most feasible and/or have the highest certainty of achieving the Project Objectives") at a programmatic level (less detail of project design) for all salt ponds within the SSFBSS boundary, and certainly all those within the Refuge. For project-level comparison of alternatives, ponds that are not currently available for restoration can be eliminated from detailed analysis. The lead NEPA agency's duty remains, however, to identify reasonable alternatives that may be circumstantially outside the capacity of the applicant or agency "because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies. Section 1500.1(a)." (CEQ 1981, #2a-b).

Given the primary purposes of NEPA (40 C.F.R. 1500.1, 1500.2(b-e)[emphasis], 1501.1(a-d), 1502.1, it is plainly unreasonable, from a scientific or policy perspective, to omit or exclude Newark, Mowry, Redwood City salt ponds (including crystallizers) from discussion of alternatives in a programmatic EIS/R governing long-term wetland restoration and flood control planning. Because no reason was explicitly given in the EIS/R for their omission (particularly salt ponds that are already publicly owned, and by the lead NEPA/CEQA agencies themselves), this omission appears to be arbitrary or prejudicial (see 40 C.F.R 1506(c)(3)). Because the SBSP Alternatives Development Report (Philip Williams and Associates and others 2004) also confined its evaluation to the proposed salt pond clusters, this technical support document does not remedy the omission. It does, however, provide much of the framework necessary for this task. For treatment of the disparities in available data on salt ponds within and outside the project area (potential imbalance of information available for comparison of alternatives), see 40 C.F.R. 1502.22 and CEQ 1981 #5b.

This is also an important substantive NEPA issue because many of the long-term project uncertainties that are addressed in the EIS/R(sometimes inadequately) by tenuous or vague mitigation measures, or adaptive management "actions", could potentially be better addressed by design alternatives that properly exploited the inherent physiographic and ecological potential of these omitted diked baylands.

I can find no support in the EIS/R for even its weak claim that "only limited programmatic coverage of the Shoreline Study is provided in this EIS/R" (p. 3.1-6). The checklist-based table 3.2-1 summarizes "potential actions" under the SSFBSS study and SBSPRP, and contains cross-referenced explanation of impacts, mitigation, or alternatives in the body of the EIS/R. The brief text from pp. 3.2-1 to 3.2-5 contains only a bullet-list of potential effects (no mitigation or alternatives discussion, the minimum required for even a rudimentary Environmental Assessment

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of a project with no significant impacts) would be inadequate for even a Categorical Exclusion. Review of the whole EIS/R brings no remedy for this deficiency.

The SSFBSS "early implementation" fund credit for "early construction of flood damage reduction elements that are part of an ultimately authorized project", but excluding funding for restoration (p. 2-154), should be carefully reviewed in the context of defective programmatic NEPA coverage in the EIS/R, prior to completion of NEPA procedures for the SSFBSS; see prohibitions of 40 C.F.R. 1506 (Limitations on actions during NEPA process) and 40 CFR 1502.2(f-g). Practically irreversible commitment of resources, such as construction of major federal flood control facilities and permanent trail or road facilities, should not precede rigorous, explicit comparison of alternative flood control/restoration design alternatives and geographic locations in an EIS/R. It is important to review at a broad, programmatic level all reasonable alternative configurations of integrated flood control and restoration projects, to minimize potential conflicts and maximize potential benefits (42 USC §4321, 4331). Suboptimal integration of flood control and restoration may result from premature focus on site-specific projects without adequate regional, interdisciplinary review of alternative sites.

In conclusion, the EIS/R does not in fact provide tiered programmatic NEPA coverage for the Shoreline Study. A reasonable range of (long-term, programmatic or project-level) alternatives must include "off-site" salt pond configurations that minimally include publicly owned salt ponds. The current circumstance that these areas are not available for immediate restoration is no barrier or disqualification for treatment in a NEPA alternatives analysis; see CEQ guidance (CEQ 1981, #2a-b). It would be reasonable to include other salt ponds and diked baylands in private ownership if these are "reasonable" in terms of long-term project objectives and in light of NEPA's goals (40 C.F.R 1501.2(c-d), 1502.1) regarding alternatives analyses. Point in fact, Congress (1990) recognized the value of most of these omitted lands for wildlife habitat and the recovery of listed species when it approved the Refuge expansion boundary.

The NEPA compliance problems identified above for the range of reasonable alternatives considered at programmatic and project levels may be rectified by recirculating the Draft EIS/R with both types of alternatives analyses. A final EIS/R alternatives analysis that remains confined to the boundaries of the of the proposed project would not serve as a program-level alternatives analysis for projects under the SSFBSS, and would remain arbitrarily narrow and inadequate even for the SBSPRP if it excluded other Refuge salt ponds with higher inherent restoration feasibility and only circumstantial unavailability.

1.2. Mitigation and Adaptive Management

The EIS/R frequently invokes "Adaptive Management" to argue that potentially significant impacts would be less than significant because adaptive management would generally solve otherwise burdensome impact problems with very high uncertainty (low predictability, limited understanding of impacts, ecological responses, independent uncontrolled factors, etc.). This argument formula in effect treats adaptive management as either a panacea or a supplemental source of efficacy for mitigation. The limitation of this type of argument in a NEPA/CEQA impact and mitigation context is that adaptive management is essentially a procedural and administrative "action", and must rely on a foundation of specific, substantive evidence for the feasibility of mitigation in the first place. Mitigation measures generally require some physical corrective or compensatory actions: mere study, monitoring, consultation, etc. alone cannot

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possibly address environmental impacts. Reliance on adaptive management to reduce impacts to less than significant levels thus demands at least some objective demonstration of the efficacy and enforceability of adaptive management as practiced by lead or responsible agencies, rather than reiteration of idealized principles of adaptive management. This requirement, however, is often not met in the EIR/S's mitigation and adaptive management measures.

Representative examples of the formulaic use of adaptive management in the EIS/R are found in Section 3.6, with similar applications (nearly identical text in conclusions) for western snowy plover, breeding and non-breeding pond-associated waterbirds, diving ducks, California least terns, and salt pond specialist waterbirds. All these biological sources are initially identified as "potentially significant" impacts without adaptive management, but are re-interpreted as "less than significant" impacts (for most alternatives) with adaptive management. The corresponding sections on resource-specific adaptive management, however, generally provide only short and general lists of potential substantive restoration actions, without discussion (or reference to studies) of site-specific constraints, feasibility, reliability of results from past or similar actions. The argument formula, which has the structure of a tautology (an argument which incorporates its conclusions in its premises; a circular argument) is as follows (abstracted from p. 3.6-79, 80, 86, 89, 96):

- If numbers of [birds] were to decline substantially as a result of [alternative action], and no adaptive management to reverse these declines were implemented, impacts to these species could be potentially significant.
- However, as described above, an Adaptive Management Plan would be used to monitor changes in abundance to determine actual responses of [birds] in San Francisco Bay to SBSP restoration Project activities with the *goal* of ensuring that declines do not exceed the thresholds of significance. [emphasis added]
- [therefore impacts are] Less than significant.

This is an unsound argument scientifically and logically for the following reasons:

- Most monitoring, whether in the context of "adaptive management" or not, cannot and does not "determine" causal relationships or conclusively test hypotheses (hypothesis testing is a foundation of adaptive management). Most monitoring may be analyzed to examine the strength of relationships among variables, but generally cannot determine causes (as in controlled experiments). This is indicated by the very sound discussions of indeterminacy about the multiple and interacting causes of bird population fluctuations within and beyond San Francisco Bay. The EIS/R in fact generally supports the contrary position, that determination of causes of bird declines in any given year (or 3 year period) are subject to high uncertainty. The criterion of determining "actual responses" (real causes), probably cannot be met by data collection alone. This requirement for "actual responses" as opposed to mere objective 3-year monitoring results exhibiting population declines, makes the threshold at least impractical, and at worst meaningless.
- The requirement that causes of declines be "determined" is unreasonable given the prevalence of scientific evidence cited in the EIS/R that causes of bird species populations and movements have not been well understood despite decades of research. The EIS/R on the contrary repeatedly states, "There is considerable uncertainty

regarding the effects of the SBSP Restoration Project on [bird] numbers in the South Bay (p. 3.6-74, 84).

- The assumption that "adaptive management restoration" measures such as predator control, construction of habitat, modified pond management, etc. would be effective in reversing declines is not only unsupported in the EIS/R, it is often counter-indicated; for example, "given the steady decline in …numbers over the past few decades, such levels of predator management may not be adequate to protect this species in the South Bay (p. 3.6-73). The EIS/R also asserts that bird numbers would respond to conditions outside the project area, conflating off-site with on-site influences (p. 3.6-74)
- "with the *goal* of ensuring that declines do not exceed the thresholds" (alternative: "...and to adapt ongoing management and future restoration accordingly...") invokes an intention or aspiration (goal) instead of an objective result (no population decline more than three consecutive years). Goals do not objectively affect results of corrective actions; if they did, it would indicate study bias.

The argument formula, and its premises, does not support the reversal of the preliminary conclusion that potential significant impacts may occur. This is no trivial or academic matter in a NEPA/CEQA context. In CEQA, enforceable permit-conditioned mitigation measures are required if an impact is "potentially significant", but not if it is "less than significant". Similarly, all appropriate mitigation measures are conditioned through the Record of Decision in NEPA. By treating impacts as less than significant (when the preponderance of evidence and argument indicates the converse) and treating discretionary adaptive management in the distant future as the functional (but not regulatory) equivalent of permit-conditioned mitigation, the EIS/R evades mitigation obligations that are warranted under both CEQA and NEPA.

Scrutiny of the adaptive management actions and procedures that refer to the specific (bird) biological resources confirms that the actual content is limited to monitoring, future planning or study, and optional actions that "may include" corrective (mitigation) actions that are merely listed, and not rigorously assessed for feasibility or efficacy. The Adaptive Management Summary Table (Table 2.3) confirms this conclusion: the majority of reiterated "actions" in the column, "potential management actions" are purely procedural or administrative, and are not explicitly linked (except in idealized general adaptive management flow charts) to substantive actions:

- <u>Convene study sessions to review and interpret findings</u> to assess...if changes are due to restoration actions ["...or system-wide changes..."]
- <u>Study biological effects</u>
- <u>Study causes</u>
- <u>Study relationships</u>
- <u>Applied study/studies</u>
- Analyze all available monitoring
- Evaluate changes in population or density
- <u>Review all available data</u>
- <u>Review...</u>
- <u>Conduct bay-wide survey</u>

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- <u>Reconsider movement up staircase [!]</u>
- Hold charrette [!]

The most substantial "potential management actions" in table 2.3 are programmatic in the extreme – vague or even vacuous (they contain no actual substantive or specific action; noted by [!] below), weak, or general, with no reference to other portions of the document for discussion of design, constraints, cost, ecological or engineering feasibility, generality, sustainability/stability, efficacy/past applications or tests, supporting studies.

- Adjust phasing and design to increase...
- Adjust design [!]
- Implement management or adjust design [!]
- Reduce pond residence times/decrease pond residence times
- Active management such as...
- Active revegetation
- Create seasonal closure
- Introduce artificial shading
- Alter pond configuration
- Increase level of vector control

Proposed adaptive management actions such as "adjust design", "introduce artificial shading" and especially "alter pond configuration" demand an explanation of whether they are feasible in terms of cost and commitment of resources. It seems doubtful, absent any explanation, that managed ponds could be treated with "artificial shading", and the prospect of altering pond configuration after initial construction seems at least impractical in terms of cost, impacts, and engineering. The paper exercise of adaptive management planning does not eliminate the risk of irretrievable or irreversible commitment of resources. Without explanation of feasibility the few substantive management actions identified appear to be either nominal or unreasonable.

The EIS/R does not address the time-sensitivity of biological resource management in relation to adaptive management. The EIS/R candidly states that "some of the applied studies may take decades to generate useful information" (p. 2-5). This fact demands an explanation of how adaptive management will work in real time if resources decline in a matter of a few years (such as the 3-year consecutive decline threshold for significance of special-status birds) when strong scientific inference lags behind (or fails to emerge altogether) real-time declines in habitat or populations.

Primary reliance on monitoring or study aspects of adaptive management can become an incentive for perpetual monitoring *in lieu* of management decision and action where uncertainty (or political risks) exists. Monitoring may become a substitute for management, or rationalization for indecision or procrastination when corrective measures are warranted. (This is not conjecture, as indicated by the nearly 20 year lag between identification of *Spartina alterniflora* as an invasive wetland weed threat, and agency action; nearly unchecked spread of *Lepidium latifolium* for over 30 years, deferral of corrective actions at Sonoma Baylands when data indicated that critical schedule/thresholds were not met; prolonged extreme acidification or desiccation of some Napa salt ponds after public acquisition.)

PB-3 continued One of the few examples of prompt progress from study, to inference, to action, is the Refuge's initiation of red fox population control after clapper rail predation in the South Bay was confirmed in 1989. It is perhaps significant that even this admirable example of effective "adaptive management" (prior to the term) proceeded despite absolute conclusive "determination" of abrupt clapper rail population decline at the time, and the persistence of some scientific skepticism of the initial conclusions of red fox predation studies. There are few examples of this sort of agency track-record for prompt management intervention during ecological crises, and the EIS/R reviews none in the context of adaptive management.

The application of adaptive management in the EIS/R, unfortunately, is often as a programmatic panacea, inadequate and sometimes meaningless for the many "less than significant" determinations the EIS/R asserts it supports. It also appears to be indistinguishable from deferred mitigation (a normally impermissible treatment of unspecified or vaguely prescribed post-approval mitigation, sometimes with a specified performance standard). When the feasibility or efficacy of mitigation is uncertain, NEPA/CEQA lead agencies cannot reasonably determine that significant effects will not occur.

This defect is not inherent in adaptive management itself. The deficiency in the EIS/R's use of adaptive management in impact assessment (primarily significance threshold determinations and adequacy of mitigation) can and must be corrected by more rigorous, explicit evaluation (possibly in an appendix cited in the body of the EIS/R) of the feasibility and efficacy of management/mitigation measures, the range of their applicability (and constraints), time-sensitivity of biological resources for management, and the capacity and responsibility for implementing them (by lead agencies or their proxies).

NEPA regulations at 40 CFR 1502.22 specifically apply to the aspects of adaptive management in the EIS/R concerning uncertainty or unavailable information about "reasonably foreseeable" significant adverse impacts. It requires that the EIS state that relevant information essential to reasoned choice among alternatives, if available, shall be obtained and included in the EIS if the costs are "not exorbitant". If unavailable, the EIS must state so, state the relevance of the missing information (for alternatives comparison or impact assessment), and summarize existing credible scientific evidence – in short, best scientific and professional judgment, particularly for highly significant adverse or "catastrophic" impacts, such as population crashes or habitat collapse.

1.3. Mitigation – NEPA versus CEQA construction: The EIS/R improperly subordinates broader mitigation standards and thresholds for NEPA under the narrower standards and thresholds of CEQA. CEQA requires mitigation for all "significant" impacts (Public Resource Code 21081), but not for impacts deemed "less than significant". NEPA requires discussion of appropriate and feasible mitigation measures – even those outside the jurisdiction or ability of the lead federal agency -- for the full range of adverse impacts, even if they are not "significant" (40 C.F.R. 1502.14(f), 1502.16(h), 1508.14; CEQ 1981 #19). The EIS/R systematically omits appropriate mitigation under NEPA for all impacts determined to be "less than significant", even when the discussion of impacts indicates a high degree of uncertainty about intensity predicting significant impacts. This is unreasonable and inconsistent with NEPA. The EIS/R as a joint document should identify appropriate mitigation for all reasonably foreseeable adverse impacts. It may distinguish NEPA and CEQA requirements for mitigation if necessary, where distinctions may affect state permit conditions.

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1.4. Environmental "baseline" in NEPA and CEOA: The EIS/R defers entirely to a fixed CEQA interpretation of environmental baseline for purposes of "significant" impact threshold determination, identical to "existing conditions" (for example, p. 3.6-61; no reference here to corresponding NEPA guidance). NEPA not only does not require that "existing conditions" be the baseline condition for "significance" determinations, it encourages a more dynamic or flexible baseline when it is reasonable to do so for purposes of comparing alternatives or assessing cumulative impacts (CEQ 1981 (#3) and especially CEQ 1997: "the affected environment for a cumulative effects analysis may require...a broader time frame..", including trends data or variation over time). The EIS/R notes many problems of a fixed baseline date for biological (population) impact assessment, particularly for interpretation of impacts to bird populations using a fixed year (2006) as an arbitrary "snapshot". Where it is reasonable to apply the more flexible CEQ NEPA baseline options for impact assessment (including long-term variability or trends, "no action" alternative options), the EIR/S should do so for NEPA discussion, and offer a required CEOA conclusion distinct from that of NEPA when it is necessary. It would be reasonable to do this when technical experts preparing impact assessments conclude that artificial, arbitrary, or misleading conclusions would result from biological interpretations based on frozen 2006 conditions as a baseline.

The EIS/R already commits an arbitrary exception to the inflexible CEQA norm for fixed-year environmental baseline, in the case of invasive Spartina alterniflora. Here, the suspension of the fixed-year baseline is used to justify a speculative and assumption-laden conclusion that the distribution and population size of this widespread invasive non-native species will be reduced so much by 2008 (the expected date of initial tidal marsh restoration) that it will not be a threat (p. 3.6-133). This optimistic and artificial assumption is inconsistent with all other interpretations of baselines for impacts. It is also unreasonable in view of the rapid rise to dominance of invasive Sparting in the Eden Landing (Baumberg) CDFG salt ponds recently restored to tidal flows. A more reasonable, probabilistic, and realistic approach to impact assessment of invasive non-native Sparting would be to evaluate the effects of a reasonable range of expected population sizes and distributions during the course of initial tidal restoration. The "less than significant" impact conclusion here is also an artificial one: unlike other conclusions, this one is stated conditionally, so that the conditional assumption forces the conclusion (p. 3.6-135): "However, *if* invasive Spartina is controlled by the Invasive Spartina Project, as the Project has assumed [emphasis added] this impact should not be substantial...Level of Significance: Less than Significant" (and thus no mitigation, such as requiring breaching to be linked to a low threshold frequency of invasive Spartina seedlings in receptive habitats). The EIS/R impermissibly dismisses a potential significant impact on the consequences of restoration – uncoordinated or poorly timed salt pond restoration, out of synchrony with regional eradication, could cause an unmanageable population surge of this invasive plant. It also improperly dismisses mitigation. These defects must be corrected by revised analysis and conclusions.

2. Specific Physical and Biological Resource Issues - Impacts, Mitigation, and Alternatives

2.1. Restoration Design Alternatives

The EIS/R discusses tidal marsh restoration design alternatives primarily in terms of configuration and ratios of pond units programmed for either management as non-tidal salt ponds or fully tidal marsh. The Phase 1 Restoration Actions for Eden Landing, as a representative example, are limited to brief descriptions of standard "restoration actions" (p. 2-91) such as

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"breaching and lowering the outboard and inboard levees; improving and extending the levee...[between ponds]...excavating pilot channels through the fringe marsh...constructing ditch blocks in the borrow ditches; maintaining existing and constructing new pond/panne habitats; and reconfiguring culvert connections". There is, in effect, only one tidal marsh restoration plan design, with few contingencies for site-specific alternatives or variations, such as gypsum-armored ponds (see below). No substantial variations in construction methods, modifications to fit distinctive landscape positions, substrate types, or wave energy environments are considered as modal restoration alternatives. This standardization is not justified. Significant geographic variation in tidal marsh structure exists, and often corresponds with variation in biological diversity that relates to SBSPRP objectives. Many feasible and advantageous wetland features, and construction materials and methods, should be considered in alternatives for specific pond clusters. Examples are given below.

• <u>Modification of "wave-break berm" distribution and pattern</u>. Berms are proposed in the restoration design (p. 2-31) primarily to restrict wave energy, on the (still unproven) engineering assumption that wave energy is generally the principal limiting factor for marsh vegetation establishment on open mudflats within tidally restored diked baylands. The restoration design is not set to test this hypothesis by comparing it with the influences of other physical factors positively influencing seedling or vegetative fragment establishment on mudflats, such as surface roughness elements (seed trap and anchorage effects, microtopographic shelter, shrink-swell cracks, coarse woody debris, peat fragments lodged in mud, and other natural roughness factors) or variation in slope (wave energy dissipation) and substrate type (cohesive dense clay or peat, sand, shell, versus fluid bay mud). The cost of constructing berms, and the efficacy of using berms to indirectly affect marsh establishment, should be tested not by committing more resources to them in Phase 1, but by examining the effects of berms and other marsh-initiating factors in many existing tidal restoration sites at various stages of development.

If berms are constructed, they should be located in positions that conform to natural topographic high positions in relation to tidal marsh drainage patterns and wildlife movements. High tide cover (flood refuge) is widely recognized to be an important limiting factor for habitat suitability of salt marsh wildlife, including endangered California clapper rails and salt marsh harvest mice. Clapper rails generally establish territories centered on tidal channels, which are used as travel corridors and foraging habitat. Proximity of tidal channels to high marsh naturally occurs in mature tidal marshes, where local sedimentation gradients (overbank flows) cause minor natural levees to accrete over long periods of time. These creek levees are typically dominated by gumplant, a tall semi-evergreen subshrub that grows about 0.5 - 1.0 m tall, often in high density. Its vegetation provides important, localized, proximate nesting and flood refuge habitat along creeks/rail territories. Rather than locate berms at arbitrary positions, or positions expedient for construction, berms should be located along creek banks, and designed to emulate the structure and function of natural levees. This is important for realizing actual habitat benefits of restoration: immature, early-succession salt marshes may be deficient in critical sub-habitats, like flood refuge cover in high marsh, that enables successful occupation by clapper rails.

Other low-cost marsh-nucleating features may also be included in salt pond restoration where initiation of marsh on mudflat is determined to be lagging: placement of peat

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33660 Annapolis Road Annapolis, California 95412 PB-6 continued fragments, seasonal deposits of large woody debris, locally excavated and side-cast mud mounds can create microtopographic shelter facilitating marsh plant seedling establishment.

• <u>Terrestrial-edge slopes</u>. The high marsh and terrestrial ecotone (upland transition zone) usually supports the highest species diversity in tidal marshes. Gentle slopes (flatter than 7:1) broaden vegetation zones, and dissipate wave energy at the shoreline that may otherwise be erosive (on conventional steep levee slopes that reflect wave energy). Variation in slope and topography along the upper shoreline of restored marshes would substantially contribute to the eventual habitat and species diversity, compared with uniform, rectilinear levees. Variation in substrate types used to cap the levee slope would be likely to further increase habitat and species diversity, compared with uniform composition of drained bay mud (an artificial soil). Sand, silt, gravel (preferably fluvial in origin), terrestrial soils, and shell hash are desirable capping materials for high marsh shorelines where they may be available and cost-effective. All are ecologically preferable to shoreline armor (riprap).

Alternative, cost-effective techniques for constructing gently sloping terrestrial ecotones should be evaluated as a means of adjusting backshore marsh profiles to rising sea level (estuarine transgression). The majority of the South Bay's historic tidal marsh shoreline was formed against alluvial fans and stream deltas of plains and valleys. Analogous structures may be generated by hydraulic placement of slurried, heterogeneous terrestrial or fluvial sediments, such as flood control channel debris (that would otherwise have been deposited in the bay's tidal marshes, but for diking). Hydraulic placement of slurried coarse sediment is in fact the principal technique for marsh construction by the Corps of Engineers in most of the United States. The stratified deposits of slurried, poorly-sorted fluvial sediments may provide ecologically important environmental heterogeneity in restored marshes. Dredge-deposited alluvial fans were inadvertently created at Sonoma Baylands, where they persist and formed exceptionally well-developed high marsh within just a matter of years.

Most clonal perennial native plants of the high marsh zone are moderately tolerant of burial by sediment during dormancy, so hydraulic placement of slurried sediment (up to about 15-20 cm per "lift") may be performed without sacrificing prior-established vegetation and habitat. Hydraulically sediment-nourished "habitat levees" may be segregated from flood control levees which require trapezoidal form and engineered cores: flood control levees may be optimally located along urban edges, while low, wide habitat levees could be located seaward of them. Segregating them by location and construction method would enable each to be upgraded as needed without sacrificing the integrity of the other's primary functions. Segregating them would also enable open water buffer areas (emulating natural "long pond" pans of historic tidal marshes) to be included between flood control/trail levees and habitat levees, improving wildlife protection while enhancing views.

• <u>Estuarine beaches, marsh berms, and coarse sediment nourishment</u>. Estuarine beaches (wave-constructed sand or fossil shell hash deposits) and related marsh berms (likely barriers forming historic salt ponds; Atwater et al. 1979; similar structures deposited above marsh scarps, stabilized by vegetation) are widespread and important marsh

PB-6 continued structures along bayshores that are not directly occupied by eroding dikes. Existing estuarine beaches shorelines (greatly reduced in extent compared with historic conditions), such as Roberts Landing, support large numbers of mudflat-foraging shorebirds at high tide. Endangered species such as California sea-blite are narrowly associated with estuarine beach/marsh ecotones. Estuarine beach restoration should be considered as an alternative or supplemental means of constructing persistent, low-maintenance, well-distributed high tide shorebird roosts to replace lost areas of shallow/emergent salt pond beds restored to tidal marsh. Beaches may also be constructed (by hydraulic placement of sand slurry) internal to salt ponds, at the downwind/downdrift (usually SE) corners where they sometimes spontaneously form.

The description of scarce shell hash deposits in the EIS/R (p. 3.6-22) is deficient. Shell beaches and berms are significant features of the Ravenswood shorelines (north to Foster City), and shell-sand beaches are widespread along the otherwise erosional Hayward-Eden Landing shoreline. The utility of estuarine beaches as buffers of wave erosion along exposed shorelines (such as bayfront dikes) should be evaluated, particularly as a "soft" engineering alternative to armoring (rip-rap) where managed salt ponds are retained. Beaches can be "constructed" by hydraulic placement (dredge discharge) of sand or shell slurry across intertidal profiles (beach profile nourishment), then allowing wave action to deposit them along the shoreline.

- <u>Coarse woody debris</u> The EIS/R omits reference to the natural role of coarse woody debris (historically generated by fluvial flooding, transport of riparian woodland trees) in tidal marshes. Well-distributed coarse woody debris provides both anchored and floating high tide flood refuge for small mammals and resident tidal marsh birds.
- <u>Salt Pond interior design</u>: mixed marsh. Salt ponds that are not chronically hypersaline can be designed to include salt marsh vegetation along gently sloping shorelines, sinuous bands along the margins of remnant tidal creeks, or vegetated marsh islands. There is no reason to assume pond designs that exclude significant vegetation, even when barren nesting and roosting islands are desirable. Gently sloping vegetated shorelines and sandbuffered interior pond shorelines would likely minimize erosion and provide windsheltered microenvironments used by waterbirds during storms.

2.2 Vegetation

- <u>Distribution of Spartina foliosa</u> (p. 3.6-7). The distribution of remnant clonal stands of, uninvaded, native cordgrass in the south bay was omitted from the EIS/R. This species is the principal native pioneer plant species establishing new marsh on mudflats. As such, it will be a highly important resource, especially in the wake of regional eradication of its hybrids with *S. alterniflora*. Restoration of tidal marsh probably cannot proceed without ample seed source populations of this species, so its protection and augmentation (especially near breaches) after hybrid eradication is complete should be considered for restoration feasibility. There would otherwise be a long time lag between population recovery (post Spartina Control Project) and initiation of SBSPRP actions.
- <u>Salt marsh description</u>. The description of salt marsh (p. 3.6-8) omits reference to plant species diversity, both modern and historic, particularly in association with mature salt

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marshes (such as upper Newark Slough) and terrestrial ecotones. This is not an academic matter, because this should be an important restoration design consideration. Similarly, this account fails to describe high marsh pans (including wrack pans, widespread in the vicinity of Eden Landing ponds), which could potentially support rare plants such as northern salt marsh bird's-beak.

- <u>Brackish marsh description</u> (p. 3.6-10). This account disregards the important influence of groundwater emergence along the terrestrial edge of salt marshes, a natural condition that appears to be increasing in the vicinity of Newark and Coyote Hills, and possibly at other locations. Brackish marsh is segregated from salt marsh by dikes that isolate terrestrial groundwater influence, and confine brackish marsh to channelized freshwater discharge gradients. The so-called "upland" transition zone of salt marshes along alluvial fans and valleys is often brackish to freshwater marsh, as at China Camp, some Petaluma Marsh sites, many Point Reyes tidal salt marshes, and many extirpated historic salt marshes of the south bay. This is significant because integration of salt marsh restoration with flood control does offer the possibility of re-integrating semi-permeable "habitat levees." Stratified coarse and fine sediment could be deposited by slurry with urban wastewater backshore ponds, so that permanent seep-influenced shorelines could regenerate salt-brackish marsh zonation and its rich diversity. Also, the rich potential native species diversity of brackish marshes is omitted (p. 3.6-10)
- <u>Freshwater marsh account</u> (p. 3.6-11). Again, the natural position of freshwater marshes and riparian woodland along "upland" salt marsh ecotone gradients driven by groundwater emergence or streams is omitted. This is significant because the federally threatened California red-legged frog, and western pond turtles, have potential habitat along this gradient. California red-legged frogs occur widely in backshore marsh ponds and small stream-mouth lagoons (fresh to brackish) in Tomales Bay and Drakes Bay, for example, and freshwater marsh has spontaneously regenerated around Coyote Hills lowlands (formerly seasonal wetland grassland).
- <u>Submerged Aquatic Vegetation (SAV) beds</u>. This important and widespread estuarine vegetation type is scarcely identified or evaluated in the context of restoration. *Ruppia maritima* is barely mentioned (3.6-19) despite importance for waterfowl (as a direct food source and nursery for invertebrate prey), and the extensive potential new habitat generated in low-turbidity, low-salinity salt ponds. Despite the EIS/R's concern for windwave effects on erosion, the frictional effect and potential use of SAV bends on windwave damping is entirely ignored. Ample technology exists for propagation and management of *Ruppia* (mostly from other regions). SAV has potential uses in pond management for nutrient sequestration, trapping fine sediment, and enhancing waterfowl foraging habitat.
- <u>Upland vegetation account</u> (3.6-12). This description omits natural terrestrial ecotones and uplands within the SSFBSS boundary, especially Newark Slough and Coyote Hills, and focuses almost exclusively on weedy diked bayland habitats with incoherent species assemblages. This impoverishes the EIS/R's focus on potential naturalistic terrestrial ecotone linkages to restored tidal marsh, and focuses almost exclusively on weeds and wildlife. The omission of the geographically rare opportunities to reunite true terrestrial soils and vegetation with restored tidal marsh is a significant bias for programmatic

33660 Annapolis Road Annapolis, California 95412 PB-7 continued comparison of alterative salt pond restoration locations within the SSFBSP boundary. The discussion also disregards the potential importance of native clonal perennial species (such as *Leymus triticoides, Euthamia occidentalis, Carex praegracilis, Ambrosia psilostachya*) as effective competitors with invasive wetland weeds - a potential application for pre-emptive control of high marsh/terrestrial weeds like *Lepidium latifolium* that may be significant impacts for restoration.

2.3. Wetland weed invasions

The EIS/R fails to address realistic management methods (pre-construction and post-construction) for controlling wetland weed invasions, particularly invasive species of the high marsh ecotone that rapidly invade freshly graded or capped levees. All the color aerial photos of the Alviso ponds exhibit the typical light-colored outlines of Lepidium latifolium on all dredge locks and levees maintained in the last 20 years, as well as their adjacent marshes. Realistic control of this species on levees would require pre-construction suppression of seed sources, and rapid preemptive cover of levees by competitive (clonal perennial) native species. This applies also to Mediterranean tarweed, Dittrichia graveolens, which is currently expanding rapidly throughout the South and North Bay. The conversion of formerly hypersaline managed ponds to saline ponds also opens up large areas of old internal berms and new (proposed) earth berms to weed invasions. This is a significant cumulative impact of past invasions and new construction and maintenance of levees. It requires substantial, specific, explicit weed management design (including timely revegetation designs emphasizing rapid establishment of clonal perennial cover), not vague adaptive management language as mitigation. The weed management should also target growing bay invasions of Russian wheatgrass (*Elvtrigia pontica*, sometimes spread by "temporary mulches" or stabilization seed mixes), *Piptatherum mileaceum* (smilo grass, now invasive in Alviso and Hayward), and Australian bentgrass (Agrostis avenacea, rapidly spreading south in the North Bay; a foreseeable South Bay invader of levees)

<u>Spartina alterniflora</u> hybrid invasion. See comments at 1.4. The EIS/R should include a programmatic mitigation measure to ensure that the timing of tidal breaching does not precede the reduction of local hybrid *Spartina* seedling recruitment to insignificantly low frequencies. In other words, the timing of breaches must be contingent on effective eradication that actually prevents the primary marsh succession in restored salt ponds from being infested by hybrid cordgrass, and allows native cordgrass to dominate. This is not a vague or deferred adaptive management action for future study and re-assessment (table 2-3, p. 2-16: 'continue to re-evaluate what is meant by "control"... is not a reasonable mitigation measure). It is an objective and meaningful, enforceable criterion.

2.4. Special-status plant species.

The EIS/R contains inaccurate information about special-status plant species that prejudices the range of reasonable alternatives to omit design features that could support their reintroduction to historic (extirpated) portions of their ranges within the project area. The EIS/R incorrectly states that suitable habitat does not occur in the SBSP restoration area for some special-status plant species that do in fact have highly suitable but unoccupied habitat present today. Other species are identified only from habitats other than tidal marshes and their margins, when historic

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populations are known and published in the scientific literature and accessible on-line floristic databases. These omissions and inaccuracies are particularly important for the purported programmatic EIS/R element. Historic collection localities of all these species are available online at the Calflora database and the U.C. Berkeley SMASCH database. All rare plant species of the South Bay and their historic and modern distributions were summarized in the Goals Project Species and Communities profiles (Baye and others 2000). These sources appear not to have been reviewed in preparation of the EIS/R. Inexplicably, the EIS/R (Table 3.63) instead compiled rare plant information for species that do not and have not been known to occur in the South Bay, and should not be expected to do so (*Lilaeopsis masonii, Astragalus pycnostachus, Lathyrus jepsonii*, etc.).

Examples of species that could be reintroduced to historic (extirpated) portions of their ranges within the project area include:

California sea-blite (*Suaeda californica*). Federally listed as endangered. Falsely reported by the EIR/S as "no suitable habitat in SBSP Restoration Project Area" (p. 3.6-35). Oyster shell hash/sand beaches do occur in the Eden Landing pond complex and Ravenswood pond complex. These could readily be enhanced by sand/shell sediment nourishment that would have joint restoration benefits for (a) buffering wave attack of levee scarps, slowing scarp retreat; (b) providing high tide roosts for shorebirds; (c) potential roost sites for post-fledge juvenile least terns, and (d) restoration of specific habitat for California sea-blite within its historic range.

Contra Costa goldfields (*Lasthenia conjugens*). Federally listed as endangered. Historically reported from edges of salt ponds at the Bay shore near Mt. Eden and Newark. Like *L. glabrata*, this species should be expected to occur and be suited for reintroduction in tidal salt marsh-grassland ecotones and high marsh pan-salt marsh edges.

Northern salt marsh bird's-beak (*Cordylanthus maritimus* var. *palustris*). This species was historically widespread in the South Bay as far south as Alviso. Falsely reported by the EIR/S as "no suitable habitat in SBSP Restoration Project Area" (p. 3.6-35). This subpecies should be expected to occur and be suited for reintroduction in high salt marsh with low or sparse cover, such as vegetation gaps high marsh pan-salt marsh edges.

Missing from the EIS/R treatment of rare plants from South Bay tidal marshes are:

Suisun aster (*Symphiotrichum lentum*, syn. *Aster lentus*). Nomenclature and synonyms with S. chilensis are often confused. Suitable habitat exists in most brackish or fresh-brackish high marsh edges; wastewater discharges near Alviso have expanded suitable (unoccupied) habitat of this robust clonal perennial species, which is likely dispersal-limited (seed, seedling stages).

Bolander's water-hemlock (*Cicuta maculata* var. *bolanderi*). Possibly extinct, but reported from Suisun Marsh; habitat is brackish high marsh. Reported by Thomas (1961) "to be expected locally" in salt marshes in the Flora of the Santa Cruz Mountains of California (including South Bay). Suitable habitat exists in most brackish or fresh-brackish high marsh edges; wastewater discharges near Alviso have expanded suitable (unoccupied) habitat of this exceedingly rare but robust subspecies.

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Salt marsh owl's-clover (*Castilleja ambigua*, ssp. undetermined). The salt marsh ecotypes of this species within the San Francisco Estuary have been extirpated in the South Bay, and are known to occur only at Point Pinole and Southhamptom Marsh. It was widespread and abundant historically in South Bay salt and brackish tidal marshes as far south as Alviso. This ecotype should be expected to occur and be suited for reintroduction in tidal salt marsh-grassland ecotones and high marsh pan-salt marsh edges.

Other salt marsh plant species that have declined to regional rarity in the Estuary, and would significantly benefit from reintroduction to restored tidal marsh edge habitats, include marsh baccharis (Baccharis douglasii), western goldenrod (Euthamia occidentalis), western ragweed (Ambrosia psilostachya), sea-milkwort (Glaux maritima), spikeweed (Centromadia pungens var. *maritima*), meadow sedge (Carex praegracilis), and local populations of creeping wildrye (Leymus triticoides). The clonal perennial species native to high tidal marsh zones have important restoration uses for pre-emptive competitive exclusion of invasive species such as perennial pepperweed; they also have high esthetic (ornamental flowering displays, heterogeneity, visual alternative to monotonous stands of levee weeds) and ecological value (stabilization of shorelines, maintenance of pollinator populations, high tide cover, nesting habitat, seed sources for foraging songbirds and small mammals, food base for insect prey items of many wildlife species). Spikeweed may be an important competitor useful for competing with invasive Mediterranean stinkwort (Dittrichia graveolens), a major and growing invasive threat to the South Bay levees and marsh edges; the two species are ecologically and morphologically similar. The EIS/R should rigorously consider not only the conservation benefits of reintroducing and managing these native species for their own benefit, but also in terms of their instrumental value for weed management, wildlife habitat, shoreline stabilization, esthetic/recreational value, and ecological benefits.

The EIS/R suggests planting Brewer's saltbush (*Atriplex lentiformis* var. *breweri*) on salt pond levees (p. 2-139). This species and its subspecies are not native to San Francisco Bay. They have been introduced as amenity for ornamental or wildlife habitat plantings because of their tolerance to saline soils. They are native to interior valleys, and occur naturally on saline coastal terrestrial soils only as far north as Watsonville, Monterey County. Native *Atriplex californica* has been extirpated from San Francisco Bay. It is inappropriate to introduce species native to other floristic regions of California to perform ecological functions that may be performed by species native to San Francisco Bay. Introduction or deliberate spread of non-native species to unoccupied restored tidal marsh and ecotonal vegetation would be a significant adverse impact.

2.5. Shorebirds and other waterbirds – See comments at 1.2, 1.4. The EIS/R should acknowledge more candidly the magnitude of uncertainty regarding long-term maintenance and sustainability of managed ponds in view of accelerated sea level rise, and borrow ditch depletion for dike maintenance. The EIS/R's optimistic reliance on the feasibility of proposed designs for artificial islands, levees, artificial structures, and their maintenance, is not justified and excessively speculative. The potential impacts to shorebirds and other pond-reliant waterbirds may be significant, and justifies robust, resilient, realistic mitigation. Feasible long-term compensatory mitigation for tidal conversion impacts may be found in portions of the South Bay salt pond system outside the SBSPRP boundary, particularly high-elevation crystallizer beds (continually re-surfaced by mud layer lifts during their history of use) and ponds along alluvial fans in the Newark and Mowry pond subsystems. Higher-elevation ponds are more amenable to modification for gravity drainage and water management of ponds and pans. Adjacency to

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uplands (natural positions for large pans) also increases feasibility for multiple sediment lifts by future hydraulic placement of sediment, to compensate for rising sea level. These practical compensatory mitigation measures for shorebird and waterbird impacts should be rigorously evaluated in a programmatic comparison of alternatives and mitigation options for long-term adaptive management.

2.6. Western snowy plover. Given the acknowledged uncertainty of impacts and mitigation for this important federally listed species (p. 3.6-74; see also baseline NEPA fallacy, p. 3.6-75, comment 1.4), and the unsound "less than significant" impact determination (comment 1.2), the EIS/R should modify its conclusions and acknowledge the potential for long-term significant impacts to this species due to project implementation, particularly due to cumulative impacts with sea level rise. Additional substantive (not procedural) mitigation is required. Mitigation alternatives should include (a) additional dedicated high-elevation (sustainable) replacement pan habitat in suitable, defensible landscape positions, such as modified crystallizer beds; (b) nourishment of pocket beaches, spits, or fringing beaches (Pleistocene shell hash or fine sand, hydraulically placed from offshore dredge sources or port deepening projects; possibly also "screenings" of waste gravels from industrial bay sand processing sites) along suitably receptive shorelines (crenulate eroded marsh scarps, tidal re-entrants, minor headland-enclosed shorelines) as alternative habitat. Note that sand and shell beaches naturally re-construct themselves by waves and equilibrate with rising sea level as long as sediment supply is adequate (or nourished sufficiently).

2.7. Special-status invertebrates – The EIS/R omits reference to rare or endemic insect species identified as important target species in the Goals Project, including tiger beetle species (*Cicindelia* spp.), Western Tanarthrus beetle, and rare wasps (*Compsocryptus* sp.). These could be significantly impacted by restoration actions, or even extirpated. Mitigation should include surveys, restoration of alternative habitat/refuges, and active translocation experiments before habitats are significantly impacted.

2.8. Trails, Public access design alternatives, and impacts. The EIS/R should assess and guide (at least programmatically), not defer, the compatible use determination of the Refuge (p. 2-86) in relation to recreational uses that may be structurally embedded in proposed trail designs. The alternatives analysis should compare contrasting types of trail alignments in terms of potential wildlife disturbance impacts, assuming unequal and unknown future distribution and use of managed ponds and restored marsh/mudflats by waterbirds. The alternatives should consider trail designs that minimize loop trails that leave no levees within a pond free from human trail use (eliminating refuges from disturbance). Alternatives should also examine designs for segregation of flood control/improved (road top) levees used as main trails, and distinct habitat levees that function as backshore marsh gradients, separated by open water areas.

The EIS/R's working assumptions about recreational impacts on shorebirds and waterfowl should be re-examined with external peer review, consulting with bird behavior experts on this subject from other coastal U.S. regions, as well as authors of bird disturbance studies from elsewhere in the San Francisco Estuary. I am concerned that public and political pressure for recreational use in levees may exert subtle bias both assessment and scientific review of this sensitive subject.

2.3. Physical factors affecting long-term tidal marsh restoration and salt pond management.

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<u>Sea level rise, sediment sinks, and sediment deficits.</u> The EIS/R's treatment of sea-level rise is fundamental to all aspects of project feasibility, comparison of alternatives, and impact assessment based on long-term forecasts of habitat development and persistence. Unfortunately, the approach of the EIS is to establish a fixed assumption of obsolete estimated sea level rise rate, rather than a *reasonable range* (or the rate of rate of change – the acceleration curve) of equally likely sea level rise rates. Managing coastal habitats in general – not just tidal marsh restoration – demands a "bet-hedging" or risk assessment approach in the face of growing (not diminishing) uncertainty about the magnitude of sea level rise rates (Cowell *et al.* 2006). Note that the most important aspects of sea level rise for tidal marsh succession and persistence is the *rate* of rise in relation to sediment budgets and sediment sinks (French *et al.* 1993, 1994), not just the amount of sea level rise forecast within a given time interval.

A "bet-hedging" approach to highly uncertain sea-level change is most essential to the *design* of alternatives that may reasonably cope with an uncertain 50 year future of sea level rise rates, and not just predictive methodology for impact assessment. Restoration designs for *reasonable* alternatives cannot be based on arbitrary assumptions or hopes that a "golden mean" of moderate estimated sea level rise rates will occur. Note that even the recent (2007) revised IPPC sea level rise estimates have, as a matter of procedure, "simplified" its assumptions by artificially excluding the overwhelming (and unpredictable) influence of ice sheet collapse or mass wasting (Otto-Bleissner *et al.* 2006, Overpeck *et al.* 2006) from its estimates.

The EIS/R tidal restoration alternatives must identify engineering designs and methods that could *actually* be applied feasibly in adaptive management of tidal marsh restoration. Few compensatory coastal engineering tools are available for this: hydraulic discharge of sediment fans or mounds is among the only well-tested (national Corps program) techniques, but it is not addressed at all in the EIS/R. Designing "overfilled" (e.g., Pond 3 Alameda, 1975 Corps experimental dredge disposal/wetland creation project) sloping marshes/terrestrial ecotones, to construct transgressive estuarine platforms that anticipate a higher range of sea level rise rates (resulting in island-like marsh gradients) is another approach that needs consideration for a "bethedging" approach to restoration alternatives.

The EIS/R also must distinguish between mere marsh persistence at accelerated sea-level rise, and restoration or maintenance of specific marsh types and structures that are narrowly associated with plant or wildlife species guilds or vegetation zones. Atlantic tidal marshes, for example, are known to persist but degenerate at different rates of relative sea level rise, with profound longterm effects on wildlife species (Cahoon et al. 2006). All San Francisco Bay wildlife species dependent on critical distribution and amounts of high marsh for nesting or flood refuge are at risk of local extirpation in "restored" tidal marshes if they lack foundations for maintaining welldistributed high marsh during accelerated sea level rise. The comparison of alternatives must focus on the resilience of restoration designs (not just the map of ponds and idealized tidal marsh types) in response to a reasonable range of sea level rise rates, based on the best available (not the most authoritative "official" short-lived forecast) scientific evidence and expertise on coastal management. This requirement applies equally to the long-term maintenance of managed ponds with fixed bed elevations, low potential for sediment accretion, and reliance on steep-sided, unstable levees. This is significant because a large number of significant impacts are dismissed as "less than significant" based on the assumption that managed ponds will be manageable and function as intended with adaptive management. Sea level rise may make a mockery of this

assumption if explicit and effective resilient restoration designs are not established in the project from its outset.

Of all the important coastal submergence variables that the EIS/R must assess, it should focus most on the variables that are governed by contrasting project or program alternatives. The project can be framed as a comparison of different choices about where to locate massive new sediment sinks, and what size sediment sinks to create as sea level rises. The goal of alternatives, at least in Alternative C (or equivalent) is to maximize the "rate of return on investment" for each unit volume of sediment available. This of course is a function of initial salt pond bed elevation (or subsidence), and proximity to pools of bay mud in tidal flats and shoals. The comparison of alternatives at a bay-wide scale (SSFBSS boundary) should rigorously examine (and quantitatively model) all reasonable salt pond restoration configurations under low, intermediate, and high forecast rates of sea level rise to compare their efficiencies at generating tidal marsh. In particular, the choice between initiating Phase 1 tidal marsh restoration in deeply subsided Alviso ponds, and restoring equivalent pond areas in the Newark, Mowry, and Ravenswood pond areas (least subsided), should be rigorously examined at the programmatic level before irretrievable commitment of sediment resources is made. This would enable a reasoned comparison of the alternative cost/benefits of delaying some restoration until the most feasible ponds become available for tidal restoration. I am concerned that the premature tidal restoration of deeply subsided Alviso pond sediment sinks (some over 2 m below local MHHW) could significantly compete with and jeopardize sediment transport to more timely marsh restoration sites. The EIS/R fails to deal with this large-scale question in the alternatives analysis.

Note that the EIS/R must correct the cumulative impact assessment of sea level rise and sediment budget deficit exemplified on p. 3.6-71. This exclusively incremental, segregated approach to important interactions among physical variables and project alternatives flouts and inverts CEQ guidance on cumulative impact assessment (CEQ 1997).

<u>Levees</u> – The EIS/R is unclear on the important issue of long-term maintenance, stability, and sustainability of retained levees for managed salt ponds. Most salt ponds have exhausted, or will exhaust, borrow ditch sediment sources for levee capping. The costs of maintaining levees during accelerated sea level rise after borrow ditch exhaustion is a formidable feasibility issue that is not adequately addressed in "adaptive management" or alternatives comparisons that dwell only on pond configuration.

Instead, the EIS/R includes relatively minor issues such as "mulch or temporary plantings" (p. 3.4-5) to address localized erosion, and inappropriate veiled references to mitigation based on "additional erosion control measures" that may include shoreline armoring (rip-rap; significant potential adverse impact for habitat; p. 2-73). Note also that mulch and temporary plantings are likely vectors for invasive weed species, a potential significant impact of this 'mitigation'. The EIS/R needs to rigorously re-assess alternative compatible levee design and maintenance in a 50 year horizon for managed salt ponds and flood control. This is particularly important for the EIS/R's claim to serve as a program-level EIS/R for the SSFBSS.

<u>Nesting and roosting islands in managed ponds.</u> The description of nesting island construction "expected to be used by snowy plovers, Forster's terns, American avocets, and black-necked stilts" omits vegetation control. These species are unlikely to use islands that are subject to progressive increases in vegetation cover over years. In the absence of phytotoxic levels of

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hypersalinity to control vegetation, any earthen (bay mud) islands that are usually emergent would very likely become vegetated by halophytes, and thus unsuitable nesting habitat for shorebirds and terns. Guano deposition on nesting islands also facilitates colonization by halophytes that are also usually nitrophilic (Chenopodiaceae species).

Vegetation control on hundreds of nesting islands (54 per pond) is simply infeasible, particularly since nesting season overlaps almost completely with growing season. The EIS/R does not assess the feasibility of its proposed vegetation control methods, which are not described in sufficient detail for meaningful comment. The nesting island designs must factor in substrate-based controls of plant growth to be effective and feasible. Placement of impermeable substrates, such as gypsum fragment caps, or shallow-buried concrete layers capped by shallow layers of coarse sand, oyster shell, oyster shell hash, or gravel. Impermeable substrates shed guano deposits during rainfall events, and prevent soil enrichment by ammonium, urea, or nitrate. Impermeable substrates also restrict root penetration to permanently moist soil and expose seedlings to lethal desiccation. Active artificial vegetation management of nesting islands by herbicide application is likely to conflict with nesting, because nesting season overlaps with seedling growth and establishment in spring; active vegetation control is therefore infeasible for long-term maintenance.

<u>Gypsum and marsh restoration</u> (Description of Alternatives). The EIR very broadly describes a very significant potential constraint of tidal marsh restoration due to relict precipitated gypsum mineral deposits that armor the salt pond surface (such as pond E8A at relatively high intertidal elevations, close to the expected final elevations of mature restored tidal marsh. "The hard layer of gypsum...may delay or impair marsh plant community development...." (p. 2-97). It is not clear whether this conclusion (which I believe is correct, and understated) is based on best professional judgment or technical documentary evidence; none is cited.

Corrective actions for impediments to salt marsh restoration caused by gypsum crusts of salt pond beds (mineral armoring of the salt pond surface) are described only in very general terms ("pretreatment would disturb or fracture the gypsum layer in select locations, while the layer would be left intact in other locations" (pp. 2-97; equally general and superficial discussion on p. 2-31, 2-95).

The EIS/R fails to disclose the acreage or percent area of ponds that are armored by gypsum deposits. The reader must hunt and peck through the text to assess the geographic magnitude of gypsum armoring. The EIS fails to disclose the fact that gypsum deposits occur on approximately <u>one quarter</u> of the South Bay salt pond system (Siegel and Bachand 2001, citing Wildlands 1999), a very significant proportion of the system. The proportion of gypsum armored salt ponds currently programmed for restoration as potential marsh is not disclosed. The EIS/R's assessment of the magnitude and intensity of the gypsum problem for salt marsh restoration, and efficacy of corrective measures, is insufficient for meaningful assessment of site-specific constraints on marsh restoration potential. It is also insufficient for meaningful assessment of the feasibility of corrective actions.

The EIS/R does not identify the site-specific elevation range of gypsum armor in relation to either MHW or MHHW in any of the programmed salt pond restoration clusters. This is significant because even with the nominal and localized "treatment" proposed to mitigate gypsum impediments to restored salt marsh root zones ("construction equipment or other techniques (*sic*)

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would be used to disturb the gypsum layer...only in certain locations and not other to test the effectiveness..." p. 2-95), gypsum would restrict marsh plant root penetration to narrow cracks. The higher the elevation of the gypsum armor in relation to MHHW, the more restricted salt marsh plant root zone development would be.

Gypsum may also adversely affect marsh plant colonization of accreted mudflats above mineralarmored salt pond beds. If the root zone restriction of seedlings caused by gypsum significantly impairs anchorage of seedlings in semi-fluid bay mud deposits above them, seedlings would be more vulnerable to dislodging by wind-shear currents or wind-waves acting on the mobile upper layers of mud supporting emerging seedlings. Marsh plant colonization of bay mud above gypsum layers may thus be significantly impaired (limited to localized patches or stunted vegetation development) or prevented over large areas.

Restriction of marsh plant rooting zone depth by gypsum is also likely to proportionally reduce above-surface height of vegetation, analogous with a hardpan soil horizon or bedrock outcrops in grassland or vernal pool vegetation. Marsh vegetation structure (height and density), especially in relation to flooding during high tides, has important consequences for wildlife habitat functions (such as cover from predators, flood refuge, nesting habitat) and ecological function (such as sediment trapping potential). Salt marsh vegetation cover stunted by gypsum "hardpan" should not be expected to function as salt marsh formed on continuous bay mud soil profiles. It is unreasonable to expect untreated gypsum-bedded salt ponds to develop suitable (i.e., consistent with project objectives) salt marsh if the gypsum armor occurs between MSL and MHW.

An impermeable subsurface layer of gypsum is also likely to affect subsurface drainage of marsh adjacent to scarps and creek banks, where groundwater surface elevations are typically depressed at a local scale. Localized impediment of marsh drainage along creek banks is likely to suppress or eliminate development of distinctly taller, denser vegetation at these topographic locations, where it supplies essential nesting, flood refuge, and predator escape habitat for resident marsh wildlife species (including endangered California clapper rails and salt marsh harvest mice) depend on. The EIR/S fails to consider this significant environmental consequence as a specific design factor or a priority mitigation issue.

The EIS/R refers to "delay [of] habitat development *until* the gypsum layer dissolves and degrades over time" (p. 2-95; emphasis not in original), but provides no scientific basis for its vague reference to the rate of solubility of solid thick gypsum crusts in a saline environment, especially when buried by mud. The known chemical weathering properties of gypsum can and should be investigated from the existing scientific literature (summarized by Siegel and Bachand 2001, p. 48; no salt pond technical appendix documents are cited in the EIS/R itself for gypsum issues), as a matter of due diligence. There is no need to defer this investigation to future "adaptive management" because this important information is available. The calibrated local rate of solution of gypsum in south bay tidal water (direct exposure, no mud cover; maximum potential solution rate) could have been readily determined through short-term experiments during the long (2004-2007) pre-EIS/R period of salt pond restoration planning when insoluble gypsum was *already known* to be a significant potential constraint on marsh restoration (Siegel and Bachand 2000, p. 47; C. Wilcox, pers. comm.).

There is no empirical evidence to support the assumption that thick gypsum crusts would in fact *ever* dissolve below estuarine muds on an accreting marsh plain, which is the landform over

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which the vast majority of gypsum crusts will occur in tidally restored salt ponds. Gypsum forms geologic mineral beds. Salt pond gypsum is highly persistent and resistant to weathering even in subaerial environments exposed to slightly acidic high rainfall. Clearly, the persistence of gypsum fragments for decades on levees above high tide line, deposited by clamshell dredge during levee capping, provides strong incidental data on the rate of weathering.

The EIR/S fails to cite any technical appendix documents that substantively assess the nature of the gypsum problem for tidal marsh restoration, and restoration approaches in terms of restoration feasibility. There is no information presented on the amount (acreage or intensity) of gypsum fracturing that would be effective in enabling tidal marsh vegetation to develop on armored, high salt pond beds. There is no basis for predicting even whether merely fracturing gypsum and leaving it in place would even have any appreciable benefits for marsh establishment at all. Invoking the phrase "adaptive management", and refer to deferred future study of gypsum treatment and marsh vegetation response, does not make an unreasonable assumption like this reasonable, especially in the context of NEPA/CEQA.

The EIS/R fails to objectively evaluate necessary restoration options (mitigation measures or modal alternatives) that include partial removal of gypsum from armored salt pond surfaces to enable tidal marsh to develop acceptably (consistent with basic marsh restoration objectives). Instead, the EIS/R refers only to monitoring without regard to efficacy or feasibility of post-tidal corrective measures. Monitoring or study *per se* does not substantively mitigate gypsum constraints and impacts on tidal marsh restoration; monitoring or study procedures *per se* are merely guiding antecedents of potential actions.

The EIS/R must rigorously evaluate the extent and intensity of gypsum constraints on tidal marsh restoration. It is meaningless to propose to "test the effectiveness of restoration techniques...for gypsum pre-treatment" (p. 2-96) if the EIS/R provides no basis for the design or fails to assess its feasibility. This is essentially blind, deferred mitigation of unknown efficacy. The purpose of the EIS/R is to compare alternatives and evaluate substantial mitigation measures to avoid or lessen impacts and maximize environmental benefits. Failure to mitigate cumulative gypsum impacts may result in failure of the salt marsh restoration components of the project to adequately mitigate for significant restoration-related impacts of the project.

Some gypsum constraints on salt marsh restoration could be substantially avoided or minimized by landscape-level restoration design configurations that allocate gypsum ponds to tidal salt marsh/pan complexes. Between the extremes of fully tidal, fully vegetated tidal salt marsh, and wholly unvegetated managed salt pond, are alternative models of salt marshes with significant proportions of pans. The hardpan conditions provided by gypsum, especially gypsum armor at elevations above MHW, are likely to *facilitate* pan development. This could contribute towards resolving the EIS/R's concern that "These features (pans) have rarely formed naturally in restored marshes, and constructed marsh ponds have been difficult to maintain due to vegetation colonization ..." (p. 2-96). The EIS/R does not connect these related topics of gypsum armoring and pan formation. Gypsum-armored ponds may be programmed for restoration as intermediate persistent marsh/pan (shallow emergent pond) with emphasis on shorebird habitat within a pond complex. This allocation of different salt ponds for different salt marsh/pan habitat mixes would justify commensurate emphasis on well-drained salt marsh restoration with high channel density and robust vegetation, in other portions of the salt pond complex unconstrained by gypsum. This

should be evaluated at the level of modal (restoration method) and geographic (pond complex design) alternatives.

Similarly, the EIS/R fails to identify potential "co-generated" benefits of salvaged and recycled gypsum removed from salt pond beds restored to tidal marsh. The same vegetation-restricting properties of gypsum slabs may be used to mitigate one of the most intractable wildlife management problems in low-salinity salt ponds: overgrowth of weedy vegetation on managed pond islands used as roosting or nesting sites by shorebirds, terns, and waterfowl (see p. 2-96, p. 2-100 [nesting islands]). Gypsum is an extremely harsh substrate for plant growth, even when weathered into soil; gypsum soils frequently contain barrens (Kruckeberg 2002). Stacked layers of gypsum fragments may be used to cap and loosely armor bay mud islands in low-salinity to slightly hypersaline managed salt ponds, and thereby inhibit significant vegetation growth. Gypsum may substitute for the effects of lethal hypersalinity on plant growth, maintaining islands and roost sites in suitably barren condition for shorebird and tern use.

Finally, the EIS/R fails to assess the indirect and cumulative impacts of its managed pond/tidal restoration alternatives in terms of gypsum production on the remaining industrial salt ponds in active production. This includes all the East Bay salt ponds (other than bittern waste storage ponds) owned by the Refuge that are not currently in industrial production. The ISP EIS/R (2003) stated that brines from salt evaporation ponds phased out of production would be moved to active industrial salt ponds remaining in production. This would be expected to result in a net increase the proportion of Refuge ponds supporting brines with sufficient concentration to precipitate gypsum at accelerated rates (brine and lime ponds; Ver Planck 1958). The failure to evaluate this indirect impact was also a defect of the 2003 ISP EIS/R, which appears to have largely deferred the issue, by default, to the current EIS/R (see cursory discussion on p. 5-16, 5-16 of draft ISP EIS/R; perhaps foreshadowing perpetually deferred study and lack of meaningful mitigation of this issue). The cumulative impact of interim pond management and tidal restoration on the industrial ponds may be a significant long-term increase in the extent of salt ponds producing brines over 150 ppt (gypsum precipitation threshold) and rate of gypsum armoring of Refugeowned salt pond beds. This would cause a significant adverse cumulative and indirect effect on the restoration feasibility of the Refuge-owned ponds that are not currently part of the restoration project. Note that the ISP EIR/S considered this impact of "long term pond drying" (or elevated brine concentration) forming gypsum to be "potentially significant and unavoidable". This significant cumulative impact must be addressed at either a project-specific or a programmatic level in the SBSPRP EIR/S. Thus, the EIS/R fails to address the significant cumulative impact of redistributed and concentrated gypsum precipitation in the South Bay salt pond system as a consequence of both interim management and restoration.

<u>Creation of Marsh Pond/Pan Habitat</u> (Description of Alternatives; Restoration Techniques). The evaluation of pan construction unfortunately addresses only two explicit physical variables, elevation range and salinity, in relation to depressional topography. Primary marsh plain pans (unvegetated poorly drained mudflats or shallow ponds enclosed by vegetated marsh) have in fact regenerated extensively within passively restored salt ponds like pond 2A Napa, which retained much of its original tidal marsh topography and relative tidal elevation. The feasibility of restoring pans is therefore not conjectural. This CDFG pond should be studied to guide activities that are likely to facilitate their regeneration (such as exaggerating microtopographic barriers to drainage, vegetative stabilization of pan edges to resist connection to emerging drainage patterns). This would be more instructive and effective than merely conducting surveys of "vegetation"

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cover, soil salinities, bird use, and erosion along the margins of the graded ponds" without prior empirical guidance for design (p. 2-96)

Depressional marsh plain pans discussed in the EIS/R are only one type of pan. The natural analog of playa-like pan habitats within dry concentrator salt ponds are playa-like barrens, or high marsh pans, that occur at upper intertidal elevations of natural salt marshes in Central California. These are infrequently submerged, and are typically irregularly and shallowly ponded when they are. Natural examples in the San Francisco Bay are rare: they typically occur along the margins of alluvial fans with fine sand or stratified alkali clays and sand (e.g. Hill Slough, Suisun Marsh; Whittell Marsh, Point Pinole). Large high marsh pans are also associated with intermittently active stream deltas, splay deposits, and alluvial fans (e.g., upper Schooner Bay, Point Reves; Los Osos Creek, Morro Bay). Because the depositional processes that form some high marsh pans are partially emulated by dredge discharge pipes with heterogeneous sediment classes, the construction of successional playa-like high marsh pans on alluvial fans with interbedded clay. silt, and fine sandy sediments should be rigorously evaluated as a modal restoration alternative. High marsh pans of sufficient size have the potential to integrate into salt marsh restoration designs many of the habitat features associated with dry concentrator salt pond beds. This is important to the restoration of the South Bay salt ponds because this habitat type may suffer longterm losses and reduction in sustainability as sea level rises.

Conclusions

The draft EIS/R should be recirculated with revisions to correct fundamental defects in the range of alternatives caused by the inverted NEPA/CEQA tiering relationship of the SBSPRP and SSFBSS and their geographic scope of analysis. The alternatives analyses (programmatic and project) should be revised substantially to address comments above. It is essential that the entire South Bay salt pond system be considered in the NEPA alternatives analysis, not just the ponds within the proposed project boundary. Impact assessment and mitigation methods should be corrected to comply with CEQA and NEPA regulations and guidance, and where conflicts between CEQA and NEPA treatment exists, separate conclusions or findings should be distinguished. A fundamental framework of realistic, scientifically sound working assumptions, or scenarios, of sea-level rise rates and sediment budgets should be applied to all impact assessments and restoration designs.

Respectfully submitted,

Peter R. Baye, Ph.D.

PB-18 continued

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Ph.D, Plant Sciences- University of Western Ontario, London, Canada, 1991.

Thomas J. Watson Fellow, Providence Rhode Island, 1981 – (transatlantic field studies of barrier beach, dune, and backbarrier tidal marshes)

B.A., Colby College, Waterville, Maine - distinction in majors of Biology, Philosophy

Expertise in botany, coastal ecology: I have been professionally or academically engaged in field studies and research, applied ecology and environmental management (restoration, management, regulation, litigation, planning) of coastal habitats since 1979, in New England, Canadian Maritime Provinces, Great Lakes, Britain, and California. This has been my principal professional career focus. My experience with California coastal wetlands and terrestrial habitats extends to 1984.

In San Francisco Bay, I worked for the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, from 1991-1997, specializing in NEPA compliance (including EIS management), impact analysis, endangered species consultation, technical review of wetland mitigation plans and large-scale tidal wetland restoration projects, such as Montezuma Wetlands and Sonoma Baylands. I was the environmental analyst for the Leslie (Cargill) Salt permit applications in both the South Bay and Napa plants from 1991-1994. I have investigated nearly all salt pond, levee, and adjacent marsh environments of both salt pond systems, and developed detailed original analyses of levee operation impacts to wetlands.

I worked as a staff biologist for the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Endangered Species Program (Mare Island sub-office) from 1991-2002. I completed a comprehensive administrative draft ecosystem recovery plan for endangered species of central and northern California tidal marshes, including detailed technical appendices and GIS-based maps for restoration of San Francisco Bay salt ponds and other diked baylands. Working with the Department of Water Resources, I developed original conceptual design specifications for modified managed estuarine ponds and associated "habitat levees" to improve sustainability and habitat values, and reduce maintenance cost and impacts. I participated in the San Francisco Bay Area Wetlands Ecosystem Goals Project since its inception, for which I prepared three chapters of the Species and Communities Profiles volume, as well as Plant Team recommendations. I also provided interagency technical support for estuarine wetland restoration and management planning for many projects regulated by or coordinated with the Service.

As an independent ecological and botanical consultant to public resource agencies and non-profit conservation organizations since 2002, I have contributed substantially to numerous tidal wetland habitat restoration projects (including adjacent terrestrial habitats) and rare species reintroduction planning and implementation (design, permitting, and on-site management) along the Petaluma River, San Pablo Bay, San Francisco Bay, and the western Delta. I was a regular participant of the Estuary Project's Design Review Group, providing peer-review services to wetland restoration project teams. I was one of the principal biological consultants for the Coastal Conservancy's regional Invasive Spartina Project (the first bay-wide control program for estuarine invasive exotic species) from 2002-2005, and was a lead author it its joint EIS/R with the U.S. Fish and Wildlife Service. I also often provide *pro bono* services to many non-profit coastal or wetland conservation organizations in central and northern California, including field trips, lectures, biological conservation review and recommendations, and regulatory or legal technical support (CEQA/NEPA, ESA, CWA).

Response to Peter R. Baye, Ph.D.

Many of Dr. Baye's comments pertain to restoration design elements that are indeed being considered as part of the overall restoration program. However, a number of the restoration recommendations he suggests do not happen to be a part of Phase 1 and/or are too detailed to be explicitly discussed as part of the programmatic assessment. Dr. Baye's input is valuable and will be considered as the restoration program progresses. In particular, consideration of many of his suggestions will be important at the project level as future phases of restoration are designed.

Our specific responses to his comments follow:

- PB-1: Comment acknowledged.
- PB-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussion of the relationship between the SBSP Restoration Project and the Shoreline Study, tiering, and the scope of the EIS/R.

PB-3: Efficacy and enforceability of adaptive management

The programmatic portion of the adaptive management plan is only intended to provide a general framework for the process and those elements which are likely to be important. Future phases will reevaluate those assumptions and recommend more specific actions. For example, those studies being proposed in Phase 1 are outlined in greater detail with specific goals that will affect the direction of the restoration in future phases. The text in Sections 2.3 and 2.5 has been revised to clarify these points.

The institutional and operational structure of the Adaptive Management Plan is discussed in Appendix D. Implementation of Adaptive Management Plan will involve drafting a new Memorandum of Understanding (MOU) (see the response to Comment SCVWD-138). In some instances, enforceability will be driven by permit requirements (*e.g.*, fish trapping study at Pond A8 as part of Phase 1).

Use of adaptive management in impact assessments

In the summaries of thresholds of significance for biological resources impacts, the term "substantial" is frequently used to indicate the level of impact (*e.g.*, a decline in numbers of a particular species or group) that would be considered significant under CEQA and NEPA. Neither NEPA nor CEQA guidelines provide a clear definition of the term "substantial" as it applies to the magnitude of an impact (*e.g.*, to a species' populations, habitat, or range) that would be considered significant. Therefore, in determining the threshold of significance for a particular species or group of species for the SBSP Restoration Project, both the magnitude of impacts to South Bay populations and the contribution of South Bay populations to larger-scale (*i.e.*, regional, flyway-level, continental, and range-wide) populations were considered.

Triggers for action are designed to ensure, to the greatest extent possible, that the Project will not have significant impacts and achieve the Project Objectives. The triggers for adaptive management have been established below the threshold of significance so that appropriate actions can be determined at that time. The potential actions are extremely variable, but ultimately, the Project is committed to stopping along the "staircase" at any point in the process if significant adverse impacts are unavoidable from additional tidal habitat restoration.

Adaptive Management Plan and mitigation

The Adaptive Management Plan is part of the Project and not a mitigation. The programmatic portion of the adaptive management plan is intended to provide an overall framework for the process to avoid significant impacts and direct all subsequent phases of the program. All future studies and actions over the 50-year timeframe for the Project cannot be predicted, but a good-faith effort to predict those types of studies and impacts that may occur over the life of the Project has been made. As with the proposed studies in Phase 1, the details, rationales, and consequences of future adaptive management actions will be subject to future environmental documents.

- PB-4: New text has been added to Section 3.1 of the EIS/R that indicates that the potential management actions identified in Table 2.3, Adaptive Management Summary Table, are also potential mitigation measures for less-than-significant impacts identified in the EIS/R.
- PB-5: The commenter notes that while the CEQA baseline for impact assessment is fixed at the "existing conditions", NEPA encourages a flexible baseline when appropriate. The commenter suggests that this flexible approach be adopted when appropriate. Such an approach has been used in the case of SBSP Impact 3.6-1 (small migratory shorebirds), where the baseline will be determined using the best available data from past surveys as refined by ongoing surveys, and SBSP Impacts 3.6-3 (western snowy plovers), 3.6-4 (breeding pond-associated waterbirds), 3.6-6 (diving ducks), and 3.6-8 (California least terns), where the most recent three-year average abundance in the South Bay has been used as the baseline.

Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Invasive *Spartina* issues.

PB-6: The Project acknowledges that the alternatives are defined primarily in terms of configurations and ratios of managed pond and tidal restoration. This is not meant to imply that there is only one "standard" tidal marsh restoration plan design. The program-level alternatives provide for a range of tidal restoration features that can be integrated within both restoration alternatives. The Project considers variations to reflect landscape position, presence of gypsum, and other site-specific factors, as requested by the

commenter, at the project level (*e.g.*, Phase 1). The details of specific features will be determined in site-specific design at each phase of planning and implementation.

The commenter suggests that no substantial variations in construction methods, modifications to fit distinctive landscape positions, substrate types, or wave-energy environments are considered. The Phase 1 actions contain features that are representative of the ponds unique geographic location, substrate and wave-energy environment. For example, marsh ponds were historically prevalent in the Eden Landing pond complex, and the Phase 1 action at Ponds E8A, E9 and E8X includes marsh pond/panne habitat. The Phase 1 action at Ponds E8A, E9 and E8X also includes gypsum pretreatment due to the presence of gypsum in Pond E8A. The Phase 1 action in the Alviso pond complex (Pond A6) considers site-specific factors such as wave energy, as this pond is located in a known high-energy, wind-wave environment.

The commenter states that "many feasible and advantageous wetland features, and construction materials and methods, should be considered in alternatives for specific clusters". Each future phase for implementation would consider site-specific variations in geographic location, pond bottom elevations and substrate, wave energy environment, as well as the desired biological goals with respect to the restoration design and the construction materials and methods. The restoration designs associated with future phases would contain additional restoration elements that are not included within the Phase 1 actions.

Additional responses to the subpoints of the comment are discussed below.

Modification of 'wave-break berm' distribution and pattern

The commenter suggests that it is an unproven fact that wave energy is generally the limiting factor for marsh vegetation establishment on open mudflats within tidally-restored diked ponds. The comment focuses on the role of wave energy in vegetation establishment once mudflats are present. However, for highly subsided sites, wind-wave energy plays an important role in the sediment deposition required for mudflat creation. Wind-wave energy is a known limiting factor for sedimentation (Dalrymple and others 2006; French and Reed 2001). In subsided ponds, the pond bottoms must first accrete sediment before the other factors (*e.g.*, surface roughness, mudflat slope, and substrate type) would affect marsh vegetation establishment.

The commenter suggests including testing for physical factors other than wave energy in the methodology for testing berms as a restoration technique (*e.g.*, surface roughness elements, variation in slope, and substrate type). The Project recognizes that wave energy is only one potential factor affecting vegetation establishment on mudflats. Additional factors will be considered at the time the detailed methodology for the applied study is developed. Appendix D provides information regarding the process for soliciting proposals for the Phase 1 applied studies.

The Project acknowledges that monitoring of other tidal restoration sites at various stages of development will be beneficial. Section 2.3 (Applied Studies) of the EIS/R has been modified to clarify that Phase 1 monitoring is not limited to the locations of Phase 1 actions. Note that the program-level adaptive management text in Section 2.3 already acknowledges that monitoring is not limited to the SBSP Restoration Project Area.

The commenter requests that Phase 1 resources be directed toward assessing the effectiveness of wind-break berms in Phase 1 rather than constructing new berms. This is consistent with the Project's proposed Phase 1 approach. The Phase 1 action at Pond A6 contains monitoring and assessment and does not include new berm construction. Monitoring and assessment for wave-break berms are described in Section 2.3.3. The specific details with respect to the Phase 1 action at Pond A6 are described in Section 2.5.3. Pond A6 contains existing internal levees, such as the internal levee bisecting Pond A6. Although this levee would be breached to reconnect remnant historic tidal channels, only portions of the internal levee would be lowered. The remaining sections would function as wave-break berms, and are expected to reduce the wave energy generated by the predominant winds from the northwest.

The commenter recommends that, if berms are constructed, they should be "located along creeks banks, and designed to emulate the structure and function of natural levees." The locations of wave break berms, if any, would be determined in subsequent design phases, guided by the lessons learned from the Phase 1 adaptive management study of waveenergy effects on pond sedimentation and vegetation establishment. The Project acknowledges the commenter's recommendation to consider features other than berms to facilitate marsh establishment on mudflats.

The commenter suggests additional features that could be incorporated in future restoration phases where marsh initiation is determined to be lagging, such as the placement of peat fragments, deposits of large woody debris, and locally-excavated and side-cast mud mounds. These features will be considered as appropriate at the project level, as future phases of restoration are designed.

Terrestrial-edge slopes

The Project acknowledges that upland transition zones (*i.e.*, high marsh and terrestrial ecotones) provide essential habitat in tidal marshes. The Project alternatives propose to create extensive upland transition habitat, as described in Section 2.4. Also, please see the response to Comment AUDCA-6 for a discussion of transitional habitat priority for the Project. The commenter suggests the use of gentle slopes (flatter than 7:1), variations in slope and topography, and variations in substrate types. The program-level alternatives include the creation of gentle slopes (preliminarily estimated at 10:1) extending bayward from the flood protection levees as shown on the alternative maps. The Project acknowledges that variations in slope and topography would be beneficial. As shown on the alternatives figures (*e.g.*, along Ponds E5, E6, and E6C), the upland

transition zones would vary in width, creating a non-uniform edge. The choice of substrate would likely vary depending on design considerations, biological goals and substrate availability. Section 2.4.3 of the EIS/R has been revised to include the following clarification:

Upland transition areas would be created along the landward edge of the tidally-restored. The design of these broad, gently sloping areas adjacent to flood protection levees or adjoining upland habitat would consider the long-term effects of sea level rise incorporate variations in width, slope and topography and the creation of backshore ponds and pannes. The gently sloping marsh/upland transition zone surface would consider the long-term effects of sea level rise and provide an elevation gradient over which tidal marsh could shift upslope as sea level rises.

Possible sources of sediment for the creation of upland habitat would be evaluated during the design of future phases of restoration. SCVWD's stream maintenance program is one potential identified source of imported fill that would be utilized as appropriate. Many aspects of the Project would require the placement of imported fill material (*e.g.*, levees, islands, upland transition zones) and the use of fill material would be prioritized based on the overall needs of the Project as fill becomes available.

The commenter suggests construction techniques for constructing transitional areas, such as the hydraulic placement of slurried, heterogeneous terrestrial or fluvial sediment, such as flood control channel debris. In accordance with the commenter's suggestions, the fill derived from the SCVWD stream maintenance program could provide a sediment source for this construction technique if determined appropriate during subsequent design and construction phases.

The commenter suggests segregating "habitat levees" from flood protection levees by location so that each can be upgraded/maintained as needed without sacrificing the integrity of the other's primary function. The Project has generally considered combining upland habitat next to flood protection levees as complementary uses of limited fill. Creating both separately would require significantly more fill. However, in some locations, the construction of new flood protection levees would require the construction of adjacent wide stabilization berms which could serve as separate habitat levees. This type of consideration would be taken into account during subsequent design phases.

The commenter suggests that backshore pannes (*e.g.*, open water buffer areas) could be created between the flood protection and habitat levees if created separately. The creation of backshore pannes and open water areas can be accommodated in a combined design. Section 2.4.3 has been clarified as noted above. The analysis and design of these features would occur in a later phase of the Project, and would be accompanied by a subsequent tiered EIS/R document.

Estuarine beaches, marsh berms, and coarse sediment nourishment

In the South Bay, a natural shell-sand beach ridge (*e.g.*, chenier ridge) is present bayward of the Eden Landing pond complex, as described in Section 3.6.1. Additional shell beaches and berms are present within the South Bay, as noted by the commenter; however, these beaches are outside of the SBSP Restoration Project Area.

The Project acknowledges that estuarine beaches are a desirable feature of the shoreline. The Project has coordinated with USGS regarding recent research in the South Bay to better understand and quantify the long-term morphologic trends associated with the South Bay's intertidal and mudflat habitats. Three South Bay studies in particular provide valuable information for use in the design of future phases of implementation that could include beach construction: a study (in progress) regarding the near-surface sediments and substrate types (Jaffe and Fregoso in progress), an assessment of the long-term sedimentation and erosion trends (Jaffe and Foxgrover 2006b), and an evaluation of the history of the intertidal mudflats (Jaffe and Foxgrover 2006a). USGS studies could be used to evaluate the long-term sustainability of artificially creating shell-sand beaches to protect establishing and/or established marsh areas or to provide additional high-tide roosting habitat in future phases if needed.

The commenter suggests a technique for constructing beach ridges. The technique described is similar to the mudflat nourishment used in the United Kingdom, and this technique could be potentially be utilized within the South Bay if permitted appropriately, and if suitable amounts of fill were available. Many aspects of the Project would require the placement of imported fill material (*e.g.*, levees, islands, upland transition zones) and the use of fill material would be prioritized based on the overall needs of the Project as fill becomes available.

Coarse woody debris

We concur with the comments regarding the ecological value of coarse woody debris. This debris will be supplied, or allowed to deposit naturally, in restored tidal marsh.

Salt pond interior design

Per the commenter's suggestion, revegetation of the interior slopes of some salt ponds will be implemented (*e.g.*, in Phase 1 at Pond SF2). A number of locations were identified in the restoration plan as locations for broader transitional marshes that grade into upland areas either on levees or existing uplands. Those transitional high marsh areas will be focus areas for active revegetation, and are also areas where restoration of special status plant species by planting is anticipated. These comments will also be considered in future phases and accompanying project-level analysis.

PB-7: The purpose of Section (3.6.1) of the EIS/R is to describe the current environmental setting of the SBSP Restoration Project Area. This description of current conditions does not include discussions on feasibility for restoration or alternatives.

Distribution of Spartina foliosa

Text in Section 3.6.1 of Section 3.6, Biological Resources, under the heading Salt Marsh has been revised as follows:

Pacific cordgrass is the only cordgrass that is native to San Francisco Bay. <u>Remnant clonal stands of uninvaded</u>, <u>Pacific cordgrass still exist in areas of the South Bay</u>.

...In winter, Pacific cordgrass clones die back to young shoots and buds near the sediment surface, making the Pacific cordgrass stands less effective at trapping sediment than the invasive smooth cordgrass (California Coastal Conservancy and US Fish and Wildlife Service 2003). Pacific cordgrass <u>is</u> the principal native pioneer plant species establishing new marsh on mudflats and provides valuable habitat for a number of species, including the endangered California clapper rail, which forages for food within or near the protective canopy of cordgrass.

Salt marsh description

Text in Section 3.6.1 of Section 3.6, Biological Resources, under the heading Salt Marsh, has been revised as follows to reference modern and historic species diversity and high marsh pannes, including wrack pannes:

Salt marsh vegetation consists of a limited number of halophytic (salt tolerant) species adapted to regular immersion by the tides. A natural salt marsh system shows increasing diversity with decreasing salinity levels. South Bay salt marshes typically consist of three zones: low marsh dominated by cordgrass, middle marsh dominated by pickleweed, and high marsh with a mixture of pickleweed and other moderately halophytic (salt tolerant) species that can tolerate occasional high tides. South Bay salt marsh habitat consists primarily of low and middle marsh, and is dominated by pickleweed (*Salicornia virginica*), and Pacific cordgrass (*Spartina foliosa*).

...While these species usually occur in areas dominated by pickleweed, species such as the marsh gumplant and perennial pepperweed sometimes occur in dense patches with less than 50 percent aerial coverage of pickleweed. <u>At the upper tidal limits, salt marsh communities are replaced</u> by transitional communities (high marsh) and wrack (layers of dead plant material set at high tide). Northern salt marsh bird's beak could occur in wrack panne (high marsh panne) habitat, although the chance that this species is present is extremely low and, in general, plant species diversity is lower in South San Francisco Bay.

Brackish marsh description

Text has been added to Section 3.6.1 of Section 3.6, Biological Resources, under the heading Brackish Marsh, as follows:

Brackish marsh habitat typically occurs in the low-to-mid intertidal reaches of sloughs and creeks draining into the Bay, where the vegetation is subject to tidal inundation diluted by freshwater flows from upstream, and groundwater emergence along the terrestrial edge of salt marshes.

...<u>Marsh plant species richness and diversity increase in brackish marshes</u> <u>compared with salt marsh.</u> The vegetation in brackish marsh habitat is dominated by emergent, vascular plant species adapted to intermediate (brackish) interstitial soil salinities, including short bulrushes such as alkali bulrush (*Scirpus robustus*) and saltmarsh bulrush (*Scirpus maritimus*).

... The edges of these channels are also dominated by the shorter bulrushes, but may also have dense stands of tall bulrushes such as California bulrush (*Scirpus californicus*) and hard-stem bulrush (*Scirpus acutus*) adjacent to the low-flow channel of creeks and sloughs. <u>Other plants that can occur in brackish marshes include alkali heath, saltgrass, dodder, sea-lavender (*Limonium californicum*), cattails (*Typha* sp.) along major slough channels, spearscale, and pickleweed along the high marsh/upland ecotone.</u>

Additional text describing species diversity and habitat potential are currently described in Section 3.6.1 under the heading Brackish Marsh.

Freshwater marsh account

Text in Section 3.6.1 in Section 3.6, Biological Resources, under the heading Freshwater Marsh, has been revised as follows:

Freshwater marsh habitat typically occurs in the upper reaches of sloughs and creeks draining into the Bay or from groundwater emergence.

Submerged aquatic vegetation (SAV) beds

Text in Section 3.6.1 in Section 3.6, Biological Resources, under the heading Salt Pond Complex Habitat Descriptions, has been revised as follows:

These ponds, which generally have salinities below 40 ppt, support high abundances of macroscopic green algae (particularly *Rhizoclonium* spp. and *Enteromorpha* spp.), microscopic algae and diatoms, and occasionally the vascular plant wigeon grass (*Ruppia maritima*). Wigeon grass may be an important food source for waterfowl and may function as nursery for invertebrate prey.

Upland vegetation account

Text in Section 3.6.1 in Section 3.6, Biological Resources, under the heading Upland Vegetation, has been revised as follows:

Areas dominated by assemblages of annual, nonnative plants that thrive in disturbed areas (ruderal species) and/or ornamental vegetation (landscaping), ...and agricultural areas, <u>or areas that occur as natural terrestrial ecotones</u>. <u>including within Newark Slough and Coyote Hills</u>, are characterized as upland vegetation habitat

...Perennial pepperweed (*Lepidium latifolium*) is also an aggressive colonizer in upland areas. <u>Some native upland habitat may include native</u>, <u>clonal</u>, perennial species such as alkali rye (*Leymus triticoides*), western goldentop (*Euthamia occidentalis*), clustered field sedge (*Carex praegracilis*), and western ragweed (*Ambrosia psilostachya*) which act as effective competitors of invasive wetland weeds such as perennial pepperweed.

PB-8: Wetland weed invasions

The Project proponents concur that weed management of invasive plants will continue to be an issue in existing and restored marshes in the Bay. As part of the Adaptive Management Plan (Appendix D), *Spartina* hybrids will be aggressively controlled within the Project Area in coordination with the Invasive Spartina Project. Other non-native and nuisance species will be controlled if they threaten Project Objectives. Weed management plans will be built into successive phases of the Project. The EIS/R addresses invasion of non-native *Spartina* and *Lepidium* in Chapter 4, Cumulative Impacts.

Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of invasive species issues.

PB-9: Special-status plant species

Many of the special-status plant species that historically occupied suitable habitat within the South San Francisco Bay are no longer known from the area because *current*

conditions preclude their occurrence and only very small areas of suitable habitat remain. However, design elements will be included to aid in the reintroduction of special-status plant species.

The commenter would like Suisun aster (*Aster lentus*) and Bolander's water-hemlock (*Cicuta maculata* var. *bolanderi*), which both occur in the Suisun Marsh area, to be included in the discussion. This is inconsistent with the recommendation given by the commenter with regards to species included, such as Mason's lilaeopsis (*Lilaeopsis masonii*).

Text in Section 3.6.1 of Section 3.6, Biological Resources, under the heading Special Status Plant Species has been revised as follows:

The special-status plant species that occur in the South Bay in the vicinity of the SBSP Restoration Project are discussed in this section. <u>The most current</u> and historic pertinent information were reviewed to compile a list of species considered for occurrence within the SBSP Restoration Project Area. In addition, each species was queried under several data bases to determine both historic and current range, including CDFG CNDDB (Rarefind 2007), CNPS Inventory (http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi), the Jepson Interchange for California floristics (http://ucjeps.berkeley.edu/interchange.html), the Consortium of California Herbaria (http://ucjeps.berkeley.edu/cgi-bin/get_consort), Calflora, and the USDA Plants Database (http://plants.usda.gov/index.html). These sources represent the most current, up to date data available regarding special-status plant distribution within California.

However, more emphasis should be placed on those species for which reintroduction is plausible.

SBSP Impact 3.6-19 in Section 3.6, Biological Resources, under the subheading Potential SBSP Restoration Project Effects has been revised as follows:

These upland transition zones represent an important habitat type largely absent from the South Bay, and would provide the opportunity for the reintroduction of special-status plant species. <u>Examples of species that may be</u> introduced to historic (extirpated) portions of their ranges within the SBSP Restoration Project Area include: California seablite (*Suaeda californica*) which could occur within oyster shell hash/sand beaches; Contra Costa goldfields (*Lasthenia conjugens*) which could occur along tidal salt marsh/grassland ecotones and high marsh panne-salt marsh edges; and Northern salt marsh bird's-beak (*Cordylanthus maritimus* var. *palustris*) which could occur in high salt marsh with low or sparse cover, such as vegetation gaps in high marsh panne-salt marsh edges.

California sea-blite

The fourth column of Table 3.6-3 in Section 3.6, Biological Resources has been revised as follows:

Extirpated from the South Bay Project Area; <u>suitable habitat occurs within</u> <u>Eden Landing pond complex and Ravenswood pond complex on oyster</u> <u>hash/sand beaches.</u>

Contra Costa goldfields

The fourth column of Table 3.6-3 in Section 3.6, Biological Resources has been revised as follows:

<u>Historically known from edges of salt ponds at the Bay shore near Mt. Eden</u> <u>and Newark.</u> Two large colonies associated with grassy seasonal wetlands in the Warm Springs area and Pacific Commons Preserve in Fremont are within the Shoreline Study area, but there is no suitable habitat present in the SBSP Restoration Project Area.

Northern salt marsh bird's beak (Point Reyes bird's-beak)

The fourth column of Table 3.6-3 in Section 3.6, Biological Resources has been revised as follows:

Extirpated from the South Bay area. Currently no suitable habitat present in SBSP Restoration Project Area. <u>Expected to occur and be suited for</u> reintroduction in high salt marsh with low or sparse cover, such as vegetation gaps in high marsh panne-salt marsh edges.

Suisun aster

Table 3.6-3 in Section 3.6, Biological Resources has been revised as follows to include the following in each column:

Name Column: <u>Suisun aster (Symphiotrichum lentum; syn Aster lentus)</u>. Status Column: <u>CNPS 1B</u>. Habitat Column: <u>Brackish and freshwater</u> <u>marshes and swamps</u>. Potential for Occurrence On Site Column: <u>Suitable</u> <u>habitat exists in most brackish or fresh-brackish high marsh edges</u>, <u>wastewater discharges near Alviso have expanded suitable habitat of this</u> <u>robust</u>, clonal, perennial species, which is likely dispersal limited.

Bolander's water-hemlock

The information provided by the commenter is noted. Published data or citations substantiating this information cannot be found. No new information has been added to the text. Bolander's water-hemlock (*Cicuta maculata* var. *bolanderi*) is considered "too common, rejected for inclusion" from the CNPS Inventory (<u>http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi/Home</u>; accessed 10 July 2007). This means that the plant was considered to be too common to be on a list for which more information is needed (CNPS List 3) or a watch list, of limited distribution (CNPS List 4).

Salt marsh owl's-clover

The information provided by the commenter is noted. Published data or citations substantiating his information cannot be found. No new information is added to the text. Salt marsh owl's-clover (*Castilleja ambigua*, ssp. undetermined) is not listed in the CNPS Inventory or in Calflora (not under that common name other than the native Johnny nip or paintbrush Orthocarpus). The common species, *Castilleja ambigua* ssp. *ambigua* (Johnny nip) is listed in Jepson and Calflora, but is not rare.

Decline of other salt marsh plant species

This input is appreciated. All of the plant species and recommended techniques will be considered in Project phases that include active revegetation. Plant species palettes will be determined during the restoration planning of subsequent phases and will be selected on site conditions at the individual restoration sites and will focus on native plant diversity. Plant palettes will favor native species that often have difficulty establishing on their own over plant species such as pickleweed which are more easily restored due their ability to recolonize through natural recruitment. In addition, the SBSP Restoration Project is expected to improve conditions for most special-status plants, as well as others that occur primarily in upper tidal marsh habitat. Newly created upland transition zones represent an important habitat type largely absent from the South Bay currently, and would also provide the opportunity for the re-introduction of special-status plant species.

Planting Brewer's saltbush (Atriplex lentiformis var. breweri) p 2-139

The commenter's comment is appreciated regarding Brewer's saltbush and the Project will take this information into consideration when developing the restoration plans for phases of the SBSP Restoration Project, including the revegetation planned in the Phase 1 actions at Pond SF2. The substitution of California saltbush (*Atriplex californica*; native, but extirpated from the region) for Brewer's saltbush will be made as appropriate, as the introduction or deliberate spread of species native to California, but not native to the region (Brewer's saltbush occurs naturally only as far north as Watsonville, CA) is not in the best interest of the Project.

- **PB-10**: The commenter suggests that the long-term sustainability of managed ponds is limited, especially in light of the threat of sea level rise, and that reliance on the feasibility of proposed pond reconfiguration and management is not justified. The commenter suggests that higher-elevation areas such as crystallizer beds within the salt plant sites be considered for managed ponds due to ease of water-level management. These suggestions will be helpful if sea level rise eventually precludes management of the ponds that are proposed as managed ponds by this Project. Similarly, borrow ditch depletion can be addressed via periodic dredging, if needed. Any deficiencies that may arise in the ponds proposed to be managed by this Project, either due to sea level rise or other factors (such as borrow ditch depletion), will become apparent both to the landowners who will be managing these ponds, and to the Project team reviewing data on wildlife use of the ponds. Monitoring and adaptive management measures incorporated into the Project will be adequate to determine what measures (which may, in the future, include provision of habitat outside the SBSP Restoration Project Area) are necessary to prevent significant impacts from occurring. Please also see the Master Response regarding comments on sea level rise in Section 2.1.
- PB-11: The commenter suggests that the Project will result in long-term significant impacts to western snowy plovers and suggest specific habitat mitigation alternatives that should be considered to offset these impacts, especially in light of the potential for cumulative impacts from sea level rise. As discussed in the response to Comment PB-10 above, these suggestions will be helpful if sea level rise eventually precludes effective management of SBSP Restoration Project-area ponds for snowy plovers. However, monitoring and adaptive management measures incorporated into the Project will be adequate to avoid a significant impact to western snowy plovers.
- PB-12: The commenter suggests that rare or endemic insects could be significantly affected by restoration actions and recommends mitigation measures for these impacts. However, the net effect of the SBSP Restoration Project on rare and endemic insects associated with South Bay salt marsh and upland transition habitats is expected to be beneficial. As a result, the EIS/R does not discuss these project effects, and impacts to these species are not expected to be significant.
- PB-13: The commenter suggests that additional public access alternatives, alternatives for nesting and roosting islands away from trails, and alternatives for backshore levees be evaluated to provide more alternatives for public access while reducing wildlife impacts. The commenter also suggests that the Project's working assumptions regarding recreational impacts on waterbirds be re-examined with external peer review.

Section 2.1, Master Responses, of this Response to Comments document includes a detailed discussion of public access and impacts to wildlife that more explicitly discusses public access from an adaptive management perspective. As discussed in that Master Response, the alternatives that are analyzed in the EIS/R are adequate, both from the

perspective of restoration design and public access options, to allow for public access to be expanded in the future without resulting in substantial wildlife impacts.

PB-14: Sea level rise, sediment sinks, and sediment deficits

The commenter raises questions relating to the consideration of sea level rise in the EIS/R. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

The commenter suggests that the design of the alternatives address an uncertain 50-year future with respect to the rate of sea level. The implementation of the SBSP Restoration Project would be phased over many years, with detailed design and analysis occurring at each phase of implementation. During each design phase, the best available sea level rise information would be utilized. This phased implementation, coupled with monitoring of local relative sea level rise (sea level rise and land subsidence) and evaluating the available scientific literature on sea level rise, would help ensure that the design of each phase incorporates elements to accommodate rising sea levels. The adaptive management approach, coupled with phased implementation, allows the Project to remain flexible in the face of several key uncertainties. The success of the restoration is not based solely on predictive methodology used for the program-level impact assessment, but on phased implementation, monitoring, adaptive management and on incorporating design elements to accommodate accelerated sea level rise.

The commenter suggests that the restoration alternatives identify engineering designs and methods that could be applied feasibly in adaptive management to address higher than anticipated rates of sea level rise. The commenter further suggests methods that could be used, such as the hydraulic discharge of fans or mounds, designing sloping marshes/terrestrial ecotones, and constructing transgressive estuarine platforms or "island-like" marsh gradients). The South Bay Geomorphic Assessment (SBGA, Appendix I) provides adaptive management suggestions in order to narrow the range of uncertainties and encourage restoration success, such as: adjusting the phasing to better match the sediment supply; restoring mudflats within the ponds; restoring natural shorelines such as shell breaches, wrack lines, and Bay-edge pans; using imported fill to raise pond-bottom elevations and reduce sediment demand; prioritizing restoration actions within the Project Area; constructing a gradually sloping marsh/upland transition zone surface that provides an elevation gradient over which tidal marsh could shift upslope as sea level rises, and initiating marsh vegetation plantings to maximize sediment-trapping efficiencies and enhance the accumulation of organic matter in the developing marsh sediments. Additional approaches could also be used as suggested by the commenter, such as the hydraulic discharge of sediment fans and mounds. Opportunities for using this technique would be explored in later phases of the Project and/or as part of future adaptive management actions.

The commenter suggests the comparison of alternatives should consider sea level rise rates based on the "best available (not the most authoritative 'official' short-lived forecast) scientific evidence". The commenter did not provide alternate sources of sea level rise information. The IPCC was established by the World Meteorological Organization and the United Nations Environment Program in 1988. The IPCC is comprised of acknowledged, global experts and provides a comprehensive, objective, open and transparent assessment of human-induced climate change. The IPCC does not carry out research, rather it bases its assessment mainly on peer reviewed and published scientific/technical literature. The use of IPCC rates of sea level rise is both defensible and appropriate in this context. For additional discussion relative to the rates of sea level rise, please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

The commenter suggests that the comparison of alternatives should focus on the resilience of the designs (not just the alternative maps) in response to a reasonable range of sea level rise rates. Sea level rise represents only one of many uncertainties that could affect the ultimate habitat mix. As discussed above, the Project has identified several methods and design elements that would enhance the long-term resiliency of the restored areas in the face of accelerated sea level rise. The Project considers these features as potential adaptive management actions that would effect the movement up the staircase (*i.e.*, the progression towards the 90:10 restoration bookend). Please refer to Table 2.3 in Section 2.3 of the EIS/R for additional adaptive management actions.

A reasonable range of sea level rise rates was utilized when evaluating the South Bay sediment budget and potential long-term geomorphic change (see Appendix I, South Bay Geomorphic Assessment, SBGA). As discussed by the commenter, the rate of sea level rise is important when evaluating sediment budgets and sediment sinks. The high-end of the IPCC (2001) sea level rise estimates (double the median value) resulted in additional mudflat loss on the order of 8 km². The SBGA evaluated additional uncertainties in the long-term sediment budget, such as increases and decreases in riverine and estuarine sediment inputs, increased rates of shoreline erosion, differing sediment bulk densities, and reduced suspended sediment concentrations. The SBGA acknowledges that higher than anticipated rates of sea level rise could have a considerable effect on the mix of habitats within the SBSP Restoration Project Area and within San Francisco Bay in general. As discussed above, the SBGA provides adaptive management suggestions to encourage restoration success.

Additional studies on sediment dynamics within the South Bay are also planned as part of the Adaptive Management Plan. A longer-term modeling effort led by Principal Investigators at UC Berkeley and Stanford University is being initiated to develop a coupled hydrodynamic and sediment transport model of the South Bay. The model, coupled with monitoring data from the restoration of the Island Ponds (Ponds A19, A20 and A21) and the Phase 1 actions, would inform future phasing and implementation.

In the long term, the model may be extended to include morphological, water quality and biological modules to further enhance potential restoration success.

The commenter notes potential adverse affects on wildlife associated with high rates of sea level rise (*e.g.*, marsh degeneration, difficulty maintaining managed ponds). The EIS/R considers wildlife impacts associated with sea level rise in Chapter 4, Cumulative Impacts. Impacts due to sea level rise are beyond the control of the Project – and would happen with or without the Project. The Project would do the best it can to minimize impacts associated with accelerated sea level rise by readjusting priorities within the SBPS Restoration Project Area. Although habitat loss may occur as a result of sea level rise, the Project actions and adaptive management would ultimately provide richer habitat diversity and habitat opportunities than would likely be available under the No Action scenario. As discussed in Section 1.7, subsequent project-level EIS/Rs would be required for future Project phases. Although this EIS/R would serve as a tiering document for future project-level EIS/Rs, a re-evaluation of sea level rise and other uncertainties associated with Project implementation would most likely be completed because of changing conditions over the long term.

The commenter suggests that the comparison of alternatives should occur at a bay-wide scale (*e.g.*, the South Bay) and should rigorously examine (and quantitatively model) all reasonable salt pond restoration configurations under low, intermediate, and high forecasted rates of sea level rise. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of this EIS/R with respect to the alternatives development process.

The commenter also questions initiating Phase 1 tidal marsh restoration in the deeply subsided Alviso ponds rather than restoring an equivalent pond area in the Newark, Mowry and Ravenswood pond areas. The Phase 1 actions in the Alviso pond complex include tidal restoration of Pond A6, which is not deeply subsided. The average elevation of Pond A6 is approximately 1 ft below mean tide level. Restoration of the deeply subsided Alviso ponds would be carefully considered in future phases. The Newark and Mowry ponds are outside of the SBSP Restoration Project Area. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of this EIS/R with respect to the Newark and Mowry ponds.

The commenter requests planning to inform regional sediment prioritization (*i.e.*, to maximize the "rate of return on investment" for limited sediment) before "irretrievable commitment of sediment resources is made." Please see the responses above regarding the SBGA, potential adaptive management actions, and the longer-term studies on sediment dynamics and coupled hydrodynamic and sediment transport modeling to address sediment supply and sea level rise. Additional details are included in the SBGA (Appendix I) and the Adaptive Management Plan (Appendix D).

The commenter suggests that "the EIS/R must correct the cumulative impact assessment of sea level rise and sediment budget deficit exemplified on p. 3.6-71." The impact discussion for SBSP Impact 3.6-2 has been modified for clarity. Note that the impact discussion in question relates to project-specific actions, not cumulative impact assessment. Increased sediment demand as a result of restoration efforts, and corresponding effect on intertidal mudflats, can be directly attributed to the Project actions and these impacts are considered in Chapter 3. Sea level rise is beyond the control of the Project and is not a Project-specific action; therefore the impacts related to sea level rise are addressed in the cumulative impact assessment is addressed in Chapter 4 of the EIS/R. Please also see the Master Response regarding the scope of this EIS/R in Section 2.1 of this document.

Cumulative Impacts 3.3-1 and 3.6-2 have been revised to include projected sea level rise. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the changes made to this impact to ensure consistency in treatment of sea level rise throughout Chapters 3 and 4 of this EIS/R.

PB-15: Levees

The commenter suggests that the EIS/R is unclear regarding the issue of long-term maintenance, stability, and sustainability of the managed pond levees. The commenter suggests that most ponds have exhausted, or will exhaust, borrow ditch sediment sources for levee capping. It is correct the pond levees cannot be maintained indefinitely with local borrow using Cargill's previous maintenance methods. Construction methods and techniques are available to maintain the pond levees using locally excavated material for those ponds that would eventually be tidally restored under Alternative C. Material could be excavated at a farther distance from the levee (increasing the width of the borrow ditch), or could be excavated from an adjacent pond. Imported fill would likely be needed if local sources of fill are not available to maintain the pond levees, both in response to settlement and in response to sea level rise. The use of imported fill or alternative construction techniques could trigger the need for a supplemental project-level EIS/R.

With respect to the ponds that would be reconfigured and intensively managed, for example, the Phase 1 actions at Ponds A16 and SF2, the Project proposes to fill the borrow ditches over time as dictated by water quality constraints (*e.g.*, to reduce residence time and decrease the potential for local algal biomass accumulation and low dissolved oxygen levels) (May and Abusaba 2007). The descriptions of these Phase 1 actions have been updated in Section 2.5 to reflect this. Maintenance of the pond levees, berms, and nesting islands would therefore likely require the use of imported fill. Coordination is in progress regarding potential sources of imported fill, such as the dredged material from SCVWD's stream maintenance program.

The commenter suggests that the proposed mulch and temporary planting discussed in SBSP Mitigation Measure 3.4-5a could be vectors for invasive weed species. Reasonably weed-free mulch sources are available and would be utilized by the Project. The mulch and temporary plantings are associated with a Best Management Practice (BMP) for the Stormwater Pollution Prevention Plan. The Project proponents agree that the introduction or spread of invasive species is not desirable.

The commenter also suggests that the potential erosion control measures, discussed in Section 2.4.4, to maintain the outboard levees while marsh establishes within tidally-restored ponds could have a significant potential impact on habitat. Although minor habitat impacts could occur as a result of outboard levee maintenance, substantially larger areas of tidal marsh habitat would be created within the restored ponds. As discussed above, these actions would be permitted and any associated impacts would be mitigated.

The commenter suggests that the EIS/R needs to re-assess alternative levee designs and maintenance over the 50-year horizon, particularly if the EIS/R would serve as a program-level EIS/R for the Shoreline Study. Within the program-level EIS/R, the levee designs and alignments for the flood control levees have not been specified. This would occur during subsequent detailed design and analyses phases, accompanied by tiered project-level EIS/Rs. For additional discussion relative to the scope of this EIS/R and the relationship to the South San Francisco Bay Shoreline Study, please refer to Section 2.1, Master Responses, of this Response to Comments document.

PB-16: The commenter states that vegetation control was not discussed in the context of the construction of nesting and roosting islands, suggests that managing vegetation on all the islands proposed is infeasible, and suggests several means by which vegetation might be controlled. The need for vegetation control on these islands was mentioned (*e.g.*, see Section 2.3.3 and SBSP Impact 3.6-12). Also, because different bird species have varying vegetation tolerances or requirements, future experimentation with the nesting islands may focus on the type, density, and configuration of vegetation. For example, snowy plovers typically avoid vegetated areas for nesting, and avocets usually nest in bare or sparsely vegetated areas. While some South Bay tern colonies are located in areas with little or no vegetation, other tern colonies, as well as many black-necked stilt nests, are located in areas having some vegetation, which may also provide shade and cover from predators for chicks. Nesting waterfowl are likely to nest almost exclusively in vegetated areas.

Based on this comment, text has been added to Section 2.3.3 (Learning from Phase 1 Actions, Vegetation Management on Islands and in Managed Ponds) to include the use of saline spray and substrate based vegetation controls.

PB-17: <u>Gypsum and marsh restoration.</u>

Paragraph 1. Added citation (Siegel and Bachand 2001) to document constraint of tidal marsh restoration due to precipitated gypsum in Pond E8A. While Siegel and Bachand (2001) acknowledge the constraint that gypsum poses to pond restoration based on pond elevation, the extent of that constraint is unknown. For example, Siegel and Bachand (2001) estimated dissolution time of gypsum in MHW to MHHW ponds ranging between 4 and 76 years (Table 6-5). It is uncertain at this time whether gypsum will constrain vegetation establishment at higher intertidal ponds. Adaptive management experiments proposed in Phase 1 for Ponds E8A, E9, and E8X will help determine the sedimentation rates, gypsum dissolution, and subsequent vegetation establishment for a higher elevation pond.

Other ongoing studies will also continue to guide restoration in gypsum-covered ponds. For example, Pond A21 was breached in 2006, since then sedimentation rates over a 6month period ranged from 8 to 10 cm, and some vegetation has already become established in that pond. These results suggest that sedimentation over even longer periods will likely be sufficient within the system for more extensive vegetation establishment. Anecdotal evidence also suggests that gypsum may break up and/or dissolve more quickly than anticipated. Within the Island Ponds complex, gypsum has been observed cracking/collapsing along borrow ditches and in many of the creek channels (Callaway 2007, pers. comm.). Applied studies designed for Ponds E8A, E9, and E8X and ongoing adaptive management will guide future restoration decisions for additional high elevation ponds.

Paragraph 2. Gypsum pre-treatment actions are described in general terms to allow the flexibility to experimentally test the effectiveness of various methods.

Paragraph 3. While the commenter states that gypsum deposits occur on approximately one quarter (24 percent) of the South Bay salt pond system (citing Siegel and Bachand 2001, citing Wildlands 1999), the gypsum deposits that occur within the EIS/R Project Area are actually less (approximately 17 percent total, most of which (13 percent) were designated "less likely to interfere with tidal marsh restoration" by Siegel and Bachand (2001)).

Siegel and Bachand (2001) provide a map showing the distribution of gypsum constraints based on pond elevations for the Bay Area south of the San Mateo bridge (Siegel and Bachand 2001; Map 13). This map however, also includes ponds that are not part of the proposed Project. The acreage and proportion of gypsum-covered ponds within the SBSP Restoration Project Area and their associated constraints (as characterized by Siegel and Bachand 2001; Map 13) are described below:

Ponds for which gypsum is likely to interfere with tidal marsh restoration (between MHW and MHHW)

Pond E8A (240 acres) in the Eden Landing pond complex is identified as the only pond in the Project Area at an elevation for which gypsum is likely to interfere with tidal marsh restoration. Pond E8A represents less than two percent of the Project Area.

Ponds for which gypsum could interfere with tidal marsh restoration (between 1 ft below MHW and MHW)

Pond E8 (173 acres) in the Eden Landing pond complex and Pond A22 (274 acres) in the Alviso pond complex are the two ponds for which gypsum could interfere with tidal marsh restoration. These ponds represent approximately three percent of the total Project Area.

Ponds for which gypsum is less likely to interfere with tidal marsh restoration (between 1 ft above MTL and 1 ft below MHW)

Ponds A19 (265 acres), A20 (64 acres), A21 (149 acres), and A23 (446 acres) in the Alviso pond complex and Ponds SF2 (238 acres), R2 (141 acres), R3 (269 acres), R4 (295 acres), and R5 (30 acres) in the Ravenswood pond complex are ponds for which gypsum is less likely to interfere with tidal marsh restoration. These ponds represent approximately 13 percent of the Project Area.

Text was added to the EIS/R (Section 2.3.3 Learning from Phase 1 Actions, Gypsum Pre-Treatment and Vegetation Establishment) to reflect these data.

Paragraph 4. See added text PB-17, Paragraph 3.

Paragraph 5. See the response to Comment PB-17, Paragraph 1 above. It is uncertain at this time whether marsh plant colonization above gypsum-covered salt pond beds will be adversely affected. Current research is limited on whether the Bay mud deposits will make seedlings more vulnerable to dislodging by wind-shear currents or wind-waves acting on the upper layers of mud. However, Appendix F of Siegel and Bachand (2001), suggests that in the lower elevation ponds, an adequate layer of mud above the gypsum would allow effective marsh plant colonization despite the present of the gypsum layer. Planned applied studies for the Project will provide important data on vegetation establishment on Bay muds over gypsum surfaces, which will inform consecutive restoration phases (PWA).

Paragraph 6. See the response to Comment PB-17, Paragraphs 1 and 5 above. It is unknown at this time whether sedimentation over gypsum-bedded salt ponds result in

stunted salt marsh vegetation. Current studies underway at the Island Ponds and studies planned for Phase 1 restoration will provide important data to inform consecutive restoration phases.

Paragraph 7. While gypsum dissolution may take from 4 to 76 years at MHHW pond elevations, Siegel and Bachand (2001) estimate that lower elevation gypsum-covered ponds may dissolve at a faster rate (2 to 38 years for ponds 1 ft below MHW to MHW and 1 to 19 years from ponds between MTL and MLW). Increased inundation raises the potential for gypsum dissolution, so areas near creek banks may actually dissolve more quickly (see the response to Comment PB-17, Paragraph 1 above) and increase marsh drainage along creek banks.

Paragraph 8. The dissolution of the gypsum will depend on environmental factors, which include the density of gypsum, water exchange rates, surface flow velocities, water chemistry and inundation periods. Areas experiencing the highest flow velocities such as slough channels are expected to dissolve more quickly than areas with lower flow velocities or less frequent inundation (Siegel and Bachand 2001; Appendix F). While there currently are no gypsum dissolution experiments in place, studies are currently being performed in the Island Ponds complex to determine sedimentation rates and vegetation establishment in gypsum-covered ponds. These ongoing studies will continue to guide the restoration planning process.

Paragraph 9. There is no empirical evidence that thick gypsum crusts would dissolve below estuarine muds on an accreting marsh plain, and the data currently being collected from the breached Island Ponds complex (breached in 2006) does not indicate a change in the thickness of the gypsum layer. However, anecdotal accounts describe some degradation of the gypsum through slumping, cracking, and collapsing occurring along the borrow ditch and many of the existing creeks within Pond A21 (Callaway 2007, pers. comm.).

Paragraph 10. Technical documentation added to text (See Section 2.3.3, Learning From Phase 1 Actions, Gypsum Pre-Treatment and Vegetation Establishment) from Siegel and Bachand (2001) including text citations, table citations, and Appendix F.

Paragraph 11. The purpose of the current on-going experiment in Pond A21, as well as the Applied Study in Phase 1, is to inform the level of constraint posed by gypsum. If gypsum does prove to be a significant impediment to tidal marsh restoration, the quality of the developing habitat will be evaluated through the adaptive management process and future phases can address any landscape-level habitat deficiencies.

Paragraph 12. See added text for PB-17, Paragraph 3, and the response to Paragraph 11.

Paragraph 13. Since only about five percent of the Project Area is anticipated to have gypsum constraints (see above response to Paragraph 3), numerous other competing

opportunities and constraints were utilized in selecting areas for restoration at the landscape level. These include, but are not limited to, flood control benefits, creation of large continuous areas of marsh to achieve endangered species habitat goals, and compatibility with adjacent land uses and existing infrastructure.

The Project proponents believe the commenter is suggesting some sort of managed muted tidal system. Converting gypsum-covered ponds to tidal salt marsh/panne habitat in this fashion would require extensive management in order for the target habitat to develop for the reasons discussed in comments above (PB-17; Paragraphs 1 and 7). Fewer ponds were selected for intensive management with the idea that these ponds would provide concentrated habitat and also test key uncertainties for future restoration alternatives.

Paragraph 14. The use of salvaged and recycled gypsum removed from salt ponds beds has been considered in Project team discussions regarding inhibiting growth of vegetation on nesting islands (see Phase 1 Restoration Actions; Pond A16 Adaptive Management, Management Approaches, Vegetation Management).

Paragraph 15. All brine movement has already occurred under the ISP. No additional brine movement is expected.

- PB-18: The Project proponents concur that monitoring of the processes that contribute to the successful restoration of marsh pond/panne habitat is very important for the future restoration of this habitat type. However, the monitoring being proposed for Phase 1 has been prioritized by a consensus of the Project Management Team, Science Team, and Consultant Team to address the most critical key uncertainties. Consideration will be given to this is Phase 2 of the Project, or any subsequent phases that include the creation of large upland transition areas.
- PB-19: Please refer to Section 2.1, Master Responses, of this Response to Comments document for discussion of the relationship between the SBSP Restoration Project and the Shoreline Study, tiering, and the scope of the EIS/R.



VIA HAND DELIVERY VIA FACSIMILE: (510) 792-5828

May 3, 2007

Clyde Morris Refuge Manager United States Fish and Wildlife Service Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, CA 94560

Draft South Bay Salt Pond Restoration Project Environmental Impact Subject: Statement/Report

Dear Mr. Morris:

Cargill Salt is pleased to present its comments to the Draft South Bay Salt Pond Restoration Project Environmental Impact Statement/Report (EIR). At the outset, the local Cargill staff wishes to extend its appreciation to the various agency staff members and consulting teams that prepared this EIR. This document is remarkable, not only in its scope and vision, but also because of the technical expertise reflected in the numerous appendices. We have been part of this undertaking since the beginning and look forward to continuing our active support of the South Bay Salt Pond Restoration. Cargill provided staff assistance and has closely monitored restoration efforts since its sale and donation of more than 16,000 acres of property and property rights to the state and federal governments. For those reasons, we maintain a vested interest in seeing this property effectively restored to its full potential. While the sheer size of the EIR prevents a meticulous review, we would like to share our comments, some general and some specific. Cargill was pleased to see that flood management was given significant discussion in the CARG-2 EIR, as this is an important topic. The inclusion of significant references to the new Shoreline Study, now underway, is commendable and very appropriate. However, it is important the EIR not refer to 'continued flood protection' or makes similar references that imply the levees can or should be relied upon for flood protection in their current state. The levees surrounding the former Cargill salt ponds were built throughout the last century, some dating to the turn of the 20th century. These levees were built and maintained to facilitate salt production through solar evaporation; these levees were not

CARG-1

CARG-3

constructed or maintained to provide flood protection and do not meet the physical standards for levees relied upon for such protection. Section 1.6.1 Shoreline Study, contains the following statement: "Although these salt pond levees were not engineered or built for the purpose of flood control, they provide incidental flood protection for neighboring communities." Even the term, "incidental protection" is misleading. While addressing the issue of flood protection is laudable, we would suggest the EIR be revised to remove any inference that the current levees were constructed or maintained to flood protection levels.	CARG-3 continued
The EIR often includes Cargill's Redwood City and Newark Plant Sites as salt ponds. These sites are not salt ponds and consist of crystallizer beds and other manmade infrastructure designed to facilitate the harvesting of salt. For that reason, the EIR should not refer to these areas as salt ponds but as Salt Plant Sites. Similarly, various figures include property still owned by Cargill. We have identified some of these specific concerns below, but would suggest the EIR be reviewed to assure it does not mistakenly include Cargill property. With these points in mind, we would like to provide the following more specific commentary.	CARG-4
<i>Figures ES-2c, ES-3c, ES-4c Alternative C & 3.6-1.</i> These figures identify Cargill's Redwood City and Newark Plant Site as salt ponds or salt pond habitat. Unlike solar evaporation ponds, our industrial salt plants have little to no habitat value. Section 3.6-21 notes that there is "little to no habitat" for ponds with salinities greater than 200 ppt. Therefore, these plant sites should not be included in this figure.	CARG-5
<i>Figures ES-3a Alternative B & ES-4a Alternative C</i> . These figures propose a year round trail be built on the levee of Pond 3C, which is owned by Cargill. The EIR should note Cargill's ownership and relate that any such trail would require obtaining access rights from Cargill.	CARG-6
<i>Figures ES-3b Alternative B & Es-4b Alternative C.</i> These figures propose a vehicular trail be built on the levee of Pond 3C, which is owned by Cargill. The EIR should note Cargill's ownership and relate that any such trail would require obtaining access rights from Cargill.	CARG-7
<i>Figure ES-5.</i> This figure fails to identify the land in the Baumberg region commonly referred to as the North Hill and Turk Island as being owned by Cargill and includes this property in the project area, which it is not.	CARG-8

Page 2-136. The EIR notes that Cargill, intends to "decommission the West Bay salt ponds and [transbay pipeline] in approximately five years." While Cargill does expect to conclude its operational and management responsibility for the West Bay Ponds in the future, it has not at this time determined a specific timeline for decommissioning the transbay pipeline.

CARG-9

CARG-10

CARG-11

Pages 3.6-122 & 4-54. These pages and other areas reference the status of Cargill managed ponds and their ability to consistently provide habitat for certain species of birds. While Cargill has always cooperated with the agencies in the management of its solar salt ponds to the extent consistent with its operational needs, Cargill manages its ponds in order to produce solar salt and not to provide specific habitat. Consistent with these management practices, the physical characteristics of all of the solar salt evaporation ponds Cargill manages have historically and continue to be subject to a wide degree of variation. Therefore, the EIR should not presume specific ponds operated by Cargill would retain certain physical characteristics.

While we have provided general and specific comments in this letter, this letter should not be considered a comprehensive listing of Cargill's comments – the size of the EIR prevents such an undertaking. This EIR is a planning document, not an operational plan and our specific concerns, at the interface of operational ponds and restoration efforts, will continue to be resolved on the ground in cooperation with the various agency staffs. Returning to our opening comments, Cargill thanks you for allowing it this opportunity to comment on the EIR. The preparation of this document is really a milestone in the restoration effort and we again wish to convey out appreciation to the professionals involved in its preparation. As well we wish to emphasize our continued support for the restoration efforts.

Sincerely,

the D. Mart.

Patrick D. Mapelli Manager, Real Property Cargill Salt 7220 Central Avenue Newark, CA 94560

cc: Barbara Ransom, Cargill's Land Resources Manager Paul Shepherd, Cargill's Land Manager Penny Streff, Cargill's Land Project Manager file

Response to Cargill

- CARG-1: Comment acknowledged.
- CARG-2: Comment acknowledged.
- CARG-3: The Project acknowledges that the levees surrounding the former Cargill salt ponds were not constructed as flood protection levees, nor have they been maintained for flood protection purposes. The levees were built to facilitate solar salt production. However, the ponds and levees do provide protection from flooding, as was acknowledged by the previous Interim Shoreline Study completed by the Corps (U.S. Army Corps of Engineers 1988). The Corps study states that although most of the shoreline in the South Bay "consists of levees which do not meet flood protection standards ..., the absence of a history of significant tidal flooding in the study area indicates that these levees do provide a substantial amount of protection." The EIS/R must recognize the function the levees serve as a physical barrier to tidal flooding of developed areas, even if flood protection is not their intended purpose.

The EIS/R figures (Figures ES-2, ES-3, ES-4, 2-4, 2-5, 2-6, and 2-7) and text have been revised to reduce the potential for the pond levees to be misconstrued as being constructed or maintained to flood protection levels. The term "continued flood protection" does not appear in the EIS/R text.

Section 1.6.1 in Chapter 1, Introduction, has been revised as follows:

Under the original Shoreline Study (completed in 1992), the Corps could not economically justify developing a federal flood management project along the South San Francisco Bay shoreline, in large part due to commercial salt pond levees that provided some level of flood protection within the Shoreline Study area. Although these salt pond levees were not engineered or built for the purpose of flood control, <u>the original Shoreline Study area as evidence that</u> <u>a history of significant tidal flooding within the study area as evidence that</u> <u>the levees provided protection (U.S. Army Corps of Engineers 1988) they</u> <u>provide incidental flood protection for the neighboring communities</u>.

Section 2.4.2 in Chapter 2, Description of the Alternatives, under Eden Landing has been revised as follows:

With continued levee <u>settlement</u>, subsidence and sea level rise, the levees would be increasingly prone to failure. Stopgap measures such as sand bags and rock would be used to slow deterioration of key levees that provide flood protection <u>from flood</u>, as funding allows.

Section 2.4.3 in Chapter 2, Description of the Alternatives, under Flood Management has been revised as follows:

Alternative B would include levees and other features designed to maintain or improve existing levels of flood protection for adjacent communities and infrastructure. Presently, the former salt ponds provide adhoc coastal floodprotection from coastal flooding (U.S. Army Corps of Engineers 1988), although the pond levees were not designed or originally intended for flood management. Restoring the ponds to tidal inundation would require new flood protection for adjacent developed areas.

- CARG-4: References to Cargill's Redwood City and Newark "salt ponds" in the alternative maps (in the Executive Summary and Chapter 2, Description of Alternatives), have been revised to identify the following: Redwood City Plant Ponds, Newark Crystallizer Ponds, and Mowry Ponds.
- CARG-5: Figures ES-2c, ES-3c, and ES-4c (also Figures 2-4c, 2-5c, and 2-7c) have been revised to remove references to salt ponds. Figure 3.6-1 has been revised to replace the "salt pond" habitat designation for Cargill's Redwood City and Newark plant sites with the designation "salt plant site".
- CARG-6: Figures ES-3a, ES-4a, ES-3b and ES-4b (also Figures 2-5a, 2-7a, 2-5b, and 2-7b) have been revised with a note that Cargill owns these levees and access rights will need to be obtained for implementation of a trail in this location.
- CARG-7: See the response to Comment CARG-6 above.
- CARG-8: Figure ES-5 (also Figure 2-8) have been revised such that North Hill and Turk Hill are not identified as part of the SBSP Restoration Project.
- CARG-9: Text in 2.5.4 of the EIS/R has been revised as follows:

The transbay pipeline connects the Redwood City salt ponds to Cargill's Newark plant. Cargill expects to decommission the West Bay salt ponds and these pipes in approximately five years the future.

- CARG-10: Comment acknowledged. It is understood that habitat conditions within individual Cargill-operated ponds may change over time. The references in the EIS/R to expected bird use of these ponds assume that suitable conditions for certain species would be present somewhere within the salt pond system still managed by Cargill, based on expected depths and salinities and their corresponding effects on bird use of salt ponds.
- CARG-11: Comment acknowledged. This comment expresses Cargill's continued support of the restoration efforts and does not address the adequacy of the EIS/R.



Mendel Stewart, Refuge Manager U.S. Fish and Wildlife Service San Francisco Bay NWR Complex 5/3/2007

SFBB

Dear Mendel –

We are pleased to submit the following comments for the EIR/EIS review process.

Best Regards,

Andreas Schmidt San Francisco Bay Brand, Inc. President



Introduction

San Francisco Bay Brand (SFBB) is a sustainable resource company that has successfully operated a brine shrimp harvest business on the San Francisco Bay Salt Ponds since 1968. SFBB is committed to providing the tropical fish hobbyist, hatcheries, zoos, aquariums, and aquaculture consumers worldwide with the highest quality of all natural nutritional diets that provide complete essential nutrients found in pet's natural habitats. Management is committed to an environment that promotes honest communication, mutual respect, and a positive attitude toward preserving the natural environment and aquatic life in the refuge.

SFBB has contributed to the local economy for decades. In addition to currently providing employment for 40 members of the community, the Company has sponsored employee health care and dental plans and retirement programs for all permanent employees and their families since 1987. SFBB also directly contributes approximately \$50,000.00 to \$60,000.00 annually in local county taxes and licenses.

SFBB has further remitted royalties annually to the County general fund which have reached up to \$460,000.00 (see table below).

Despite this major contribution to the community, the impact on U.S. Fish & Wildlife operations is minimal (est. at \$9,000 to \$14,000/yr. per the 1997 DRAFT EA). The impact will remain minimal as the remaining harvesting area is not covered by the current 50 Year Plan.

Historic Land Use – Contract Milestones

- 1968 SFBB is formed and operates all ponds (including Napa) until 1978 under contract from Leslie and Cargill
- 1979 SFBB continues to operate under contract with Cargill and with U.S. Fish & Wildlife permits
- 1987 Government issues contract to harvest
 - SFBB does not receive contract although continues to harvest from the Cargill ponds.
 - Government awards contract to second harvester, Kordon, to fish Wildlife land located within the system (Two harvesters fish two different parts of the system)
- 1992 Government re-issues contract to Kordon. SFBB continues to harvest from the Cargill ponds
- 1997 Contract awarded to SFBB (one harvester in system)
- 2001 Contract renewed to SFBB
- 2003 Wildlife reclamation sale concluded

Please see Maps in Appendix

SFBB-1 continued

	`92	`93	`94	`95	`96	`97
# Employees	35	35(a)	23	29	29	26
Wages	1.18M	1.30M	844K	883K	1.03M	1.15M
ER P/R Taxes	\$94	\$86	\$76	\$85	\$101	\$106

	`92	`93	`94	`95	`96	`97
Acres in Prod. (e) - Cargill	2,604	2,604	2,604	2,604	2,604	2,604
Shrimp Ibs. - Cargill	726K	832K	820K	1.06M	912K	1.15M
Royalties - Cargill	\$182K	\$208K	\$205K	\$267K	\$228K	\$286K

	′98(b)	`99	2000	`01	`02	`03	'04(d)	`05	`06
# Employees	32	33	35	37	43	53	62	55	44
Wages	\$1.1M	\$1.15M	\$1.24M	\$1.18M	\$1.31M	\$1.11M	\$1.28M	\$1.13M	\$1.2M
ER P/R Taxes	\$124K	\$112K	\$114K	\$109K	\$121K	\$103K	\$120K	\$114K	\$116K

	′98(b)	`99	2000	`01	`02	`03	`04	`05	`06
Acres in Prod.(e)									
- Cargill	2,359	2,359	2,359	2,359	2,359	2,359	-	-	-
- F&W	3,513(c)	3,513	3,513	3,513	3,513	3,513	1,140	540	540
Shrimp lbs.									
- Cargill	959K	1.07M	585K	463K	104K	210K	94K	-	-
- F&W	<u>116K</u>	<u>303K</u>	<u>350K</u>	<u>360K</u>	<u>613K</u>	<u>316K</u>	<u>732K</u>	<u>479K</u>	<u>263K</u>
Total lbs harvested	1.07M	1.37M	935K	823K	717K	526K	826K	479K	263K
Eggs lbs.									
- F&W	7,003	11,162	223	6,280	4,523	3,588	3,887	11,590	4,589
Royalties									
- Cargill-Shrimp	<u>\$240K</u>	<u>\$268K</u>	<u>\$146K</u>	<u>\$116K</u>	<u>\$ 26K</u>	<u>\$ 53K</u>	<u>\$ 24K</u>	<u>N/A</u>	<u>N/A</u>
- F&W - Shrimp	58K(c)	156K	178K	204K	354K	188K	440K	287K	164K
- F&W - Eggs	<u>35K(c)</u>	<u>57K</u>	<u>1K</u>	<u>36K</u>	<u>27K</u>	<u>21K</u>	<u>_23K</u>	<u>71K</u>	<u>_28K</u>
Total F&W	<u>\$ 93K</u>	<u>\$213K</u>	<u>\$179K</u>	<u>\$240K</u>	<u>\$381K</u>	<u>\$209K</u>	<u>\$463K</u>	<u>\$358K</u>	<u>\$192K</u>
TOTAL ROYALTIES	\$333K	\$481K	\$325K	\$356K	\$407K	\$262K	\$487K	\$358K	\$192K

NOTES:

- (a) SFBB completes sale of wholly owned subsidiary in UT.
- (b) Number reflects partial year harvest based on contract award dates.(c) In 1998- 2006 single system operation.
- (d) Cargill begins consolidation of heavy water in system, rendering ponds M1 & M2 (940 acres) to "Bay water" to support dredging operations and raising salinity in ponds M4, M5, M6 and M23 (1,690 acres) above level which could support brine shrimp.
- (e) Acreage provided by the USGS.

SFBB-1 continued

Novalek Co. Production and Royalty Summary: 1998 – 1996

Year	Acres in Production	Shrimp (Lbs.)	Eggs (Lbs.)	Royalties
1988	4385	12.7K	0	3.2K
1989	4385	44.6K	ЗК	16.3K
1990	4385	250K	5.7K	77.0K
1991	4385	620K	2.7K	184.6K
1992	4385	225K	5K	76.5K
1993	4385	445K	2K	141.8K
1994	4385	561K	1.1K	181.6K
1995	4385	286K	5.2K	104.4K
1996	4385	319K	3.1K	114.6K
1997	N/A	N/A	N/A	N/A

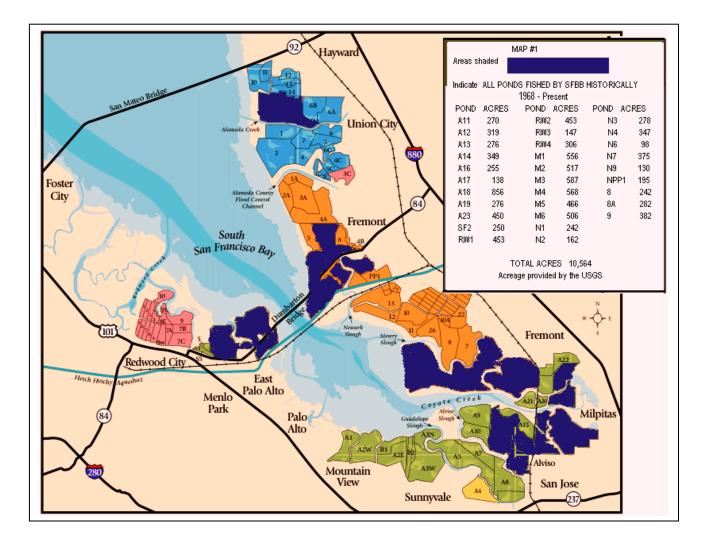
(Source: Letter to U.S. Dept. Interior from M. Kolar, 4/4/97, p.24)

Conclusion

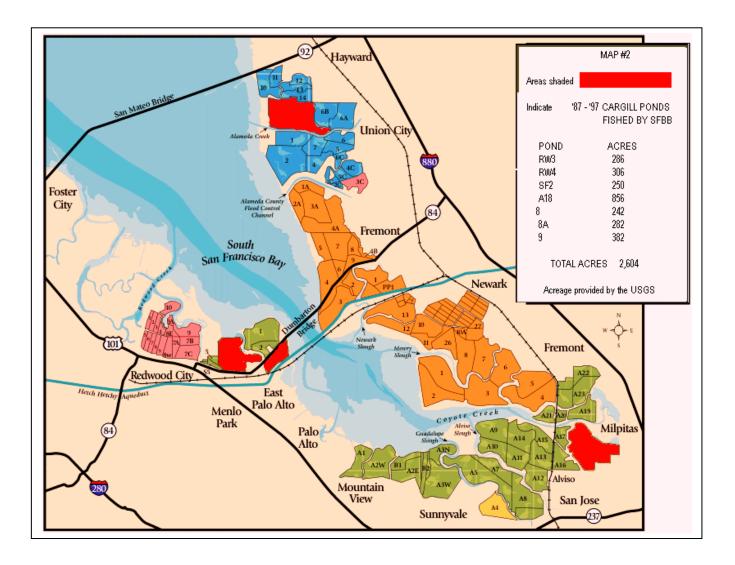
Since 1968 SFBB has significantly contributed to the local economy and demonstrated responsible stewardship for the natural resources of the salt pond ecosystem. More than any other company operating in the salt ponds, SFBB understands the history and land use of this renewable resource. The Company continues to improve its sustainable business practices and understands that by maintaining a healthy environment, all members of the community will thrive.

Appendix

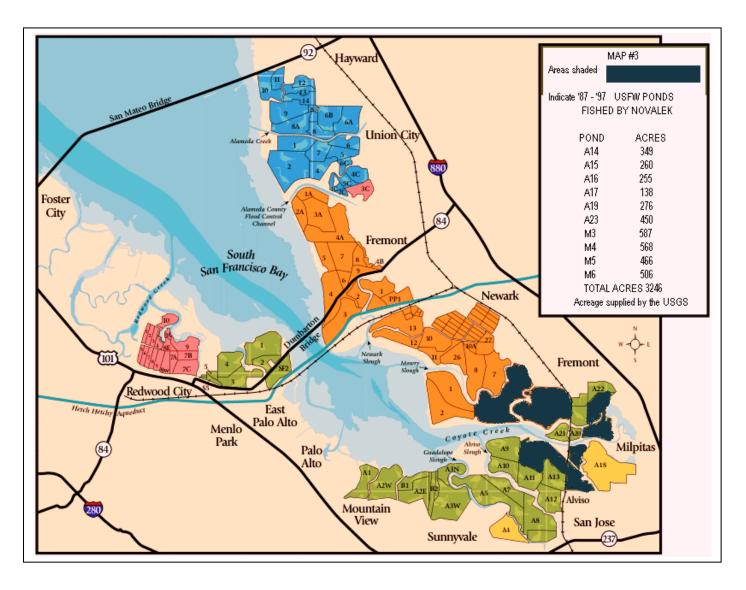
Map Index:



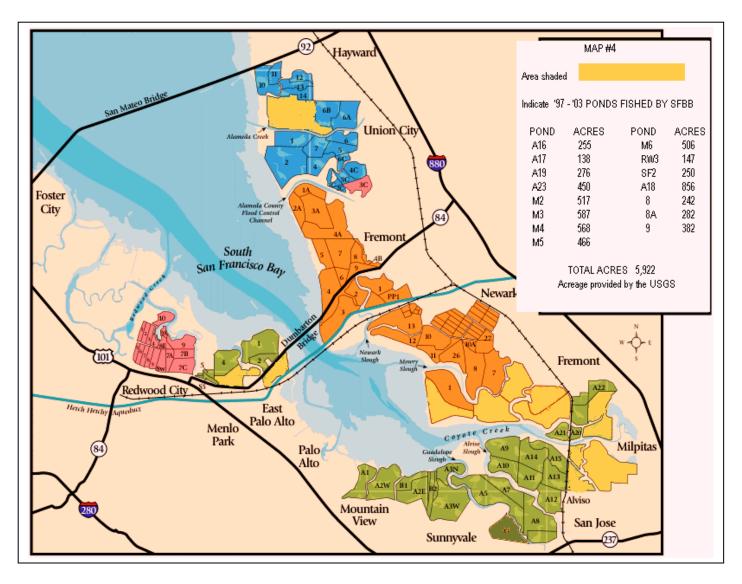
Map #1 - All ponds fished by SFBB historically (1968 - present)



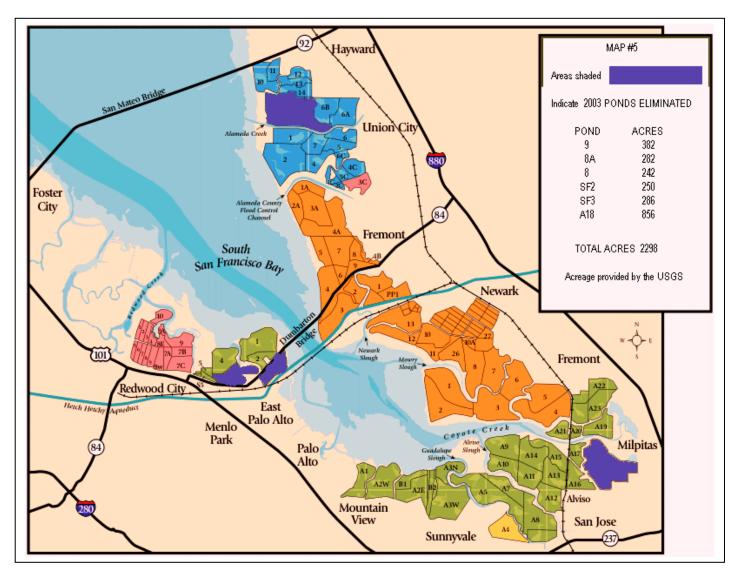
Map#2 - 1987 - 1997 Cargill ponds fished by SFBB



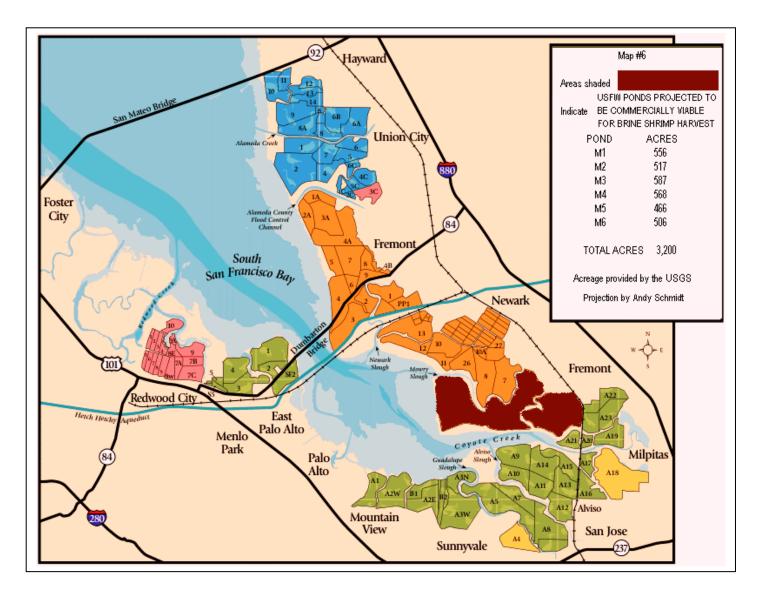
Map #3 - 1987 - 1997 USFW ponds fished by Novalek



Map #4 - 1997 - 2003 Ponds fished by SFBB



Map #5 - 2003 Ponds Eliminated



Map #6 - USFW Ponds with shrimp projected by Andy Schmidt

Response to San Francisco Bay Brand

SFBB-1: Comment acknowledged. This comment does not address the SBSP Restoration Project or the EIS/R.

Charles Taylor, Chairperson Alviso Water Task Force PO Box Alviso, CA 95002

Steven R. Ritchie, Executive Project Manager State Coastal Conservancy 1330 Broadway, 13th Floor Oakland, CA 94612

May 3, 2007

Draft Environmental Impact Statement/Environmental Impact Report Comments

The Alviso Water Task Force is comprised of residents and associates of the Alviso community. The group was formed at the behest of the Santa Clara Valley Water District to work collaboratively on local hydrology issues. Having the distinction of being below sea level and suffering devastating floods as recently as 1983 many members of the task force address matters of Flood control and prevention with life and death significance.

Additionally, many if the local residents and long time associates understand the symbiosis the San Francisco Bay and Alviso has had from its' origin. Founded because of its advantageous location at the Southern tip of the San Francisco Bay the town of Alviso flourished as a major port and industrial center when access to the Bay was bountiful. Similarly the Alviso area declined as the natural condition of the San Francisco Bay was altered for limiting the available aquatic opportunities.

For this reason the South Bay Salt Pond Restoration Project has been embraced by the members of the AWTF and residents of Alviso. The project is expected to provide the means to reestablish the natural conditions of the Bay which would in turn will advance the prospects of Alviso because of the towns' inextricable link to the condition of the Bay. In fact a major push for the involvement of the AWTF with the SBSPRP was made by the SCVWD because of the prospect to improve numerous aspects of the flood conditions affecting Alviso.

SBSP Restoration Project Objectives

Given that perspective the first observation that can be made of the EIS/R is in the overall project objectives. It is believed that the first objective should be to improve existing levels of flood protection in the South Bay Area and the reaming objectives should follow in order. This is consistent with the overall objective of restoration because the managed return of the San Francisco Bay to it's natural state would once again allow it to behave as a massive flood plain reclaiming the role it has played in nature through the millennia. The theme that can be established through the statements made in these comments to the EIS/R, is that it the AWTF believes the Bay should be allowed to restore itself

AWTF-1

AWTF-2

completely without any artificial impositions made for human temperament. There are very few examples that can be found in which human attempts to improve upon nature have been successful in the long term. Any attempt to "fight" Mother Nature where not required for flood protection, health and safety should be avoided as it will unnecessarily add additional maintenance expense.

Alternatives

As indicated previously, it is believed that any attempt to maintain artificial environments considered applicable by humans yet in conflict with natural forces will prove costly and counterproductive in the long run. Therefore Alternative C is the preferred long term end state in which the Bay is once again tidal. Statements have been made by officials responsible for the newly restored areas that "dramatic" improvements have been made in the short term with only minor modifications that allow natural forces to begin environmental alterations. A claim of one hundred percent improvement of some desired bird species was made and should indicate the managed return to environmental equilibrium may produce equally dramatic results. Perhaps the expected 50 year adaptive management time frame can be reduced, although some management of the area will always be required just as the current wildlife areas are maintained.

Adaptive Management

The management of the restoration is critical. Ill conceived restoration can result in increased flooding potential or health and safety concerns. The requirement for adaptive management is well understood and it is expected that the management team will remain open and predisposed to public input as the current process has been for the most part. It is quite easy to imagine a 50 year process that becomes rigid and private. It is also expected that the process continues to be executed without out any preconceived assumptions. Decisions should be based upon the scientific evidence and actual observations based on data gathered using an adequate time frame and experimental system.

Hydrology and Flood Management

As mentioned earlier, it is felt the emphasis should be on flood management based on the historical fact that the San Francisco Bay has acted as a natural flood plain for millennia. A flood plain with the greatest capability is probably the one that is created by the management of the natural forces. With the prospect for additional flooding risk due to climate change the restoration process should cease this opportunity to restore natural habitat while enhancing the Flood protection. The effects of additional flow from freah water treatment plants and urban projects upstream must also be considered.

Surface Water Sediment and Ground water Potential

The long term endpoint emphasizing tidal habitat would allow the natural channels and Sloughs throughout the South Bay to once again establish tidal flows and flushing action. Over the long term this will eliminate issues such as die-offs due to inadequate DO that have happened on several occasions in recent years. Hg levels which may have been elevated due to the imposition of unnatural conditions should return to normal and levels of harmful methylmercury may dropped based on studies indicating water currents AWTF-2 continued

AWTF-3

AWTF-4

AWTF-5

possible reduce methylmrecury levees. This make the method of restoration just as important. Methods such as blocking borrow ditches should be utilized.	AWTF-5 continued
Geology Soils Seismicity Any flooding potential is considered to be of significance to the AWTF. By emphasizing flood prevention along with restoration the possibility of harm to the natural habitat due to toxic runoff from flooding would be eliminated.	AWTF-6
Biological Resources Based on claims by officials that dramatic improvement in desired species have been seen since the start of the restoration efforts it is felt that there is little short or long term significance to the various species if natural forces are allowed to reshape the South Bay. The assumption that an isolated area managed for a single species would advantageous runs counter to what occurs in nature and has been observed to be detrimental to any species by allowing predators an easily accessible concentration of prey. It may be time to consider programs to alleviate some of the unnatural predators such as the seagull.	AWTF-7
Recreational and Public Access Although the total trail area within the Alviso Pond complex will be reduces as the area is converted to tidal, by looking at the larger system with additional trails and the benefit of enhanced species and natural beauty to observe the loss of trails would be mitigated.	AWTF-8
Socioeconomics and Environmental Justice The fact that a large number of Alviso residents are minorities or low-income is balanced by the fact that many are long term residents and deed holders of their homes. The dramatically improved San Francisco Bay area will prove beneficial to those that chose to stay but will make establishing residence more difficult for those with low incomes in the future.	AWTF-9
Traffic, Noise Air Quality There is concern by some citizens that the construction phase of the project will be disruptive to the Alviso community. It is hoped that impacts in these areas will be brief during the period environmental modifications are being made. After that period it is expected that most environmental factors will improve due to the natural productivity of marshland.	AWTF-10
Public Services The need for increased public services will be dramatic. Based on the fact that the services are inadequate now, any increase in use by the public will require significant enhancement just to reach the level that is currently needed today. The San Francisco Bay Development Commission and the Santa Clara Valley Water District have neglected their responsibility to maintain public safety for several years by allowing illegal activities to occur along the Alviso Sough which are disruptive to the public. No agency has been willing to address violations of the sundown restrictions in the various parks and wildlife refuges. Violent crimes in the parks have touched some of us personally and remain unaddressed. With the extension of trails to and from other bay areas criminals	AWTF-11

will be able to remain at large throughout a longer interconnected system of trails. An increase of recreational boating will also result in the need for emergency assistance on occasion. It is expected that the SBSPRP will plan for these increased needs and as part of the management plan work with the necessary agencies to make sure they are addressed.

We realize that the input from all public and private groups must be considered. But as a community that enjoys a special bond with the San Francisco Bay throughout our existence we have appreciated the deference the members of the SBSPRP have provided to our input. We look forward to continuing to work together closely as these and other comments are considered.

AWTF-11 continued

Response to Alviso Water Task Force

- AWTF-1: Comment acknowledged. This comment does not address the adequacy of the EIS/R.
- AWTF-2: The overarching goal of the Project and the six project objectives were developed with substantial stakeholder input and adopted by the Stakeholder Forum on February 18, 2004. Although maintaining or improving existing levels of flood protection in the South Bay is listed as the second project objective, it is recognized as being no less important than the first project objective.

The comment expresses support for the overall SBSP Restoration Project, in particular Alternative C, and does not address the adequacy of the EIS/R.

- AWTF-3: Comment acknowledged. The long-term adaptive management of the Project would remain open to public input and it is the intent of the Project that decisions be made based on scientific evidence and monitoring data.
- AWTF-4: Comment acknowledged. The Project recognizes the importance of providing flood protection to the communities adjacent to the Project Area, and integrating ecological restoration with restoration of the natural coastal and fluvial floodplains. The Project acknowledges the desirability of self-sustaining natural floodplain and habitat systems. The Project would consider all sources of flow, including potential future increases in freshwater flows.
- AWTF-5: The commenter speaks to the benefits of Alternative C for dissolved oxygen, mobilization and transport of mercury contaminated sediments, and mercury methylation. The analysis acknowledges that these may be potential benefits, but that is uncertain, which is why adaptive management is proposed to approach Alternative C in a measured, stepwise progression, evaluating whether these water and sediment quality factors are improved in successive Project phases. Blocking borrow ditches is one of many adaptive management tools that have been proposed for avoiding low dissolved oxygen.
- AWTF-6: Please refer to Section 3.4, Impact 3.4-5 for a discussion of water quality impacts from other contaminants.
- AWTF-7: Comment acknowledged. Applied studies regarding the effects of California gulls on sensitive South Bay biota, the factors that affect gull use of the South Bay (such as availability of anthropogenic food supplies), and the effects and feasibility of gull management methods are being developed.
- AWTF-8: Comment acknowledged. No changes to the EIS/R are warranted.
- AWTF-9: Section 3.11 of the EIS/R evaluates the socioeconomic effects associated with the SBSP Restoration Project, including the effects on existing businesses and minority/low-income communities. The Project does not evaluate opportunities for low-income communities

to establish residence in the community of Alviso, as it does not propose housing. The EIS/R confirms the benefits to surrounding communities from implementation of Alternatives B and C of the SBSP Restoration Project. As described in SBSP Impact 3.11-3, Alternatives B and C would have a less than significant/beneficial impact on nearby communities due to the increase in recreational opportunities.

AWTF-10: Section 2.5.5 in Chapter 2 of the EIS/R describes construction of the Phase 1 actions. At the Alviso pond complex, construction activities at Ponds A8 and A16, the nearest locations to the community of Alviso, would last from two to six months. Sections 3.12, 3.13, and 3.14 (Traffic, Noise, and Air Quality, respectively) evaluate construction-related effects of Project implementation of the Phase 1 actions. As discussed, the Project would result in either no impacts or potentially significant short-term construction effects that could be reduced to less-than-significant levels with the implementation of mitigation measures required as part of the Project.

Although future phases of the Project have not yet been determined, the duration of future phases could be similar those of the Phase 1 actions. Construction-related impacts for the long-term alternatives have been evaluated in Sections 3.12, 3.13, and 3.14 of the EIS/R. The Project would result in potentially significant impacts that would be reduced to less-than-significant levels with implementation of mitigation measures required as part of the Project.

In the long-term, the Project would result in benefits to the environment, in terms of flood protection, improvements to biological resources, and socioeconomic.

AWTF-11: Section 3.15, Public Services, evaluates the potential for an increase in demand for public services associated with the implementation of the Project. SBSP Impact 3.15-1 specifies that the Project is not expected to increase the need for fire and police protection services to such an extent that it would cause a reduction in acceptable response times. The section does not address the adequacy of the existing public services to address crime in the vicinity of the Project Area or the responsibility of other agencies working in the area to provide such services. The SBSP Restoration Project would consist of restoration activities and installation of recreational features that are intended to improve the overall Project Area and provide benefits to nearby communities; these features are not expected to increase crime rates.

PAGE

ant Society

3921 E. Bayshore, Palo Alto, CA94303

May 3, 2007

RE: South Bay Salt Pond Restoration Project Draft EIS/EIR.

The Santa Clara Chapter of the California Native Plant Society covers Santa Clara and the southern two-thirds of San Mateo County and hence has a long coastline along this part of San Francisco Bay. The biodiversity that the wetlands of the bay can provide is a most important resource and we strongly favor its protection. There are two dimensions to this issue.

1. Prevention of the introduction or spread of invasive species, and management of those that have found a niche here.

2. Identification and monitoring of rare and endangered species and restoration of habitats that support them.

We have long been concerned with the spread of the invasive hybrid cordgrass, Spartina alterniflia X foliosa, and its replacement of the native Pacific cordgrass, Spartina foliosa. This is especially a problem when unvegetated lands are re-opened to salt water. We saw this happen at a restoration project at the old Palo Alto yacht harbor. We strongly support the San Francisco Estuary Invasive Spartina Control Project.

We are also concerned about other invasives plants in the proposed restoration area. *Phragmites australis*, which is genetically different from the native species, is spreading in Palo Alto Baylands and other brackish waters in the south bay. Other invasives of particular concern to us in the baylands include *Lepidium latifolium* and *Dittrichia* graveolens. We would like to see specifics in the proposed project on how such invasives would be controlled.

The bay wetlands provide habitat for a number of plants included in the California Native Plant Society Inventory of Rare and Endangered Plants of California. The Draft EIS/EIR lists some of these species but presumes they are extinct based on sketchy information or asserts there is no suitable habitat for them. The fact that a CNDDB occurrence has not been seen in recent years can simply mean no one has looked for it. More adventurous botanists continue to find species thought extinct. For example, *Plagiobothrys glaher* was sighted in the East Bay in 2002. Cordylanthis maritimus ssp. palustris has been reported in North Bay locations and therefore might be found, if searched for, in the south bay. It certainly could be used in a restoration effort. The populations of *Centromadia parryi* ssp. congdonii vary greatly from year to year. It definitely occurs in salt marshes. We urge that more effort be put into looking for these rare plants that have occurred in south bay wetlands and possibilities for their restoration be considered.

Donald Mayall, Rare Plait Coordinator

Santa Clara County California Native Plant Society



Dedicated to the preservation of California native flora

CNPS-1

CNPS-2

(*)

Response to California Native Plant Society

- CNPS-1: The SBSP Restoration Project will continue to work closely with the Invasive Spartina Project to minimize the spread of the invasive hybrid cordgrass *Spartina alterniflora* x *foliosa*. See Section 3.6-20; Adaptive Management Plan. There are currently no ongoing efforts in the South Bay to eradicate *Lepidium latifolium* and *Dittrichia graveolens*. The Adaptive Management Plan (See Section 3.6-21) defines adaptive management triggers and control for *Lepidium latifolium*. The Project will continue to incorporate new information on invasive species into the decision making process at the beginning of each Project phase and as understanding of the ecosystem improves through ongoing monitoring. Please also see the Master Response regarding invasive *Spartina* and other invasive species in this document.
- CNPS-2: Long-term monitoring as part of the Adaptive Management Plan will increase the potential for locating rare and endangered plant populations if in fact they do exist in localized populations. In the long term, the SBSP Restoration Project is expected to improve conditions for most special-status plants, as well as others that occur primarily in upper tidal marsh habitat. Newly created upland transition zones represent an important habitat type largely absent from the South Bay currently, and would provide the opportunity for the re-introduction of special-status plant species. In addition, tidal habitat restoration could eventually include the development of mature tidal marsh features (*e.g.*, shell ridges, microtopographic differences, salt panne) that could present opportunities for colonization or restoration of these special-status plant species in future Project phases (See Section 3.6-19).

PRBO

Message-Id: <<u>20070504005242.CF07A2400D8C@mail.sfei.org</u>> Date: Thu, 3 May 2007 17:52:42 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: Nadav Last Name: Nur Organization: PRBO Conservation Science Street Address: 3820 Cypress Drive, #11 Street Address2: City: Petaluma State: CA Zip Code: 94954 Country: USA Email: nnur@prbo.org

Subject(s) of question or comment: EIR;

Question or Comment: The following are comments submitted by Nadav Nur, Ph.D., on behalf of staff of PRBO Conservation Science.

General points:

The success of the adaptive management plan will depend critically on effective, informative, and rigorous monitoring. Therefore there needs to be a comprehensive mechanism for ensuring long-term funding of monitoring.	PRBO-1
The timeframe of monitoring is a concern. Restoration of vegetation characteristic of tidal marsh will take time and response by wildlife will take considerably longer. Twenty years of monitoring may be required for a site, once tidal action is restored.	PRBO-2
Management action that results in large concentrations of birds is a concern. These concentrations may be subject to excessive predation or catastrophic mortality.	PRBO-3
The criterion for determining threshold of significance of impact differs depending on the species or group of species. For threatened and endangered species, the criterion is generally no decrease over a multi-year period. However, for other species, different criteria are used. An objective basis for this determination needs to be presented. For example, why specify a 20% decline for small shorebirds but 50% decline for salt-pond-specialists (phalaropes and grebes), p. 3.6-93?	PRBO-4
Impacts are evaluated relative to population size or density in 2006. We feel that the evaluation should be made relative to pre-ISP numbers.	PRBO-5
We heartily endorse the Applied Studies questions outlined in Appendix D (Adaptive Management Plan). However, we are concerned that there may not be adequate funding to address these questions. Some amounts listed we feel will be inadequate. For example, we do not feel that the question, âEURoeWill shallowly flooded ponds or ponds constructed with island or furrows provide breeding habitat to support sustainable densities of snowy plovers while providing foraging and roosting habitat for migratory shorebirds compared to existing ponds not	PRBO-6

managed in this manner?âEUR can be adequately addressed for âEURoe\$25,000-PRBO-6 50,000/yearâEUR. Applied studies questions 6 and 7 are of high importance but are not outlined in this document. One year of monitoring will generally not be sufficient to address these continued questions (cf. Applied Studies question 8). The mechanism by which studies will be developed and evaluated needs to be described. We feel that it is important to allow enough time to evaluate the success of Phase 1 before PRBO-7 proceeding to Phase 2. Data collection and analysis will be needed, as well as sufficient time for marsh vegetation to establish itself. Five years may be entirely inadequate. *Specific points:* We take issue with the criterion of a EUR other consecutive years of decline a EUR to serve as a trigger (p. 3.6-64 and elsewhere in section 3.6). What should be of concern is the underlying trend and not whether declines are evident in three consecutive years or more. Thus, if after three years or more, the population has declined by, say, 40%, this should be of concern, even though a decline may not be evident in every single year. Because of natural variability reflected in annual PRBO-8 fluctuations there may considerable long-term declines that could be obscured by the results of a single year, which may show an increase. Consider this example: in every year the underlying trend is a decrease of 15%. After 3 years, the population would, on average, have declined by 38.6%, which is substantial. However, due to natural fluctuations in numbers, the change observed in any one year may deviate by plus of minus 20% of that baseline trend. Thus, in one year the population might show a 5% increase, while in another it may show a 35% decrease. Hence it is the cumulative change that should of primary concern. We take issue with conclusions regarding impacts for small shorebirds under Alternative C, Impact 3.6.1. Results of PRBOâEUR(tm)s modeling indicate likely substantial decreases under Alternative C, as is noted in the text (3.6-67). The draft text states that implementation of the

Adaptive Management Plan would avert these declines, but there is no assurance that will be the case. Nor is the mechanism by which declines would be averted clearly identified, though suggestions are made. Another problem is that adaptive management actions to avert a decline for one group (e.g., small shorebirds), may exacerbate a decline for another group (e.g., diving ducks). Finally, the time lag between detection of shorebird declines (or other species of concern) and implementation of adaptive management to halt or reduce the decline is of concern. Therefore, we believe that the level of significance for 3.6.1, Alternative C, should be âEURoePotentially Significant.âEUR

We take issue with conclusions regarding impacts to intertidal mudflats under Alternative C, Impact 3.6.2. As is noted in the text (3.6-71), under Alternative C there would be a 48% decline in mudflat area compared to baseline values. The draft text states that implementation of the Adaptive Management Plan would âEURoeensure that declines do not reach a level of significanceâEUR, but we cannot be confident of these assurances. Therefore, we believe that the level of significance for 3.6.2, Alternative C, should be âEURoePotentially Significant.âEUR Some of the mudflat loss is due to natural erosion, not to the project. However, the loss of mudflat in conjunction with loss of managed ponds could have synergistic negative impacts on foraging shorebirds.

We take issue with conclusions regarding impacts to western snowy plovers under Alternative C, Impact 3.6.3. Whereas Alternative C may include island creation, active management of ponds, and predator control, one can have little confidence that these actions will completely counteract the substantial decline in snowy plover breeding habitat. In particular, the total area of created

PRBO-9

PRBO-10

PRBO-11

islands is not likely to be large enough to support a viable population, even without predation. We also reiterate that three years of consecutive declines is not a desirable trigger, due to annual fluctuations. We also emphasize that a baseline of three years (e.g., 2004 to 2006, as noted in the text) is preferred to use of a single year (i.e., 2006). Therefore, we believe that the level of significance for 3.6.3, Alternative C, should be âEURoePotentially Significant.âEUR	PRBO-11 continued
We take issue with conclusions regarding impacts to salt pond specialists under Alternative C, Impact 3.6.5. The ponds to be managed at high salinities under this alternative (E12 and E13) would be shallow (0.1 m mean depth), and would not be expected to support Eared Grebes, which are associated with deeper ponds. If the ponds were managed to be deeper, this would result in a loss of shorebird habitat. Even with an adaptive management plans, these types of trade-offs among species cannot be avoided.	PRBO-12
We are similarly concerned with the assessment of Impacts 3.6-4 (breeding, pond-associated waterbirds) and 3.6-6 (diving ducks). We believe that these impacts in relation to Alternative C are potentially significant, and there is little certainty that implementation of the Adaptive Management Plan will prevent declines implied by modeling efforts to date. In particular, as noted on page 3.6-101, management activities are expected to emphasize shallow ponds, which favor migratory shorebirds and nesting birds rather than âEURoedeep-water conditions that are preferred by diving ducks.âEUR	PRBO-13

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to PRBO Conservation Science

PRBO-1: Comment acknowledged. The Project agrees that funding for long-term monitoring and management is critical to the success of the Project. PRBO-2: Comment acknowledged. The monitoring program that is being developed (the essential species- and habitat-specific components of which are discussed in Table 2-3) will take into account lags between restoration/management actions and habitat/species responses to ensure that monitoring timing and duration are appropriate. PRBO-3: The potential adverse effects of concentration of large numbers of birds in small areas were assessed in the EIS/R; these potential effects are addressed in a number of impacts (e.g., SBSP Impacts 3.6-3, 3.6-4, 3.6-16, 3.6-18, and 3.6-22). PRBO-4: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of wildlife significance thresholds. PRBO-5: Comment acknowledged. The use of 2006 (*i.e.*, ISP) conditions as the baseline against which predicted changes are compared for impact assessment purposes is required by CEQA. The Overview subsection of Section 3.6.3 provides a discussion of this baseline for biological resources. PRBO-6: The cost estimates provided for the applied studies listed in Appendix D are simply preliminary estimates. Actual costs cannot be determined until precise details (e.g., study methodologies) are formulated. Also, there will be other applied studies that will be identified as the Project progresses. The Project team is developing the process by which proposals for conducting specific applied studies will be solicited and evaluated. PRBO-7: Comment acknowledged. Phase 2 activities will be informed by monitoring of the results of Phase 1 actions. Issues related to monitoring, such as statistical power of monitoring approaches, lags in responses to restoration, and other issues that may affect how long monitoring must be conducted before meaningful results are obtained will be better understood once monitoring begins, following the implementation of Phase 1 actions. These issues will be regularly reviewed by the Project team to ensure that meaningful feedback from the Phase 1 monitoring occurs. PRBO-8: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of wildlife significance thresholds and triggers. PRBO-9: The pace of restoration activities (e.g., acres restored to tidal habitats over a given period of time) is expected to be slow enough that monitoring results will determine whether declines are occurring for a particular group of species before those declines become substantial, and in time for adaptive management actions to be implemented. The urgency, scale, and type of adaptive management response will be commensurate with the evidence of, and apparent scale of, any potential problems. As a result, it is expected

that any real declines in shorebird numbers will be addressed via a change in habitat management. In addition, the Adaptive Management Plan is structured so that apparent, smaller-scale declines that trip a trigger (*i.e.*, those that are not so great as to require a large-scale, urgent response, and that only suggest at a possible decline) may cause the restoration process to be slowed to allow for a longer monitoring period (to determine whether the decline is real, and to provide evidence for the likely mechanism for the decline) and to ensure that impacts do not become substantial. Finally, it is acknowledged that adaptive management responses for one group of species may conflict with the habitat needs of another group. Conflicts between habitat needs of different groups, and tradeoffs in the effects of restoration and management actions, will all be considered carefully as the Project moves forward. Given all these considerations, it is anticipated that the monitoring and adaptive management process can avoid significant impacts to biological resources as described in the EIS/R.

- PRBO-10: Comment acknowledged. Monitoring of the extent of intertidal mudflats, any apparent effects of specific restoration activities (*e.g.*, the breaching of a particular pond) on the extent of mudflats, and numbers of species such as shorebirds that forage on these mudflats will determine how the Project is affecting mudflats and the species that use them. Adaptive management measures, which may include changes to the proposed extent or location of tidal restoration, modification of tidal restoration techniques to retain more mudflat, and changes in management of managed ponds for certain species groups, will be implemented as needed to avoid substantial impacts. Such adaptive management measures will be particularly important if loss of mudflat and conversion of managed pond habitat has synergistic negative impacts on foraging shorebirds as the commenter suggests. As described in the response to Comment PRBO-9 above, it is anticipated that the monitoring and adaptive management process can avoid significant impacts to biological resources as described in the EIS/R.
- PRBO-11: The EIS/R acknowledges that there is considerable uncertainty regarding the responses of western snowy plovers to habitat changes under Alternative C. Monitoring and adaptive management will thus be particularly important in maintaining snowy plover numbers, and contributing to the species' recovery. If use of the islands and managed ponds by snowy plovers does not meet expectations, management of ponds will be modified to increase snowy plover densities and productivity. Also, as noted in the EIS/R, predator management will be an important component of the SBSP Restoration Project, which will benefit snowy plovers. Therefore, with incorporation of the Adaptive Management Plan as an integral component of the Project, it is anticipated that impacts to snowy plovers will be less than significant.

The commenter notes that three years of consecutive declines is not a desirable trigger due to annual fluctuations. As described in the *Adaptive Management Triggers* section of SBSP Impact 3.6-3, any decline in numbers below the most recent three-year average (not a decline in three consecutive years), or if the population increases (*e.g.*, due to

intensified habitat and predator management) any decline below the projected population trajectory in any given year, will serve as an adaptive management trigger.

- PRBO-12: As discussed in the response to Comment PRBO-9, tradeoffs between habitat needs of different species or species groups are inevitable, and will be considered in determining appropriate tidal restoration, pond management, and adaptive management actions. If monitoring determines that certain salt pond specialists, such as the Eared Grebe, decline to the point of tripping a trigger as a result of Project activities, or are not using ponds that are being managed with the intent of providing habitat for those species, adaptive management actions will be taken to improve habitat conditions for those species.
- PRBO-13: Please see the responses to Comments PRBO-9 and PRBO-12 for a discussion of how tradeoffs among species groups will be addressed by the Project, and how the Adaptive Management Plan will help to avoid significant impacts to these species groups.

Message-Id: <<u>20070503235437.B3B0B2400AE0@mail.sfei.org</u>> Date: Thu, 3 May 2007 16:54:37 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Danielle Last Name: Le Fer Organization: San Francisco Bay Bird Observatory Street Address: 524 Valley Way Street Address2: City: Milpitas State: CA Zip Code: 95035 Country: USA Email: <u>dlefer@sfbbo.org</u>

Subject(s) of question or comment: EIR;

Question or Comment:

Comment regarding the South Bay Salt Pond Restoration Project EIS/EIR

Of particular concern is whether Snowy Plovers will nest in the reconfigured ponds since limited habitat will be available for plovers within the South Bay Salt Pond Restoration Project landscape. In addition, Snowy plovers and avocets that are nesting on A8 and E8A/E9 will be displaced when the area is flooded. There is high variation in Snowy Plover nest densities and productivity among different ponds, and factors affecting productivity may vary annually at different ponds. We donâEUR(tm)t know the impact on Snowy Plovers of limiting access to a few ponds, without a better understanding of habitat requirements.	SFBBO-1
The location of trails also needs to be carefully evaluated to ensure that nesting Snowy Plovers are not disturbed. Migrating and over-wintering shorebirds may also be sensitive to trail traffic.	SFBBO-2
There is uncertainty regarding use of created islands at A16 and SF2 by ForsterâEUR(tm)s Terns, American Avocets, Black-necked Stilts and Caspian Terns. Pond A16, targeted as a high bird use area, is in an area with high mercury levels. ForsterâEUR(tm)s Terns nesting at A16 in 2002 and 2003 had lower nesting success than those nesting at A1 (SFBBO, unpublished data). Recent studies (Ackerman et al. 2007) indicate that mercury levels in adult ForsterâEUR(tm)s Terns were higher in east Alviso than west Alviso ponds.	SFBBO-3
The concentration of salt pond birds in just a few locations is a concern, because of the increased risk of disease, contaminants and predation. In addition, we donâEUR(tm)t know the maximum carrying capacity for nutrients and prey in such an intensively managed system.	SFBBO-4
Maintaining a mosaic of different habitats with a dynamic component that allows for annual variation in bird use would ensure the protection of bird populations in the South Bay.	SFBBO-5

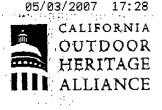
Response to San Francisco Bay Bird Observatory

- SFBBO-1: The effects of Project activities, including Phase 1 actions, on snowy plovers will be monitored. The Project team's understanding of snowy plover habitat requirements is expected to improve through this Project as a result of monitoring the responses of plovers to specific management actions. While it is acknowledged that snowy plovers currently nesting in Ponds A8 and E8A/E9 will be displaced by Phase 1 activities, ample managed pond habitat is present elsewhere within the Project Area to support this species; targeted habitat management will be used to ensure that adequate habitat is managed appropriately, and the results of monitoring will be used to inform future management of snowy plover habitat. Please also see the response to Comment PRBO-11.
- SFBBO-2: The effects of public access on snowy plovers, shorebirds, and other species will be monitored. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access issues.
- SFBBO-3: Comment acknowledged. Future management and restoration activities, particularly in the Alviso pond complex, will be informed by the results of ongoing mercury studies. Islands created at Pond A16 are intended to provide nesting habitat for terns and recurvirostrids displaced from Pond A8 (and Ponds A5 and A7) by Phase 1 activities associated with Pond A8; mercury levels in the immediate vicinity of Pond A16 are lower than those in the Pond A8 vicinity.
- SFBBO-4: The potential adverse effects of concentration of large numbers of birds in small areas were assessed in the EIS/R; these potential effects are addressed in a number of impacts (*e.g.*, SBSP Impacts 3.6-3, 3.6-4, 3.6-16, 3.6-18, and 3.6-22). The EIS/R also notes that the carrying capacity of managed ponds achievable through targeted, intensive management is unknown, and that the Project's ability to maintain habitat suitable for supporting high densities of foraging birds will have to be determined through monitoring.
- SFBBO-5: Comment acknowledged. The results of monitoring and applied studies will be used to inform the habitat configuration of the Project Area, and how habitats in managed ponds are managed.

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CAL OUTDOOR HERITAGE

COHA



... promoting conservation and protecting our hunting and shooting heritage.

1600 Sacramento Inn Way · Suite 232 · Sacramento, CA 95815 916.643.4607 phone · 916.643.4682 fax · www.ourdoorheritage.org

May 3, 2007

Yvonne LeTellier, U.S. Army Corps of Engineers 1455 Market St. San Francisco, CA 94103

Clyde Morris, U.S. Fish and Wildlife Service Don Edwards San Francisco Bay NWR 9500 Thornton Ave. Newark, CA 94560

John Krause, CA Department of Fish and Game PO Box 47 Yountville, CA 94599

RE: Draft EIS/EIR for the South Bay Salt Pond Project

Dear Madame and Sirs:

The California Outdoor Heritage Alliance (COHA) has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the South Bay Salt Pond Restoration Project and would like to provide the following brief comments, which focus on potential impacts to waterfowl habitat areas and the associated public hunting programs administered by the U.S. Fish and Wildlife Service and California Department of Fish and Game (DFG).

Our Association supports Alternative B (Managed Pond Emphasis), which would help ensure that the waterfowl habitat values of the salt ponds are reasonably maintained and that existing waterfowl hunting opportunities are not adversely impacted. However, Alternative B would still allow for a significant amount of tidal marsh restoration to benefit a number of threatened and endangered species. While COHA supports tidal marsh restoration efforts in highly saline ponds with little or no wildlife habitat value, we believe that other salt pond areas which provide important foraging and resting areas for resident and migratory waterfowl must continue to be managed as such. Recognizing that previous efforts to lower salinity levels in selected ponds have provided important waterfowl habitat benefits and increased overall waterfowl use, we would also urge that these efforts be undertaken in the remaining ponds, where possible.

In addition, we would encourage the Service and DFG to focus tidal marsh restoration activities solely on salt ponds which are not open to waterfowl hunting to ensure that an adequate number of pond areas continue to be available to local hunters. We would also urge that any new trails or recreational facilities be implemented in a manner that would COHA-1

COHA-2

not conflict with the existing waterfowl hunting programs. This can be accomplished by routing trails and paths away from high use hunting areas, using appropriate signage and closing certain areas to recreational activities other than hunting during the waterfowl season (October-January).

Please note that hunting, per federal law, is a "priority use" of the National Wildlife Refuge System and that providing public hunting opportunities is an important component of DFG's public trust responsibilities. Hunting also provides much-needed revenue for wildlife conservation activities through the sale of hunting licenses and associated stamps, as well as through federal taxes on sporting firearms, ammunition and archery equipment via the Pittman-Robertson Act. Waterfowl hunting is also an historical use of the South Bay salt ponds and the adjacent San Francisco Bay.

Thank you for the opportunity to provide input on this important issue. Should you have any questions regarding COHA's comments, please feel free to contact me at (916) 643-4607.

Sincerely,

Mars I fermel

Mark Hennelly, Vice President

Cc: Robert McLandress, President, California Waterfowl Association (CWA) Will Bacr, Chair, CWA Unattached Hunters Committee COHA-2 continued

Response to California Outdoor Heritage Alliance

- COHA-1: Comment acknowledged. To date, management of the majority of the SBSP Restoration Project ponds has focused on management for salt production (when the ponds were managed by Cargill) or for water quality and discharge salinities (under the ISP). For most ponds, management specifically for wildlife has either not occurred, or (under the ISP) has been a secondary objective. As a result, it is expected that wildlife use of many of the Project Area ponds can be enhanced through reconfiguration (*e.g.*, grading and island creation) or targeted management of water levels and salinities with wildlife use specifically in mind. Such targeted management would allow more individuals to be supported on fewer ponds, which would allow for increased tidal restoration in some ponds while avoiding substantial impacts to pond-associated species. Continuing to manage ponds as they have been managed in the past would, in the case of many ponds, under-utilize the habitat potential of these ponds.
- COHA-2: As noted in Chapter 2 and Section 3.7 of the EIS/R, hunting will continue to be allowed within the Project Area. USFWS and CDFG have crafted their respective hunting programs to ensure that there are minimal conflicts with other public access users and will continue to monitor these activities as well as provide appropriate signage to avoid user conflicts. Certain trails will continue to be closed during hunting season to further prevent potential conflicts between users.



Marin Audubon Society

P.O. Box 599 | Mill Valley, CA 94942-0599 | Marinaudubon.org

May 4, 2007

Yvonne Le Tellier Army Corps of Engineers 1455 Market Street San Francisco, CA 94103 John Krause CA Department of Fish and Game P.O. Box 47 Yountville, CA 94599

Clyde Morris, Manager Don Edwards SF Bay National Wildlife Refuge 950 Thornton Avenue Newark, CA 94560

Dear Mr. Morris, Mar Krause and Ms LeTellier:

I am writing to report Marin Audubon Society's endorsement of the three comment letters submitted on behalf of the Citizen's Committee to Complete the Refuge. We had intended and understood that these letters be submitted on behalf of our organization as well, and hereby request that you consider them as such.

While Marin Audubon's participation was clearly stated in the letter form attorney Steven Volker, our name was inadvertently omitted from the letters written by Dr. Peter Baye and Arthur Feinstein.

Thank you for considering our request.

Sincerel President

cc: Peter Baye Arthur Feinstein Florence LaRiviere

MAS-1

Response to Marin Audubon Society

MAS-1: Comment acknowledged and participation in the referenced comments is duly noted.

2.2.4 Individuals

Comments from individuals and the responses to those comments are presented in this section.

Message-Id: <<u>20070315054718.0114C2140004@mail.sfei.org</u>> Date: Wed, 14 Mar 2007 21:47:18 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Michael Last Name: Case Organization: Street Address: 685 Roble Dr Street Address2: City: Morgan Hill State: CA Zip Code: 95037 Country: USA Email: cases@garlic.com

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment:

I understand that the Salt Ponds of the Don Edwards National Wildlife Refuge and South San Francisco Bay are entertaining comment on the Draft EIS/R.

Having been an avid duck hunter since the age of 12 (some 37 years ago) and growing up in the South San Francisco Bay Area I was very pleased to hear that the Don Edwards NWR would be opening the salt ponds to duck hunting as of 2005. I have taken advantage of this opportunity to spend time outdoors hunting on these ponds, and have really enjoyed the chance to share these "urban adventures" with my family and friends as well. Being able to do anything with my 20 year old daughter is a real joy to me, but when it means getting to hunt with her it's that much better. She's never been one to enjoy waking up early or take long trips, so to have a hunting opportunity close to home means more trips I get to spend with her.

I'm pleased that these opportunities have been made available, and very pleased that there has been no animosity toward hunting from the other good folks that are using the hiking and biking trails on the refuge. Many folks have shown a healthy curiosity and open mind, and in kind have been treated with courtesy and respect by myself and hunting companions.

In these modern times, we can use all of the healthy distractions we can get to keep kids out of trouble. There's a saying that goes "Hunt with your kids, and you won't have to hunt for them". Growing up, I found that my love of the outdoors kept me out of a good deal of trouble that found my non-outdoorsman friends. Again, having opportunities like Don Edwards NWR close to home can be a key factor in reducing problems for those kids that discover the wonders that nature has to offer. As an Eagle Scout and past-Scoutmaster I recognize how important these opportunities can be to young men as they grow up.

I urge you to maintain, and even expand, the hunting portion of the refuge usage. The lessons learned in pursuing this waterfowling passion can be applied to many facets of life. The more people that have the chance to experience it, the better off society will be for the exposure.

Thank you for the opportunity to post my thoughts.

Sincerely,

Michael Case Morgan Hill, CA MC1-1

Response to Michael Case (1)

MC1-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070419184320.E70952400903@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 11:43:20 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Mike Last Name: Case Organization: Street Address: 685 Roble Dr Street Address2: City: Morgan Hill State: CA Zip Code: 95037 Country: USA Email: <u>mike.case@edocorp.com</u>

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation; Flood Management;

Question or Comment:

I am strongly in favor of sustaining the established hunting program on the South Bay Salt Ponds, and would like to see the opportunities expanded. In addition, I favor the restoration of as much tidal marsh as possible without impacting the value that the salt ponds may provide to wildlife. At the same time, I don't think that enhanced public access via hiking and biking trails should be provided throughout the entire area. Some areas should be undisturbed by encroachment.

MC2-1

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Mike Case (2)

MC2-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070316011325.5A825240071C@mail.sfei.org</u>> Date: Thu, 15 Mar 2007 17:13:25 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Jim Last Name: Woodworth Organization: Street Address: 805 Arcturus Circle Street Address2: City: Foster City State: CA Zip Code: 94404 Country: USA Email: Jimacho@Gmail.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I'm writing to you because I support duck hunting in the San Fransisco bay and marsh areas. I also support duck hunting in the "South Bay Salt Pond Restoration Project" and hope to continue to hunt on the refuges through out the bay area. Thanks Jim Woodworth

JW-1

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Jim Woodworth

JW-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070316035721.8951B2140007@mail.sfei.org</u>> Date: Thu, 15 Mar 2007 19:57:21 -0800 (PST)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: William Last Name: Symons Organization: Street Address: 2500 Diericx Dr Street Address2: City: Mountain View State: CA Zip Code: 94040 Country: Email: <u>billy.symons@gmail.com</u>

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment: Access leads to awareness. Awareness leads to respect. Respect leads to support; It's contagious.

The more people are exposed, the more they will begin to understand, respect, and even acquire the desire to help restore/preserve our rare, wonderful, scenic bay, marsh and wildlife areas. The Bay Trail speaks for itself as an environmentally sound project of epic proportions that will benefit our and future generations, and set a standard for all other communities.	WS2-1
I'm so glad to read about the push to open the bay trail behind Moffett. As a cyclist & trail supporter, either by myself, or with my wife and kids & friends, I've always wondered why such sections have been closed for so long. The public who wants this deserves this.	WS2-2
As for the habitat, especially the endangered turtles, It seems there would be more benefit from access/awareness, than to just shut the area around them off. My children and friends have learned more about environment and wildlife, and the fragile balance between us, by being exposed to just that. It commands respect.	WS2-3
To those concerned that public access will endanger the habitat, remember; it will be a well thought out trail, to connect point A to point B, with boundaries and informational and warning signs ,utilized by outdoor, wildlife, nature and trail enthusiasts, not a highway or retail center or ball park. In this area, you won't have anything but avid outdoor enthusiast, just as their only are hunters enjoying the area now. The rest of us deserve to enjoy the area more, with a connection from Mountain View to Sunnyvale.	

Regards, William Symons, Family and Friends 2500 Diericx Dr Mountain View CA 94040 650 906 4910

Response to William Symons

- WS2-1: Comment acknowledged. This comment does not address the SBSP Restoration Project or the EIS/R.
- WS2-2: As described in Response NASA-4, the 2.25-mile Stevens Creek to Sunnyvale Bay Trail
 Spine will be an integral spine connection in the Association of Bay Area Government's
 Bay Trail Project, a partially constructed 500-mile recreational "ring around the Bay."
 The project proponents appreciate the commenter's support of the project.
- WS2-3: As described in Response NASA-4, given the proximity of the Stevens Creek to Sunnyvale Bay Trail Spine to a known breeding population of western pond turtles, measures will be included in the Phase 1 action to educate the public about and help protect this population. These measures include symbolic fencing (post and cable) along the south side of the trail and educational signage to inform trail users of the presence of this breeding population and to discourage actions such as the release of non-native pet turtles that could adversely affect the western pond turtles at this location. Dogs will not be allowed on this trail except for trained dogs used in hunting. These measures, which are incorporated into the Project, will preclude a significant impact to this western pond turtle population.

Message-Id: <<u>20070322162944.EF5762140004@mail.sfei.org</u>> Date: Thu, 22 Mar 2007 08:29:44 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Tom Last Name: Bishop Organization: Street Address: 900 Veterans Blvd., Suite 410 Street Address2: City: Redwood City State: CA Zip Code: 94063 Country: USA Email: tbishop@pacbell.net

Subject(s) of question or comment: EIR; Public Access and Recreation;

Question or Comment:

I am very pleased with the EIR as drafted and particularly plans to restore the various ponds on the West side of the Bay. I heartily endorse the proposed public access provisions providing for increased waterfowl hunting opportunities for the public. I hunted waterfowl in the Moffet Filed areas back in the 1980's and 90's before the Cargill Salt properties were part of the refuge. I have hunted the same areas as part of the new waterfowl program over the past two years. I have taken junior hunters (licensed hunters under the age of 16 years old) duck hunting on the various areas and can tell it was a very rewarding experience to share with them the traditions of hunting for ducks. It is a great way to share the natural world with kids and we enjoy the lawful harvest of game and appreciate the opportunity to BBQ our delicious ducks.

Please contact me if you have any comments or questions.

Thank you, Tom Bishop

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

TB-1

Response to Tom Bishop

TB-1:Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070325135544.02956240039E@mail.sfei.org</u>> Date: Sun, 25 Mar 2007 05:55:44 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Robert Last Name: Andrade Organization: Street Address: 6610 Dairy Avenue Street Address2: City: Newark State: CA Zip Code: 94560 Country: Email: bobandrade@sbcglobal.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

When will the Alviso boat ramp be completed and will it be a ramp for all boats. Motor snd sail. Thanks for your answer.

Bob Andrade

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Robert Andrade

RA-1: Please contact the Santa Clara County Parks regarding the status of the boat launch facility at the Alviso Marina County Park, near Pond A8. The proposed ramp at Pond A3W shown in Figure 2-5b and 2-7b within the Alviso pond complex is recommended for non-motorized and some motorized boats. The aforementioned maps identify the proposed features that could occur within the approximate 50-year planning horizon of the SBSP Restoration Project. Future phases of the Project (subsequent to the Phase 1 actions), including the boat launch at Pond A3W, have not yet been designed, and would occur based on the adaptive management approach, to ensure that all proposed recreation components are compatible with wildlife. Message-Id: <<u>20070327232939.310412140007@mail.sfei.org</u>> Date: Tue, 27 Mar 2007 15:29:39 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Douglas Last Name: Thompson Organization: Atlantic Professional Development Street Address: Street Address2: 3074 Fermanagh Drive City: Tallahassee State: FL Zip Code: 32309-3333 Country: United States Email: doug@tidalboundaries.com

Subject(s) of question or comment: Other

Question or Comment: How to you reestablish original (before alterations) ground elevations? Are you successful in placing revegetation at the proper height to avoid/minimize flooding (too low) or drying out (too high)?

If you are interested - I can provide expertise in establishment of accurate, affordable tidal datums in all tidal areas to be restored.

If not interested kindly call or reply as approriate.

Regards, Douglas Thompson <u>www.tidalboundaries.com</u> 850-212-4381

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Douglas Thompson

DT-1: The commenter requested information on how the ground elevations within the SBSP Restoration Project Area were established. The ground elevations within the former salt ponds were evaluated differently depending on the amount of water contained within each pond. In ponds that were dry, the pond bottom elevations were obtained from LiDAR data flown in 2004, as described in:

Foxgrover, A.C., Jaffe, B.E. 2005. South San Francisco Bay 2004 topographic LiDAR survey: data overview and preliminary quality assessment. U.S.G.S. Pacific Science Center, Santa Cruz, CA. USGS Open File Report 2005-1284

In the ponds that contained water, the pond bottoms were surveyed in 2003 and 2004 using a shallow water sounding system comprised of a single beam echosounder (Navisound 210, Reson), differential global positioning system unit (AgGPS 124/132 Receiver DGPS, Trimble), and a laptop computer in a water-resistant case affixed to a Bass Hunter boat with a salt water trolling motor. Transects were run in parallel directions spaced approximately 100 m apart. This effort is described in:

Takekawa JY, Miles AK, Schoellhamer DH, Jaffe B, Athearn ND, Spring SE, Shellenbarger GG, Saiki MK, Mejia F. 2005. South Bay Salt Ponds Restoration Project Short-term Data Needs, 2003-2005. Final Draft. Vallejo, CA: U. S. Geological Survey. 267 p.

Marsh vegetation establishment is expected to occur naturally as the ponds accrete sediment and reach colonization elevations. This has occurred successfully in other restoration areas in San Francisco Bay.

RSC

Message-Id: <<u>20070328174615.AD4262400D1E@mail.sfei.org</u>> Date: Wed, 28 Mar 2007 09:46:15 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Richard Last Name: Schussel Organization: Street Address: 3156 Joanne Cir Street Address2: City: Pleasanton State: CA Zip Code: 94588 Country: USA Email: rfschus@pacbell.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: I am very supportive of the efforts being made to restore to ponds....I commend all of you.

I would also like to ask that waterfowl hunting continue to be an acceptable use of the area. I am sorry I can not attend one of the meetings being held, but want to provide my total support for a hunting program.

Hunters are the first conservationists, and they are good stewards of the resources. Countless hours are spent each year by hunters - along with millions of dollars, in order to improve conditions for waterfowl as they migrate this state - as well as local nesting birds.

Again, thank you for the hard work and please be sure to include a hunting program.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

RSC-1

Response to Richard Schussel

RSC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

WL

WL-1

Message-Id: <<u>20070329212157.087A42400D78@mail.sfei.org</u>> Date: Thu, 29 Mar 2007 13:21:57 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: William Last Name: Lev Organization: Individual and waterfowl hunter Street Address: 839 Downswood Ct Street Address2: City: San Jose State: CA Zip Code: 95120 Country: USA Email: bill lev@yahoo.com

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment: I can not attend the EIS/R Public Hearings this week and would like to provide my comment here.

I hope the EIR for the "rebirth" of the salt ponds in South SF Bay includes recreational usage in the development plan and includes waterfowl hunting.

I fully support continued waterfowl hunting as an acceptable recreational use of the ponds.

Bill Lev San Jose, CA

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to William Lev

WL-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070329223041.A84082140005@mail.sfei.org</u>> Date: Thu, 29 Mar 2007 14:30:41 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Tyler Last Name: Gullick Organization: CSU Chico Student Street Address: Street Address2: City: Chico State: CA Zip Code: 95926 Country: Email: Tgullick@mail.csuchico.edu

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: To whom in may concern,

I am an avid outdoorsman and take pride in the freedom our country gives us. I realize how important the south bay salt ponds are to the Bay area'a ecosystem and applaude what you have done. I think managing such a diverse habitat in the middle of a huge metropolis is a monumental task and to that I also applaude. I hope to see the continuance of this trend of restorartion to the South Bay. I also wish to see this area to stay open to recreation and the public whether it be bird watching or hunting or fishing.

Last fall and winter, I frequented the South Bay by boat and foot often, 2 or 3 times a week to hunt. Thank you for your effots and hard work.

Tyler

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Tyler Gullick

TG1-1:Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
Response to Comments document for a discussion of hunting. This comment expresses
support for the SBSP Restoration Project Area and recreation/public access.

Message-Id: <20070330031818.AE45D2400D7E@mail.sfei.org> Date: Thu, 29 Mar 2007 19:18:18 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Erik Last Name: Zinn Organization: Street Address: 2231 40th Avenue Street Address2: City: Santa Cruz State: CA Zip Code: 95062 Country: Email: enzinn@cruzio.com

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

Several aspects of this program are very pleasing. The principal idea of restoring the habitat is exciting to me. The other aspect of incorporating the long tradition of waterfowl hunting on some of these ponds is also great. Keep up the good work.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

EZ-1

Response to Erik Zinn

EZ-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070330185556.CEA7A2400D6F@mail.sfei.org</u>> Date: Fri, 30 Mar 2007 10:55:56 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Scott Last Name: Anderson Organization: Street Address: 4030 Cherryvale Ave Street Address2: City: Soquel State: CA Zip Code: 95073 Country: USA Email: <u>scott_t_anderson@hotmail.com</u>

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

I was raised in San Jose and have hunted in the Bay all of my life. I just wanted to throw my support in with the rest of the hunting community. Most hunters, like most other recreationists I know are very good stewards of the marsh and love the ground more than most.

SA-1

Please ensure that waterfowling remains an approved use.

Scott Anderson

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Scott Anderson

SA-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <20070401013833.CFB272400574@mail.sfei.org> Date: Sat, 31 Mar 2007 17:38:33 -0800 (PST)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Jay Last Name: Gertridge Organization: Street Address: Street Address2: City: State: Zip Code: Country: Email: gertridge@gmail.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

Duck hunting in the south bay has been a standing tradition before anyone ever heard of silicon. I was introduced to the tradition when my father would take me to shoot at a small pond in Alviso back in the mid 1950's. That same pond was given to the State by J. Gordon Knapp back in the early 1980s.

I continued to lease a blind from Cargill as late as 2000. Now office buildings have encroached on what was once rural fields that met the bay marsh. Restoring bayland habitat is long overdue, and duck hunters have not only gone on record to support these efforts, as well as, contributed more money than any other organization to ensure habitat is restored to maintain wildlife populations for future generations. Duck hunting is as much a part of San Francisco Bay as fishing sailing and boating. It is a tradition that is steeped in history - much like Chesapeake Bay in the East. Please make provisions that this healthy management of the baylands restoration includes recreational use by duck hunters.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

JG1-1

Response to Jay Gertridge

JG1-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

XMF

Message-Id: <20070409211500.3E11E2400666@mail.sfei.org> Date: Mon, 9 Apr 2007 14:15:00 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Xavier Last Name: Melanson-Fernandez Organization: Street Address: 289 2nd Ave Street Address2: City: San Francisco State: CA Zip Code: 94118 Country: Email: melansonfernandez@comcast.net

Subject(s) of question or comment: EIR;

Question or Comment: Dear South Bay Salt Pond Restoration Project Team:

Thank you for the opportunity to comment. The EIR relies heavily on an adaptive management approach to mitigate significant impacts. Given the uncertainties associated with the project and restoration in general, an adaptive management approach seems the most logical and scientifically sound approach. However, an adaptive management approach requires a substantial amount of monitoring over a long period. What financial assurances are in place to guarantee that the adaptive management approach will be fully implemented over the long-term, especially given fluctuations in annual federal and State budget allocations?

Regards,

Xavier

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

XMF-1

Response to Xavier Melanson-Fernandez

XMF-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Adaptive Management Plan funding.

Message-Id: <<u>20070412012445.F3B4D2400D8A@mail.sfei.org</u>> Date: Wed, 11 Apr 2007 18:24:45 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Richard Last Name: Santos Organization: Alviso resident Street Address: 1404 Wabash st Street Address2: PO. Box 244 City: Alviso State: Ca Zip Code: 95002 Country: USA Email: <u>RSantos@valleywater.org</u>

Subject(s) of question or comment: EIR;

Question or Comment:

Page ES-19 Alviso listed as LTS for #-3-1 should be chged to PS |RS-1 IRS-2 Impact 3-3-4 LTS should be chged to PS 3-4-5 should be chged to PS there is no consistant monitoring to prove otherwise. IRS-3 3.6-1 LTS to PS until salt water is returned and consistant maintenance from SCVWD |RS-4 | RS-5 3.6-13 LTS to PS need more monitoring to prove otherwise 3.6.17 LTS to PS I have observe the decrease of harbor seals due to food chain being deluted IRS-6 3.6-18 LTS to PS for all sensitive species and habitant. Until salt water returns to the channel, all |RS-7 species are threatened. 3.6-23 LTS to PS - there is already enough evidence to prove the bay shrimp populations has RS-8 decreased in the channel 3.8-1 LTS to PS - no Police visibility to the Alviso Community and Alviso Marina. There is part | RS-9 time and selective enforcement from the SJPD 3.12-3 LTS to PS parking will increase due to the increased amount of vistors and NOrth First St | RS-10 development 3.15-1 No impact to PS There has been little if no Police Protection for the Alviso Community **RS-11** these past 40 yrs. Our trail system and recreation opportunities need full time Police Protection, The SJPD has

proven that they do not fit this bill of providing equal police protection for our area and community.

I would like to address these issues and more when there is an opportunity. I was away in Washington D.C. trying to get more funds for all of these projects and more. Thanks you, Richard P. Santos

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Richard P. Santos

- RS-1: As identified in Table ES-1 of the EIS/R, Phase 1 Impact 3.3-1 is concluded as having less than significant impacts associated with the potential for increased coastal flood risk landward of the SBSP Restoration Project. Phase 1 Impact 3.3-1, in Section 3.3 of the EIS/R, describes the reason why potential impacts would be less than significant. No change to the conclusion is warranted.
- RS-2: The commenter would like SBSP Impact 3.3-4 (Increased levee erosion along channel banks downstream of tidal breaches) for Alternative B and/or C changed from Less than Significant to Potentially Significant. The reason for the suggested change was not expressed. The discussions for Alternatives B and C present the approach for preventing a significant impact. If levee erosion, or the potential for it, were observed, management actions would be triggered. Possible management actions would include increasing the frequency of levee maintenance or implementing other levee improvements (*e.g.*, widen shoulder, raise, armor, set back levee). Management actions would be taken early to avoid a significant impact.
- RS-3: The commenter is referring to SBSP Impact 3.4-5, potential impacts to water quality from other contaminants, under the no-action alternative (Program Alternative A). It is agreed that not all other contaminants analyzed under this impact are consistently monitored at the present time. The analysis, however, is not based on whether or not these contaminants are currently a problem, as characterized by current monitoring. Rather, the analysis is whether significant departure from baseline conditions for these contaminants would occur without the Project activities. For the contaminants analyzed, the finding was departures from baseline are predicted to be less than significant.
- RS-4: The comment is unclear as it pertains to SBSP/Phase 1 Impact 3.6-1 which is "Potential reduction in number of small shorebirds using San Francisco Bay, resulting in substantial declines in flyway-level populations". The comment is noted.
- RS-5: Please see the responses to Comments NOAA-6 and NOAA-8.
- RS-6: The SBSP Restoration Project is expected to enhance prey populations for harbor seals, and thus impacts to harbor seals are considered less than significant.
- RS-7: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- RS-8: The SBSP Restoration Project is expected to enhance habitat conditions for bay shrimp, and thus impacts to bay shrimp are considered less than significant.
- RS-9: As identified in Table ES-1 of the EIS/R, Phase 1 Impact 3.8-1 is concluded as having less than significant impacts associated with potential disturbance of known and/or unknown cultural resources. Phase 1 Impact 3.8-1, in Section 3.8 of the EIS/R, describes

the reason why potential impacts would be less than significant. No change to the conclusion is warranted.

- RS-10: Phase 1 Impact 3.12-3 in Section 3.12 of the EIS/R evaluates the impacts to parking associated with the Phase 1 actions only. Potential impacts at the Alviso pond complex associated with the development of proposed recreational features for Phase 1 actions are considered less than significant. Cumulative parking impacts are addressed in Cumulative Impact 3.12-3 in Chapter 4 of the EIS/R.
- RS-11: Please refer to the response to Comment AWTF-11 for a discussion of the adequacy of existing police protection services. A change to the significance determination for SBSP Impact 3.15-1, as identified in Table ES-1 and Phase 1 Impact 3.15-1 in Section 3.15 of the EIS/R, is not warranted.

MV2

Message-Id: <<u>20070414152036.569E72400847@mail.sfei.org</u>> Date: Sat, 14 Apr 2007 08:20:36 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Mike Last Name: Vandeman Organization: Street Address: 2600 Camino Ramon # 2E950I Street Address2: City: San Ramon State: CA Zip Code: 94583-5099 Country: USA Email: mjvande@pacbell.net

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment:

The Bay Trail is not environmentally beneficial. It destroys habitat, and increases access by humans to wildlife habitat. The salt flats should be restored to effective habitat. Recreation, if any, should be minimal.

See <u>http://home.pacbell.net/mjvande/india3</u>, <u>http://home.pacbell.net/mjvande/scb7</u>, and the following:

The Bay Trail -- A Disaster for Wildlife Michael J. Vandeman, Ph.D., wildlife activist <u>http://home.pacbell.net/mjvande</u> September 21, 2003

No wild animal nor plant was invited to any of the public hearings on plans for the Bay Trail. They are never invited to any public hearing. Humans frame the discussion, carry it out, and make the decisions. Even though it is very easy to do, no one takes the point of view of the wildlife. In this version of "The Emperor's New Clothes", not even a child notices that the Emperor is buck naked.

The results are predictable: yet another park development for pleasuring humans. It's a fallacy as old as the Bible: if a piece of land is not being used by humans, it is going to waste. Roderick Nash, in Wilderness and the American Mind, described the long evolution toward the idea of wilderness, where wildlife take priority. But recently we have regressed, and wilderness is now considered primarily a human playground.

Most species don't like having us around. There are, of course a few, like the mosquito, that like us, and a few others that are willing to tolerate us -- up to a point. But, as every child learns when he or she tries to get close to an animal, it invariably runs away. A good summary of research on the impacts of human presence on wildlife, for example, is Wildlife and Recreationists (Knight and Gutzwiller, eds.): "Traditionally, observing, feeding, and photographing wildlife were considered to be 'nonconsumptive' activities because removal of animals from their natural habitats did not occur... nonconsumptive wildlife recreation was

MV2-1

considered relatively benign in terms of its effects on wildlife; today, however, there is a growing recognition that wildlife-viewing recreation can have serious negative impacts on wildlife" (p. 257).

So what does the Bay Trail attempt to do? Take 450 miles of shoreline wildlife habitat and make it more accessible to people! Humans are suckers for people who tell them what they want to hear, and the Bay Trail lobbyists tell us that our presence won't negatively impact the wildlife. (But just to be sure, "studies" will be done.) Not only will everyone be allowed closer than ever to a lot more habitat, but long-distance modes of transportation such as roller blades and bicycles will be accommodated, letting people impact even more wildlife.

In order to facilitate all these hordes of people, veritable human "freeways" 8-10 feet wide will be constructed, requiring the clearing of up to 16 feet of right-of-way (see www.abag.ca.gov/bayarea_info/baytrail/baytrailplan.html! In some cases, habitat has been destroyed to build these trails, and in other cases, new pavement has been laid.

The worst excesses (especially paving!) are due to the desire to accommodate vehicles, such as skateboards, roller blades, and bicycles -- with the excuse that there are "user groups" that need to be accommodated. Actually, they are all human, and have the same needs as everyone else -- which do not include travelling on wheeled vehicles. Only the disabled can truly be said to have such a need, and they can be accommodated on much simpler and narrower trails.

Anyone who wants to bicycle has hundreds of miles of paved roads on which they can do so. If motor vehicles are a problem, then they should be eliminated. But "solving" that problem by destroying more wildlife habitat is not acceptable. Wildlife have already lost some 95% of their habitat, and can't afford to lose any more. Instead of creating islands of habitat in a sea of humanity, we should be doing just the opposite: providing continuous wildlife travel corridors linking adequate wildlife preserves (as described in Saving Nature's Legacy: Protecting and Restoring Biodiversity, by Reed Noss and Allen Cooperrider, and as embodied in The Wildlands Project).

It's obvious that we need to experience nature in order to appreciate it. But it's equally obvious that we need to stay out of it, if it is to survive. It is the latter that is most often ignored. The goals of the Bay Trail are good (protection and respect for nature), but they can be had without the trail!

References:

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Stone, Christopher D., Should Trees Have Standing? Toward Legal Rights for Natural Objects. Los Altos, California: William Kaufmann, Inc., 1973.

Vandeman, Michael J., <u>http://home.pacbell.net/mjvande</u>, especially âEURoeWildlife and the EcocityâEUR and âEURoeRethinking the Impacts of RecreationâEUR.

Ward, Peter Douglas, The End of Evolution: On Mass Extinctions and the Preservation of Biodiversity. New York: Bantam Books, 1994.

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Wilson, Edward O., The Diversity of Life. Cambridge, Massachusetts: Harvard University Press, 1992.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Michael J. Vandeman, Ph.D.

MV2-1: Although increased recreational access has the potential to adversely affect sensitive species and their habitats in the manner described in SBSP Impact 3.6-18, these effects would be monitored and managed. Implementation of the Adaptive Management Plan (Appendix D) would ensure that impacts to sensitive species and their habitats do not reach significant levels. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife and see Section 3.6-18 for analysis of public impacts at each pond complex.

Message-Id: <<u>20070415231909.6D99D2400D83@mail.sfei.org</u>> Date: Sun, 15 Apr 2007 16:19:09 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: Susan Last Name: Penner Organization: Street Address: 8 Admiral Drive #128A Street Address2: City: Emeryville State: CA Zip Code: 94608 Country: USA Email: <u>drpenner@prodigy.net</u>

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment: Please limit public access and restore wildlife habitat to this area. We've developed enough! | SP-1

Response to Susan Penner

SP-1: Please refer to the responses to comments CCCR-5 and CCCR-7 for a discussion of how adaptive management would be implemented for Recreation and Public Access to determine the final outcome of the recreational features that would be implemented.

EF-1

Message-Id: <<u>20070418195429.4D98D240081C@mail.sfei.org</u>> Date: Wed, 18 Apr 2007 12:54:29 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Ed Last Name: Feinberg Organization: ROMP Street Address: 2471 Johnson Place Street Address2: City: Santa Clara State: CA Zip Code: 95050 Country: USA Email: <u>edbikes@ihot.com</u>

Subject(s) of question or comment: EIR; Public Access and Recreation;

Question or Comment:

I support plan C from the environmental inpact report. More opportunity to get people out of their cars and hiking or biking in the bay area will reduce air pollution and production of greenhouse gasses.

Also, we need policies that encourage people to find the joy of recreational exercise to stem the growing obesity and diabetes threat to our society.

Ed Feinberg

Response to Ed Feinberg

EF-1: Comment acknowledged. This comment expresses supports for Alternative C and does not address the adequacy of the EIS/R.

HP

Message-Id: <<u>20070419041433.755C02400D62@mail.sfei.org</u>> Date: Wed, 18 Apr 2007 21:14:33 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Henry Last Name: Pastorelli Organization: romp & SVBC member Street Address: 1207 lisa ct Street Address2: City: los altos State: ca Zip Code: 94024 Country: usa Email: hpastorelli@sbcglobal.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I'd like to see improved bicycle access. A trail behind Moffet would be great especially if there HP-1 was a way to link it to the Stevens creek trail or Ellis street.

Response to Henry Pastorelli

HP-1: Comment acknowledged. No changes to the EIS/R are warranted.

	FJD1
	Fish & Game
April 18, 2007	APR 2 0 2007
Mr. John Krause California Department of Fish and Game P.O. Box 47 Yountville, California 94599	Yountville
Subject: South Bay Salt Pond Restoration Project Draf Environmental Impact Statement/Environmental Report for EDEN LANDING, Hayward, CA March 20	Impact
Dear Mr. Krause:	
The Eden Landing Pond Restoration Complex is an area o acres owned and to be managed by the California Depart Fish and Game (CDFG). At this time in the planning pr ALTERNATIVE B (managed pond emphasis for Eden Landing) be the plan that will accommodate shorebirds, waterfow other wildlife, and will provide adequate tidal marsh. significant impacts occur during the implementation of for Eden Landing, the ADAPTIVE MANAGEMENT PLAN would b resolve tidal marsh or managed ponds concerns.	ment of ocess, appears to 1, and If PHASE I
The hope is that CDFG will implement a circulation sys the pond complex as soon as possible to promote a heal environment for wildlife. The circulation system shou priority, and implementation of the public access and facilities will occur when funding is available in the Recreation and public access features will require lar money to construct, manage, and maintain.	thy ld be first recreation future.
If and when there are natural breaches in levees along bayward side of the Eden Landing salt ponds, perhaps i wise to allow the bay water to do its own circulation these areas to their former tidal marsh. Will there b for levee breach repairs? Should any money be used to these natural breaches?	t would be and restore FJD1-3 e funding
ERROR: Page 1-23 Alameda County does not own salt pon	ds. FJD1-4
CONCERNS:	
1. FIGURE ES-3a ALTERNATIVE B The proposed flood pr levee as noted on the map will isolate the 74 acre Web that has 52 acres of wetlands. The understanding is t Landing area is a higher plain and has not subsided as areas in the South Bay. Therefore, at this time we re a flood protection levee not be planned for the west s Weber property. Isolating this valuable upland wetlan a serious loss.	er property he Eden other quest that ide of the

Mr. John Krause April 18, 2007 Page 2.

2. A staging area is proposed for the north area of the EDEN LANDING pond complex. Page 2-62 indicates there will be a future field office and information center plus space for parking. Page 2-104 states that the staging area will accommodate 58 vehicles. Can this staging area provide all these amenities without intruding into tidal marsh habitat? See map Figure 2-11.

3. FIGURE 2-14 LOOP TRAIL This is an unfortunate display of human activity too close to wildlife. Foraging birds lose energy when disturbed. There is a reason to close public access on the proposed LOOP TRAIL during times of bird nesting, foraging and roosting. EDAW's simulated display FIGURES 2-11, 2-12, 2-13, and 2-14 impart a false impression of human activity and recreation in the public access areas.

4. MAP Page 2-98 FIGURE 2-10 and text on Page 2-101. HISTORIC SALT WORKS POND E13. The Historic Salt Works are of interest due to the visible remnants of the early salt industry on the Hayward shoreline. Maintenance of the remnant wooden structures is essential to prevent deterioration. PAGE 2-101 states that the historic salt works would rely on rainfall and evaporation. This plan is not acceptable. To prevent deterioration of the wooden structures, higher salinity bay water must be introduced into the bermed off area surrounding the HISTORIC SALT WORKS. The sooner the better! If the salt works are not protected and preserved, there will be nothing to see in the future. See FIGURE 2-13.

5. The ALTERNATIVE B Map FIGURE ES-3a indicates only one levee breach along the north side of the Alameda Creek Flood Control Channel. Is this the Alameda County Flood Control Plan for Alameda Creek? There is concern for funding to pay for bridging the breaches in the north levee and the bridge over Alameda Creek. Will there be breaches in Old Alameda Creek's south levee? The Alameda Creek project should be given high priority.

Before PHASE I can proceed, there must be assurances that adequate funding will be available for construction, management, maintenance, and monitoring of this important restoration project.

Sincerely yours.

19000 Janice Delfino

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

FJD1-6

FJD1-7

FJD1-8

FJD1-10

Response to Frank and Janice Delfino (1)

FJD1-1: Comment acknowledged. The comment dos not address the adequacy of the EIS/R.

- FJD1-2: The commenter requests that the establishment of a circulation system with the Eden Landing pond complex be given a high priority. Public access and recreation features should be implemented in the future because these features would require "large sums of money to construct, manage, and maintain." A circulation system within the Eden Landing pond complex has recently been put in place as part of the Initial Stewardship Plan (Life Science! 2004). The Project is committed to further improving circulation and water management within the reconfigured ponds as part of the proposed habitat restoration. Most aspects of the Project (not just public access and recreation) would require funding for construction, operations and management, and adaptive management and monitoring. The Project would seek to move all aspects of the Project forward as quickly as feasible. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Adaptive Management Plan funding.
- FJD1-3: It is possible that an unplanned tidal breach could occur on the bayward side of the Eden Landing pond complex, in particular at Pond E2 which is subject to the greatest windwave energy. Whether or not an unplanned breach would or should be repaired upon breaching would depend upon the timing of the unplanned breach (whether it is 1, 5 or 10+ years from present) relative to the phasing of the restoration actions in the Eden Landing complex, and whether or not the unplanned breach compromised flood protection, water quality, or endangered species habitat.
- FJD1-4: Please see the response to Comment VOLK-2.
- FJD1-5: Comment acknowledged. The commenter suggests that the proposed flood protection levee landward of the Eden Landing pond complex (as shown on the alternative figures) would isolate the 74-acre Weber Property that contains 52 acres of wetlands. Although the Eden Landing ponds are higher in the tidal frame than other, more subsided, ponds within the SBSP Restoration Project Area, a flood protection levee would still be required to provide flood protection to the low-lying areas adjacent to the Project Area. The proposed flood protection levee alignment represents one potential alignment. The alignment could change through consultation with the Alameda County Flood Control and Water Conservation District, and as a result of project-level analysis and design. Several factors will be considered when locating the levee alignment, including the surrounding habitats. Currently, the Weber Property is privately held and is outside of the SBSP Restoration Project Area. A levee alignment bayward of the Weber Property would not preclude future restoration efforts associate with these lands, if they become available for future acquisition.
- FJD1-6: The proposed staging area at Eden Landing which is not part of the SBSP Restoration Project has been designed to be fully in upland areas and over the existing levees at the

entrance to the complex and surrounding disturbed areas. This facility as well as any future public access facilities that are built including the proposed field office would be designed completely away from and outside of tidal marsh areas as much as practicable to minimize environmental impacts however there may be small areas, such as the kayak launch site, that will need to be built partially in the tidal marsh to provide access to Mt. Eden Creek.

- FJD1-7: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.
- FJD1-8: Please refer to the response to Comment HASPA-6 for a discussion of historic salt works preservation.
- FJD1-9: Comment acknowledged. The alternative figures for the long-term restoration alternatives do not indicate the exact number and locations of proposed levee breaches. The number and location of levee breaches would be determined during subsequent project-level analysis and design. With respect to the Alameda Creek Flood Control Channel (ACFCC) and Old Alameda Creek, potential alternatives are in the process of being developed as part of the Alameda County Salt Pond Integration (ACSPI) project for the Alameda County Flood Control and Water Conservation District. Although this study is in progress, the ACSPI project is not currently a Phase 1 action and would likely be implemented as a future phase. This project would therefore be presented for public comment in a separate tiered EIS/R document.
- FJD1-10: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.

May 1, 2007

Mr. Clyde Morris, Refuge Manager Don Edwards San Francisco Bay National Wildlife Refuge 1 Marshlands Road Fremont, California 94555

Subject: South Bay Salt Pond Restoration Project, Draft Environmental Impact Statement/Report. U.S. Fish and Wildlife Service ALVISO and RAVENSWOOD PONDS COMPLEX, March 2007

Dear Mr. Morris:

After reviewing the subject document, it appears that ALTERNATIVE B should be considered a guide that will provide the desired environment for birds, mammals, and fish. However, management of the salt pond restoration will determine whether to increase tidal marsh, or increase managed pond acreage for birds. It will be boots on the ground management that will determine how the ponds will be restored.

There are challenges in this restoration project, and the major one is providing flood protection especially in the Aliso area. If flood protection levees are to be constructed to meet or exceed FEMA standards, the base width of the levee must be wide enough to support additional height. Will the wide levee base be considered filling of wetlands, and will mitigation be required?

Page 2-9 SALT PANNE HABITAT: The statement concerning salt panne habitat seems to give low possibility for this type of habitat. For about 10 years the 54 acre Mosely property adjacent to POND R1 has had natural breaches. Has anyone studied the area FJD2-3 as a potential site for salt panne establishment? The Mosely property should have been included in the restoration study. Since the restoration project is a 50 year plan, the Redwood City Cargill ponds should also have been included in the study as these ponds have been abandoned for salt making.

Page 2-78 CONSTRUCTION: In the list of required equipment, add FJD2-4 AMPHIBIOUS EXCAVATOR. (Proposed FWS maintenance 2007-2008 will use an amphibious excavator for the discharge channel at POND A14).

The text states, "The portable pumps would be diesel Page 2-80 FJD2-5 and have a capacity of 20,000 gpm". A 20,000 gpm pump is not portable. Is this statement correct?

FJD2-1

FJD2-2

Mr. Clyde Morris May 1, 2007 Page 2.

Page 2-115 PILOT CHANNELS: The information in this paragraph on FJD2-6 pilot channels is confusing, and perhaps not ecologically sound.

POND SF2 FIGURE 2-21 and FIGURE 2-22: POND SF2 is a 247 acre narrow pond with proposed bird nesting islands. The plan is to allow public access around a third of the pond. If this managed pond is to provide a bird nesting habitat, the trail should only be on the north side of the pond, and perhaps be only a seasonal trail.

Since funding for restoration is paramount, funds should be used first for flood protection and pond restoration. Creating new public access and recreation amenities may be considered when adequate funding is available.

FJD2-8

FJD2-7

Thank you for this opportunity to comment on the salt pond restoration project.

Sincerely yours, LON Open Janice Delfino

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

Response to Frank and Janice Delfino (2)

- FJD2-1: The Adaptive Management Plan and the "staircase" approach, as described in Section 2.3.3 through 2.3.5, and summarized in Section S.4, provide the guides to determine the appropriate ratio of restored tidal habitat and managed ponds. Figure ES-6, the "staircase" diagram, shows the Project progression from one phase to the next, and how each phase would be evaluated to determine whether it could proceed. The "staircase" approach, when coupled with the adaptive management decisions, allows for a range of outcomes between Alternatives B and C. The ultimate mix of tidal and managed pond habitats would be determined through adaptive management.
- FJD2-2: The commenter asks if construction of the new or wider levee base would be considered filling of wetlands and if mitigation would be required. The final alignment of the flood protection levees has not been determined at this time. The levee alignments would be determined during subsequent detailed design phases, and the exact alignment would determine specific impacts to existing wetlands. Where levees expand into existing jurisdictional wetlands, material would be required and wetlands may be filled. The actions are expected to be self-mitigating because levee creation would likely be coupled with the creation of a substantially larger area of wetland habitat within the tidally-restored ponds. Mitigation requirements, if any, would be determined during subsequent phases of the Project and would be presented in separate tiered EIS/R documents.
- FJD2-3: The statement in the EIS/R that the commenter is referring to refers to the All Tidal Restoration Alternative that was considered but rejected. It is assumed that sufficient salt panne habitat would not form within the restoring tidal marshes to support species that rely on high salinity ponds and salt flats, such as the federally-listed snowy plover. Salt panne habitat formation depends on complex conditions, including salinity, vegetation, peat accumulation, bacterial and diatom growth, and the location of the panne relative to tidal channels (Collins and Grossinger 2004). Although panne habitat formation is desirable, and tidal restoration phases could contain design elements to encourage panne formation, uncertainties exist regarding the artificial creation of panne habitat and natural salt panne formation. Restoring 100 percent of the SBSP Restoration Project Area to tidal habitat in the hope that sufficient panne habitat would form and persist to support the species that depend on these habitats is therefore not considered a reasonable alternative.

The commenter also asks if the Moseley Tract has been studied with respect to panne formation. Currently, no salt panne habitat exists within the Moseley Tract adjacent to Pond R1.

The commenter further suggests that the Moseley Tract and the Cargill Redwood City salt ponds should be included within the SBSP Restoration Project boundaries. The Moseley Tract is part of a separate marsh mitigation project by the City of San Jose and is therefore outside the Project boundaries. However, the long-term restoration plan for

the Ravenswood pond complex did take into account the proximity of the Moseley Tract habitats. Cargill is in the process of shifting salt-making operations from its Redwood City plant and adjacent Redwood City ponds to its Newark Plant and ponds. The Redwood City salt ponds were not part of the 2003 salt pond acquisition by CDFG and USFWS. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the Scope of the EIS/R.

FJD2-4: Comment acknowledged. Amphibious excavator has been added to the list of equipment. The EIS/R text has been modified as follows:

> Construction would require the use of the following types of <u>land-based</u> and/or amphibious equipment (other types of equipment may be used as <u>necessary</u>):

- FJD2-5: The portable pump mentioned in the EIS/R with respect to the long-term operations and maintenance of Alternative B and C could indeed be a 20,000 gpm pump. The capacity could range between 10,000 and 20,000 gpm and for the purpose of evaluating air quality impacts, the high end of the range was assumed. These portable pumps are typically mounted on a truck or tractor and are used to move a high volume of water. A pump of this type could be utilized to lower water levels in a pond that does not contain an electric pump, such as removing flood waters to improve habitat conditions after a large storm event.
- FJD2-6: Comment acknowledged and the EIS/R text in Chapter 2 for the Pond A6 Phase 1 action was clarified as shown below. Excavation of a pilot channel does disturb and/or remove a small area of existing fringe marsh outboard of the pond levee; however, pilot channels facilitate the creation of much larger areas of marsh within the breached pond and are therefore self mitigating. Failure to excavate a pilot channel could result in delayed sedimentation and marsh establishment within the breached pond.

Pilot channels. <u>Pilot channels are small excavated channels that facilitate</u> <u>tidal exchange between the breached pond and the adjacent slough. The</u> <u>required length of the pilot channel depends on the width of existing</u> <u>vegetated fringe marsh (if any) between the outboard pond levee and the</u> <u>slough.</u> <u>Pilot channels would be excavated from the outboard levee breaches</u> to the sloughs through the existing vegetated fringe marsh outboard of the <u>levee.</u> <u>Pilot channels would facilitate tidal exchange through the breaches by</u> <u>providing a small initial flow path and removing erosion resistant marsh</u> <u>vegetation so the channel can gradually enlarge through tidal scour.</u> The pilot channels would be narrower than the breach excavations in order to minimize impacts to existing marsh and minimize construction costs. <u>Pilot</u> <u>channels would be excavated from the outboard levee breaches to the sloughs</u> <u>through the existing vegetated fringe marsh outboard of the levee.</u> <u>Material</u> excavated from the pilot channels would either be used to construct the borrow ditch blocks, placed within the pond, or cast on the marsh adjacent to the pilot channels. The casted material would likely erode as the pilot channel banks scour.

- FJD2-7: The SBSP Restoration Project, as part of Phase 1, only proposes that an existing trail along the eastern edge where Pond SF2 meets the Bay be rehabilitated for safe and accessible public access. No other access is currently being proposed. As described in Chapter 2, Description of Alternatives, the proposed islands in Pond SF2 would be located at least 600 ft (180 m) from any focal areas for human use, such as viewing platforms and benches. The setback would ensure that nesting birds would not be adversely affected by recreational use.
- FJD2-8: The Project proponents intend to fund flood protection, pond restoration, and public access and recreation equally to meet the SBSP Restoration Project Objectives identified in the Executive Summary chapter of the EIS/R. Please also refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of Adaptive Management Plan funding.

Message-Id: <<u>20070420062016.AF3432400D99@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 23:20:16 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Tom Last Name: Orgain Organization: Street Address: 3014 Ulloa Street Street Address2: City: San Francisco State: CA Zip Code: 94116 Country: Email: torgain@pacbell.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: The project should continue to provide access for waterfowl hunting.

Response to Tom Orgain

TO-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420022418.EFC8C24005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 19:24:18 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Mike Last Name: Russell Organization: Street Address: 38 Evergreen Drive Street Address2: City: Lodi State: Ca Zip Code: 95242 Country: San Joaquin Email: mrussn13@hotmail.com

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

I would like to see the south bay salt ponds continue to be open for legalized migratory waterfowl hunting. This is a great opportunity for wildlife and hunters/conservationists. Having such a large area retained within an urban area is a huge step min the right direction.

Mike Russell

Response to Mike Russell

MR-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420034637.08B5024005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 20:46:37 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: john Last Name: santin Organization: Street Address: 9781 Ellsmere Way Street Address2: City: Elk Grove State: CA Zip Code: 95757 Country: USA Email: <u>egluvdux@yahoo.com</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I feel it is very important to keep this area open to hunting. I as well as others need more places JS1-1 to be able to enjoy areas such as this with our families for years to come.

Thank you, John Santin

Response to John Santin

JS1-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

BW

Message-Id: <<u>20070420045456.766552400D97@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 21:54:56 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: BART Last Name: WILLIS Organization: Street Address: 28 PALM AVE Street Address2: City: MILLBRAE State: CA Zip Code: 94030 Country: USA Email: magpin@aol.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: Please keep Hunting open on as much area as possible . Thanks BART W. WILLIS BW-1

Response to Bart W. Willis

BW-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070419200618.F1FAC2400903@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 13:06:18 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Roy Last Name: Belletto Organization: Street Address: 2243 Sun Mor Ave. Street Address2: City: Mountain View State: CA Zip Code: 94040 Country: USA Email: rbelletto@sbcglobal.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

Maintaining portions of the South Bay Salt Ponds for hunting access is vital to the success of the recreational area as a whole. As a reminder, Federal Waterfowl Stamp Money and taxes on money spent by sportsmen and sportswomen on their sport are key components for the establishment and maintenance of the entire Refuge System.

Establishing and maintaining a portion of this project for the purpose of hunting will continue to convince sportsmen and sportswomen that their stamp money and purchases are being put to work as they should be.

Additionally, such projects will continue to convince sportsmen and sportswomen to financially support conservation efforts by such organizations as Ducks Unlimited, California Waterfowl Association, and The Audubon Society.

Finally, providing additional hunting opportunities in this area will be beneficial to the people of the Bay Area, the State and the Nation by providing much needed additional recreational avenues for our citizens.

Please ensure that hunting remains a major component and objective for this project.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

RB-1

Response to Roy Belletto

RB-1:Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420033624.2128024005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 20:36:24 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: larry Last Name: cates Organization: Street Address: 1157 fetzer lane Street Address2: City: oakley State: ca Zip Code: 94561 Country: usa Email: <u>cates1996@comcast.net</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: i would like to see the area opened up 2 waterfowl hunting and all other public activities that can be done on the property

Response to Larry Cates

LC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420035047.B3E4F24005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 20:50:47 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Doug Last Name: Croll Organization: Street Address: 986 Ina Dr. Street Address2: City: Alamo State: CA Zip Code: 94507 Country: Email: dougcroll@aol.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I am in favor of maintaining and improving the hunting areas provided. Too few areas remain for public access in our area, and this area provides for such access. Thanks for allowing input. Doug Croll

Response to Doug Croll

DC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

DF

Message-Id: <<u>20070420015034.8A3C82400D97@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 18:50:34 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: Douglas Last Name: Fernandez Organization: CWA/DU Street Address: 573 Parkridge Dr. Street Address2: City: Vacaville State: CA Zip Code: 95688 Country: Solano Email: Califduckdog@comcast.net

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment: Will hunters and other outdooors persons be able to still use this area? DF-1

Response to Douglas Fernandez

DF-1: Yes, hunters and other outdoors persons will be able to continue using the SBSP Restoration Area. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting. Message-Id: <<u>20070420032438.0BC8824005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 20:24:38 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Gabe Last Name: Garbarino Organization: Street Address: 1661 Forest Ave #31 Street Address2: City: Chico State: CA Zip Code: 95928 Country: US Email: ggarbarino@gmail.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: To whom it may concern,

I would like to voice my support for the continuation of hunter access at the salt ponds. I have many friends who have hunted with family in that area for a long time. It is very important that public hunting remains as an option. Public land which is open for hunting in California is becoming more and more scarce, and it is vital that we retain the ground that we currently have.

GG-1

Thank you,

Gabe Garbarino

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Gabe Garbarino

GG-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <20070419193231.920F12400903@mail.sfei.org> Date: Thu, 19 Apr 2007 12:32:31 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Jeremy Last Name: Gibbons Organization: Street Address: 392 A Nature Dr Street Address2: City: San Jose State: Ca Zip Code: 95123 Country: United States Email: jgibbons@gene.com

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

Hi.

I would just like to encourage the continued recreational access to the ponds the we waterfowl hunters were provided access to during the past two waterfowl seasons. The hunting access has made possible for me the introduction of my son to the family tradition of, and the introduction of a few of my friends to the pastime.

Also I would like to add that the waterfowl hunting community that utilizes the salt ponds has spent a lot of time and effort helping the refuge staff to improve the area for public use during the pilot and sophmore seasons.

regardless of the level of continued opportunity, I appreciate the work being done by the USFWS, Refuge staff and other organizations to return the ponds to natural, and the improvements Ive seen in the meantime as I have witnessed firsthand how much the wildlife has benifited in the past few years already- especially in waterfowl numbers in the south bay.

Thank you,

Jeremy Gibbons

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

JG2-1

Response to Jeremy Gibbons

JG2-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420025640.8BFF12400D6A@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 19:56:40 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: Steve Last Name: Marvier Organization: Street Address: 20 Sheila Ct. Street Address2: City: Novato State: Ca Zip Code: 94947 Country: USA Email: shmarvier@comcast.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: I'm writing to support the continuation of hunting at the South Bay Salt Ponds .

SM-1

Thank You,

Steve Marvier

Response to Steve Marvier

SM-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420064409.8BECB2400D99@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 23:44:09 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Michael Last Name: McGuire Organization: no affiliation Street Address: 136 1/2 29th St Street Address2: City: Hermosa beach, State: Ca Zip Code: 90254 Country: usa Email: <u>nflights@mac.com</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I would just like to voice my opinion that a hunting program should be included in the South Bay Salt Pond Restoration program. Hunting has been proven as a uesful and beneficial addition to the tools used in wildlife conservation. In addition to this, a local hunting venue for the residents and youth of the nearby suburban populations would provide access to many who might not otherwise be able to enjoy this outdoor activity.

MMC-1

Thank you for your consideration,

Michael McGuire

Response to Michael McGuire

MMC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

EN-1

Message-Id: <<u>20070420032630.80FCB24005C9@mail.sfei.org</u>> Date: Thu, 19 Apr 2007 20:26:30 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: erik Last Name: nelson Organization: Street Address: 1000 Talbot Ave. Street Address2: City: Albany State: CA Zip Code: 94706 Country: USA Email: <u>erik.nelson@cox.net</u>

Subject(s) of question or comment: EIR;

Question or Comment:

I am pleased to see a balance of uses including public hunting. I grew up hunting the bay. Great numbers of hours were spent with family in this pursuit. I am glad that future generations will have this priviledge. While numbers of hunters may be low, if you look at hours spent on the wildlife area, instead of merely visits (which I feel is a better indictor of use, and of course impact) I think you will find that hunting and fishing pursuits begin to have a far greater use index than other user groups. I sincerely hope that the hunting program which many enjoyed under Cargill will be perpetuated and in some way integrated into the mosaic of uses for this area.

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Erik Nelson

EN-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070420233440.1CF06214000A@mail.sfei.org</u>> Date: Fri, 20 Apr 2007 16:34:40 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Anthony Last Name: Naples Organization: Street Address: 505 Blackstone court Street Address2: City: Danville State: ca Zip Code: 94506 Country: usa Email: <u>yelrdog13@hotmail.com</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I think the hunting program is great and I enjoy the time that I have been able to use the refuge. I think work parties and improvement are what needs to be done for the next season. IE blind repairs. I do not like the idea of charging a one time fee (\$50) is the best way to obtain funds for the needed repairs. donations, from hunters, CWA, DU is one Idea.I hunted only once last season and if I had to pay a one time fee that big I may not have gone at all. Thank You and please conact me if you would like. Tony Naples 925 915-9351

AN-1

Response to Anthony Naples

AN-1: Comment acknowledged. This comment does not address the adequacy of the EIS/R.

Message-Id: <<u>20070420231829.C9AEC2140004@mail.sfei.org</u>> Date: Fri, 20 Apr 2007 16:18:29 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: David Last Name: Newsom Organization: Street Address: 1120 Woodland Dr. Street Address2: City: San Mateo State: CA Zip Code: 94402 Country: USA Email: toprodandgun@netscape.net

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: Please include a duck hunting program in the recreation plans of this area. There is little public land to hunt in the bay area, and hunters do more than anyone to augment duck populations and habitat. Sincerely, Dave Newsom

DN-1

Response to David Newsom

DN-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Name: LAINE THOM Mailing Address: CA 95002 150. Telephone No. (optional): 262-0349 e-mail (optional): Comments: Figure E5-46. Clternatine C; to Einshafed Cloto 4er 50 -2Z TL-1 W TL-2 Ý s in the Please use additional pages if necessary.

SUBMIT WALLEN COMMENCE (PUBLICATION DIT 4/17) DY FITTIFR.

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

TL

Response to Thomas A. Laine

- TL-1: As described in Chapter 2, Description of Alternatives, the Project would restore portions of the Project Area to tidal action. With restoration, it is possible that not all of the previously navigable channels may be available for navigation. Public boating may continue to be restricted/prohibited in the SBSP Restoration Project Area. However, hunting will continue to be available in the SBSP Restoration Project Area. The Project proponents appreciate the commenter's suggestions regarding Pond A3, and will consider this option in future phases of the Project.
- TL-2: Comment acknowledged. Many of the channels within the SBSP Restoration Project Area have experienced sediment deposition following leveeing of the adjacent marsh areas, particularly within the Alviso pond complex because the far South Bay has historically been a depositional environment. In the absence of tidal restoration, many of the slough channels will continue to silt in. Restoring a large percentage of the ponds in the Alviso pond complex to tidal action will increase the tidal flows in the slough channels, scouring the recently deposited sediments and enlarging the slough channels. The deeper more consolidated sediments and those layers with a higher critical shear stress for erosion (*e.g.*, clam shell layers) will be more resistant to erosion.

Message-Id: <<u>20070423161321.1F0262400D83@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 09:13:21 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: geoff Last Name: belyea Organization: Street Address: 403 dry creek lane Street Address2: City: winters State: ca Zip Code: 95694 Country: USA Email: gbelyea12@yahoo.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I strongly encourage hunting to be included in the EIR for the South Bay Salt pond restoration project. The South Bay has a strong tradition of waterfowl hunting and I encourage the continuation of that tradition.

GB-1

Response to Geoff Belyea

GB-1:Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
Response to Comments document for a discussion of hunting.

Message-Id: <20070423173429.0374B214000A@mail.sfei.org> Date: Mon, 23 Apr 2007 10:34:29 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: kevin Last Name: burroughs Organization: Street Address: 417 south washington st Street Address2: City: sonora State: ca Zip Code: 95370 Country: us Email: <u>kevsauto@pacbell.net</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

KB-1 I have hunted those ponds on and off for the last 30 years and would like to see hunting continue. It has been a on going use of this property for quite some time.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Kevin Burroughs

KB-1:Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070424033251.6595B2140005@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 20:32:51 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Stephanie Last Name: Case Organization: Street Address: 685 Roble Dr Street Address2: City: Morgan Hill State: CA Zip Code: 95037 Country: United States Email: hotshotsteph85@yahoo.com

Subject(s) of question or comment: Habitat; Other

Question or Comment:

I think that the salt ponds are a great access for hunting. I spent this past year hunting with my dad and it was an unbelievable experience. I cherish every moment that I am able to spend with my dad and these areas made that even easier to spend valuable time with him. I would love to see more areas opened up that would increase the opportunities to spend valuable time with my dad :) Thank you for all of the opportunities presented and I would love to see more areas available in the future.

SC-1

Response to Stephanie Case

SC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070424032842.5417B2400DB6@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 20:28:42 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Brahman Last Name: Conci Organization: N/A Private citizen Street Address: 1290 Alicante Dr Street Address2: City: Pacifica State: Ca Zip Code: 94044 Country: USA Email: jjzconci@sbcglobal.net

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

I am writing to urge the authority having jurisdiction to continue to alow public access, namely hunting and fishing within the South Bay Salt Ponds. Hunting is as big a part of the Bay's history as the bay itself. The Ohlone indians, the settlers that came to the area all hunted waterfowl and fished for substinence. Although continued hunting is not necessarily sustinence, it is part of this area heritage and history. It has been practiced quietly for many decades and I belive it can continue to be without having a negative impact on either the South Bay, it's residents or species migrating throgh. Please allow hunting to continue in earnest.

Thanks

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

BC-1

Response to Brahman Conci

BC-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

GD

Message-Id: <<u>20070423223616.F1DE4240071C@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 15:36:16 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Gregory Last Name: Damitz Organization: Street Address: 540 Elefa St Street Address2: City: Roseville State: Ca Zip Code: 95678 Country: usa Email: <u>drakeslayer@comcast.net</u>

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: Hunting is a viable use and should not only be continued but expanded.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

GD-1

Response to Gregory Damitz

GD-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070423200206.8D7F92140005@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 13:02:06 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Darcia Last Name: Eding Organization: Street Address: 1227 McIntosh Ct. Street Address2: City: Sunnyale State: CA Zip Code: 94087 Country: USA Email: Darciae@aol.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment: Dear Sir or Madam,

I am not certain if this is the correct manner to provide input on a recreational use which I would like to see included in the South Bay Salt Pond Restoration Project.

As a dog owner who has recently returned to the bay area I am finding a lack of areas where dogs are allowed to be off leash outside of established dog parks. I would like to see areas such as the City of San Diego has on Fiesta Island and Dog Beach. At both of these areas there is off leash water access for dogs combined with sufficient walking areas for people.

It may also be worth noting that the Fiesta Island areas is fenced off with an additional fenced area to protect some bird nesting areas.

Below is a link with some information about these sites.

http://www.sandiego.gov/park-and-recreation/general-info/bchdog1.shtml#DOG

I would be glad to provide additional input if desired.

Sincerely,

Darcia Eding

DE-1

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Darcia Eding

DE-1: The Project proponents appreciate the commenter's suggestion. As discussed for SBSP Impact 3.6-18, existing restrictions on dog access to the SBSP Restoration Project Area will remain in place. However, dogs are permitted in many of the parks surrounding the SBSP Restoration Project Area, as noted in Table 3.7-1 of Section 3.7, Recreation Resources. Local jurisdictions should be contacted to verify where and when dogs are permitted.

PL

Message-Id: <<u>20070423180512.DA1452140007@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 11:05:12 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Philip Last Name: Lantsberger Organization: Street Address: 9518 Triathlon Lane Street Address2: City: Elk Grove State: CA Zip Code: 95758 Country: USA Email: philip@sfgac.com

Subject(s) of question or comment: Habitat; Public Access and Recreation;

Question or Comment:

The South Bay Salt Pond Restoration is an important habitat project and provides habitat to many species including wintering waterfowl. This project can provide public access and recreation to numerous hunters and potentially a number of new hunters or disenfranchised hunters as it is close to a major urban area. Hunting is a viable recreation activity that contributes greatly to our society and to the conservation arena from the funds generated by taxes and fees on the sales of firearms, ammunition and sale of hunting licenses but also the significant dollars hunters donate for conservation. Hunting was allowed on this property before its acquisition, so it is a preexisting use of the property and should be continued after its acquisition.

Thank you for your consideration.

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

PL-1

Response to Philip Lantsberger

PL-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070423171859.EC0A12140005@mail.sfei.org</u>> Date: Mon, 23 Apr 2007 10:18:59 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Candy Last Name: Murphy Organization: Menlo School Street Address: 50 Valparaiso Avenue Street Address2: City: Atherton State: CA Zip Code: 94027 Country: USA Email: cmurphy@menloschool.org

Subject(s) of question or comment: Habitat;

Question or Comment:

What animals, plants, etc. were affected by the Salt Pond constructions in the SF Bay? In a sense were any invasive creatures destroyed providing a small enviormental benefit? Did the addition of salt ponds change the surrounding habitats in a way that would allow more invasive species to prosper? Has your team removed any invasive species of plants? What were the difficulties faced in doing so? What invasive species are causing the biggest issues? Thank you for your time taken to read this. If convenient, please answer these questions as soon as possible.

CM-1

Sincerely,

Brennon Williams 6th grade student at Menlo School

My group and I are researching invasive species for a school project. We hope you can give some light on the subject.

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Candy Murphy

- CM-1:
 - The EIS/R evaluates the potential effects of implementing the SBSP Restoration Project on the environment and does not described the potential effects on these resources from salt pond constructions in the past. Section 3.6 of the EIS/R specifically evaluates the potential impacts associated with biological resources, including plants and wildlife. SBSP Impacts 3.6-20 and 3.6-21 provide discussions of effects associated with colonization by non-native Spartina and its hybrids and Lepidium, respectively. Potential effects were considered less than significant under the long-term alternatives. The removal of the non-native cordgrass is addressed in Section 3.6.2 under the heading San Francisco Estuary Invasive Spartina Project.

Message-Id: <<u>20070427015749.17E2F2400DAC@mail.sfei.org</u>> Date: Thu, 26 Apr 2007 18:57:49 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Mark Last Name: Bell Organization: Street Address: 1856 Creek Drive Street Address2: City: San Jose State: ca Zip Code: 95125 Country: Email: mark.bell@ngc.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

There are approximatly 500+ sportspersons that were issued permits for access to the FSW hunt areas. Each season more hunters will need access to the pond areas. Public access need to include small powerd watercraft and walk-in access. I would like to see a public boat ramp for motorboat access to the open sloughs.

MBB-1

Thanks

Mark Bell

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Mark Bell

MBB-1: The Project proponents appreciate the commenter's suggestions. As noted in Chapter 2 and Section 3.7 of the EIS/R, public access, including small watercraft launches (motorized and non-motorized) and trails will be provided within the SBSP Restoration Project Area. Message-Id: <<u>20070427235532.960F22400D83@mail.sfei.org</u>> Date: Fri, 27 Apr 2007 16:55:32 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Jim Last Name: McGrath Organization: Street Address: 2301 Russell Street Street Address2: City: Berkeley State: CA Zip Code: 94705 Country: USA Email: macmcgrath@comcast.net

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment: Subject: Draft Environmental Impact Statement/Report for the South Bay Salt Pond Restoration Project

Dear Mr. Krause:

I have been involved in habitat restoration and public access for most of my adult life, and I am a strong proponent of restoration of the South Bay Salt Ponds. I was pleased to be asked to join in the Stakeholder Forum, and pleased that the Coastal Conservancy, which has both habitat restoration and public access missions, was the lead agency for planning. I had hoped that the role of the Conservancy would result in a balanced proposal that included both sufficient public access, and credible restoration proposals. In nearly every way, the planning process has been a model for restoration, particularly in establishing an adaptive management element that proposes a sound approach for dealing with uncertainties of restoration science, sediment budget, shoreline morphology, and methyl mercury. I wish that I could simply endorse the proposal and look forward to working with the project sponsors on implementation.

However, the public access portion of the document falls well short of the standard of excellence set in the remainder of the document, and particularly in the case of Eden Landing, renders the document inadequate as an EIR that fairly establishes all significant impacts and searches for feasible alternatives and mitigation measures that would avoid or minimize those significant impacts. In much of the document, final decisions on restoration configuration will be made at later stages, and the current document can be used programmatically, and the shortcomings âEURoecuredâEUR in project specific documents at later stages. However, in the case of the Eden Landing projects, the identification of significant impacts and mitigation measures is simply not sufficient to clear those projects at this time. The project sponsors face a decision about whether to continue to propose a public access system within the Eden Landing that falls below the Bay Trail recommendations, and thus has

significant impacts. In that case, the EIR must be revised to include the missing significant impacts, analysis of alternatives and mitigation measures, and then must be recirculated for public comment. Alternatively, the project sponsors may decide to fully mitigate the impacts on public

JM-1

access identified here, and then can proceed to finalize the document. The remainder of my letter will deal with this question more specifically.

THE FAILURE TO IMPLEMENT THE BAY TRAIL SPUR ALONG OLD ALAMEDA CREEK IS A SIGNIFICANT IMPACT NOT ACKNOWLEDGED IN THE EIR

Under CEQA, inconsistencies between established plans and project proposals are nearly always seen as significant impacts. Indeed, the EIR uses a EURoeConflict[s] with any applicable land use plan, policy, or regulation of an agency with jurisdiction...a EUR as a significance criteria on page 3.9-28. However, the discussion of recreational impacts in Section 3.7 does not mention the conflict between the adopted Bay Trail plan and the proposed public access facilities in the Eden Landing area. That shortcoming is difficult to fathom; the proposed location of the Bay Trail along Old Alameda Creek can readily be found on the on-line version of the Bay Trail maps, see http://www.abag.ca.gov/bayarea/baytrail/maps/bt_map4.html.

The proper identification of the conflict between the Bay Trail Plan and the project necessarily triggers a more detailed analysis of both alternatives and mitigation measures under CEQA. Since the restoration concepts for the Eden Landing segment are being set with the Phase I projects, this analysis cannot be deferred, nor can the programmatic aspects of the document be relied upon to approve the Eden Landing Phase I projects. Instead, a rigorous and quantitative analysis of the actual impacts that recreation might have on restored habitat, and alternative configurations of the restoration areas and public access mitigation measures must be considered. If significant impacts remain, the public must be given a meaningful opportunity to comment on both the impacts and the mitigation measures. This is normally done through recirculation of the document.

I would suggest that the ability to reach the margin of the Bay, as opposed to the margin of the restored wetlands, is an important criteria in considering mitigation of this conflict. As currently proposed, the restoration plan curtails any direct access to or along the margin of the Bay for nearly 5 miles, between the northern boundary of the project and the Alameda Flood Control Channel. Indeed, that channel already provides access along both levees, and the project would eliminate access along the northern levee. Thus, the project restricts existing access, rather than provides any new access to the Bay. I believe that the significant impacts of this conflict with the Bay Trail plan could be mitigated sufficiently by establishing a year-round trail at either the southern boundary of ponds E10 and E11, or at the Old Alameda Creek Channel.

NEITHER THE DISCUSSION OF BIOLOGICAL IMPACTS, NOR THE DISCUSSION OF RECREATION CONTAIN QUANTITATIVE ANALYSIS OF THE IMPACTS OF PUBLIC RECREATION ON HABITAT

It is acceptable to use qualitative assessment of impacts where no quantitative assessment can be made. However, there are readily available techniques to assess the potential impact of a recreational corridor on restored habitat that must be used in a program of this magnitude, particularly where public access is precluded, and may be curtailed in the future. In the case of potential future curtailment, the loss of promised public access areas may alter the impact of the project in ways that have significant, adverse impacts on public access. As noted above, under CEQA, the public is required to have an opportunity to comment both on all significant impacts, and on the suite of alternatives and mitigation measures that might eliminate or reduce those impacts. Further, the thresholds used to determine significance must be revealed.

JM-2

JM-3

It is clear that public access along the edge of a restored marsh will impair the value of the adjacent habitat somewhat. There is no simple answer in the literature as to what the area of impact may be, or conversely, what is a sufficient buffer to prevent impacts to an existing wetland. For example, the regulations of the Cape Cod Commission call for regulation of uses within 100 feet of resource areas, and within 200 feet of streams. The issue of what width buffer is sufficient is discussed in âEURoeTidal Wetlands Buffers Guidance DocumentâEUR, by the Connecticut Department of Environmental Protection. That document generally recommends a minimum width of 100 feet, but also acknowledges that substantial habitat values will exist within a 300 foot buffer. However, debate in the literature about the appropriate width of the buffer does not mean that quantitative analysis cannot be made, nor that the results may be important, even with some level of uncertainty.

To begin a discussion that quantifies the impacts of public access, and to assess where it might be necessary to restrict public access, the project sponsors should start with the common rule-of-thumb of 100 feet, and apply it to the different new public accessways that have been proposed. Instead, the document only includes an orange coloring, and a vague footnote that âEURoeDenotes trails that were identified during the alternatives development process as being of particular concern to permitting agencies for potential to disrupt habitat.âEUR This vague language is not even qualitative, and provides no information on what level of impact is judged to have significant impact, or in other ways impairs the feasibility of providing âEURoemaximum feasible public accessâEUR under the MacAteer-Petris Act, or might justify departing from the recommendations in the Bay Trail plan. To be sure, the expectations of what habitat might be expected within the area close to trails, and specific

information about the sensitivity of the species that might be expected in that area, could lead to an adjustment of this rule-of-thumb.

I tried to apply a 100 foot âEURoezone of impactâEUR to the proposed, and omitted, trails to make at least a cursory assessment of whether or not public access might significantly impair the value of the restored wetlands. For Eden landing, I identify about 42,000 feet of spine trail, 15,000 feet along Alameda County Flood Control Channel, a short segment of 6,000 feet along OAC, about 9,000 feet along pond E6, and a seasonal loop of about 27,000 feet. That represents an edge effect of about 260 acres in the complex of about 5,000 acres, using an impact width of 100 feet. Even a doubling or tripling of that impact would mean that public access would result in some diminution of value on about 10-15% of the restored habitat. Nothing in the document suggests that a restoration program that resulted in 85 to 95% of the optimum habitat values is unacceptable, and that therefore public access needs to be limited.

Looking at Eden Landing in greater detail supports the need for quantitative analysis that acknowledges the importance of the recommendations of the Bay Trail Plan, and then proceeds fairly to evaluate, quantitatively, the feasibility of that recommendation. When looking at the restoration concept proposed, that is, restoration of ponds E10-E13 as an important area for restoring snowy plover habitat, I can recognize the need to close the trail around E12 and E13 during breeding season. The area within those ponds only totals 230 acres, and year-round access with a 100 to 200 foot width of impact would substantially impact this area. However, that shouldnâEUR(tm)t preclude access just south of E10 and E11, which would represent about 8000 ft of trail and a disturbance area of 18 acres at 100 feet. This quantitative analysis leads to my suggestion that a year round trail south of E10 or E11 would not substantially diminish the restored values and thus could sufficiently mitigate

the impacts of the conflict with the Bay Trail Plan.

JM-3 continued

Similar reasoning, can also be applied to the OAC trail. If a trail to the edge of the Bay is provided along just the north side of OAC, it would represent an edge of less than 5,000 feet, or about 11 acres of edge disturbance at 100 feet width, a minor impact of disturbance on the 730 acres that would be restored. Again, quantitative analysis is needed to support restrictions to public access that, in the current example, appear to be entirely arbitrary. This location for a spur Bay Trail might be superior, in overall wildlife impact, to a trail adjacent to E10 and E1,1 and thus needs to be evaluated as an alternative.

I cannot readily tell from the document how and why E10-E13 were selected for the primary site within Eden Landing for the plover. In earlier discussion, the restoration objectives for the plover include increasing the population from 100 to 250 breeding pairs within the entire project area. However, there appear to be many choices about where best to locate that breeding habitat, including ponds E8A, E8X, and E9, which now provide plover habitat and which are proposed to be converted to tidal marsh. There may be feasibility limitations that restrict the options for restoring plover habitat within the Eden Landing area. If so, the proper way to discuss the matter is acknowledge the conflict between the Bay Trail Plan and the restoration concept as a significant impact, and then proceed to discuss alternatives and mitigation measures in sufficient detail to allow the public to comment in a meaningful way on your conclusions. That simply has not been done.

I have emphasized Eden Landing in these comments because the Phase I projects for Eden Landing define the future restoration landscape here more than in the other areas. As such, decision are being made about the appropriate locations of what may be sensitive habitat with disregard for the Bay Plan proposal, and without adequate analysis of the feasibility of additional public access. Quantitative analysis on the edge impacts of public access needs to be completed for the entire salt ponds area. However, in Ravenswood and Alviso, the permanent restoration landscape is not being set by the Phase I projects, so this problem can be cured in later, project specific documentation.

ACCESS TO AND ALONG THE BAY DESERVES PROTECTION

In public access throughout the project area, access is generally provided along levees at the perimeter of the project area. To be sure, completion of the Bay Trail through the project area would be a major accomplishment, and it is clearly not feasible to have the Bay Trail continuously along the bayward margins of the project area. However, relocating existing, or proposed, trail segments from the Bayfront to the urban edge is not mitigation in kind. In recreation, there is a human tendency to seek the furthest point, and to want to walk along the edge. Within the project area, existing access to the Bay is proposed to be restricted at the Alameda Flood Control Channel, along the perimeter of R1 and the bayward edge of SF2 in Ravenswood, and in the Alviso area by eliminating a loop trail. The EIR does not quantify the magnitude of these impacts, nor include any discussion of the qualitative differences between the access that is removed and the new access. It appears

that the restoration of R1 and R2 would eliminate about 3.8 miles of trail, and the trail at SF2 appears to be about 4200 feet in length. I would note that the Ravenswood access program, if implemented, would provide access to the Bay margins at three different points within a relatively short distance. While these access points might be a diminution of access along the Bay, they also represent a stark contrast to the Eden Landing area, where access is restricted for nearly five miles.

CONCLUSION

JM-3 continued

JM-4

The lack of quantitative analysis, and the omission of consideration of the Bay Trail evince a shortsightedness in the document as to the importance of public access, both under CEQA, and to gather the support needed to implement this ambitious and worthy program. I would not ask for public access to be provided where there is substantial information that shows that such access would have significant, adverse impacts. There are clearly areas for restoring nesting habitat for endangered species that should be protected from intrusion. But the document fails to use the available analytical tools to document any conflicts that may arise, and instead appears to rely on vague and unwritten guidance from âEURoethe permitting agencies.âEUR Such an approach is not consistent with the requirements of CEQA, and doesnâEUR(tm)t do justice to the magnificence of this program.

Very truly yours,

Jim McGrath

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

JM-5

Response to Jim McGrath

- JM-1: Early alternatives explored the idea of placing a trail along the levee adjacent to Old Alameda Creek as proposed in the Bay Trail Plan. The restoration plans propose a large expanse of tidal marsh through most of this area and to optimize restoration of the historic slough network and create a large uninterrupted expanse of marsh, a potion of the levees are proposed to be removed as are shown on the Alternatives B and C. In lieu of having the proposed trail proceed all the way to the Bay, a proposed shoreline access trail is planned in the northern portion of the Eden Landing pond complex to better complement the range of current factors affecting this complex including habitat restoration, flood control and public access. However, a shorter spur trail is proposed in each of the Alternatives B and C which would still follow Old Alameda Creek and allow visitors to explore the old Union City salt works. In response to this comment Section 3.2 of the EIS/R has been revised to provide discussion about how the proposed public access and recreation plan conforms to local and regional plans including the Bay Trail Plan.
- JM-2: See the response to Comment JM-1 above.
- JM-3: Quantitative analysis of public access and recreation impacts on wildlife is not provided in the EIS/R. This will be considered under the Phase 1 applied studies. Please refer to Appendix D, Adaptive Management Plan.

Please refer to the response to Comment CCCR-4 for a discussion of recreation-oriented impacts on wildlife and thresholds of significance for this issue area. Please also refer to the responses to Comments CCCR-5, 6, and 7 as well as Section 2.1, Master Responses, of this Response to Comments document for a discussion of the adaptive management approach to recreation and public access and public access and impacts to wildlife.

- JM-4: Access to, or near, the edge of the Bay is provided for in several areas in the public access components of the Project; providing additional access would result in unacceptable levels of disturbance to sensitive habitats and species in one of the largest areas of contiguous tidal salt marsh to be restored by this Project. Providing increased access to the Bay edge in the Eden Landing pond complex would conflict with the habitat restoration and wildlife enhancement objectives of the Project.
- JM-5: See the response to Comment JM-1 above and Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

Message-Id: <<u>20070428162524.1EF792400DA5@mail.sfei.org</u>> Date: Sat, 28 Apr 2007 09:25:24 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Last Name: Organization: Street Address: Street Address2: City: San Mateo State: Ca Zip Code: Country: Email: sm Sugar red@yahoo.com

Subject(s) of question or comment: Public Access and Recreation;

Question or Comment:

I am a duck hunter and would like to continue hunting in the bay. I generally hunt in the sacramento valley but did enjoy the convienience of hunting somewhere so close to home. It was great to meet hunters that are local to the area. I've been looking forward to hunting there again next year.

ANON1-1

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

Response to Anonymous

ANON1-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070503050804.628772400DB6@mail.sfei.org</u>> Date: Wed, 2 May 2007 22:08:04 -0700 (PDT)

A question or comment has been submitted at <u>www.southbayrestoration.org</u>

First Name: Ross Last Name: Heitkamp Organization: Friends of Stevens Creek Trail Street Address: 2044 Carol Avenue Street Address2: City: Mountain View State: CA Zip Code: 94040-3809 Country: U.S.A. Email: ross@stevenscreek.org

Subject(s) of question or comment: EIR; Habitat; Public Access and Recreation;

Question or Comment:

I must commend you all on the fine job you have done already on preparing the draft EIR for the South Bay Salt Ponds, while in the same breath admitting that I still have not read it in its entirety. Pardon my last minute submission of comments, but I did want to have read as much as possible prior to submitting.

My primary concerns are for the opportunities that exist amidst the requisite work to deliberately establish the levy system in these areas.

I would like to make a plug for the restoration of the wetlands in this area, but given that the natural course of wetlands is for siltation and transition, this is not my highest priority. Also, regardless of the altruistic intent of doing such a restoration, the fact is that it would be a change and any change will negatively impact the existing wildlife.

So, my most urgent plea to you is for what you might consider the recreational enhancements through this region. As anyone well knows, the shortest distance around a circle is with the smallest radius. Thus, the shortest distance around the bay is closest to the bay. Down here at the southern end, the curvature is the greatest and, as such, the benefit of staying close to the bay has the greatest reward. And what better beneficiary of such efficiency than the self powered transportation group of walkers, hikers, bikers and rollerbladers.

Regardless of what alignment might be chosen, I would like to emphasize the importance of connecting segments of the Bay Trail together through the study regions. In particular, the connection around Moffett Field is desperately needed to connect Mountain View to one of the most "access challenged" regions in the entire south bay - Moffett Park. Just imagine how many commuters could utilize such a trail to get to their work by bike that are scared to death to navigate through the Mathilda/237/Java nightmare. As a former Juniper Networks employee, I know first hand. Every day sooner that this can be made to happen is a reduction in greenhouse gasses produced.

I have heard some concern about disruption to wildlife due to letting people pass through this area. I feel that these concerns are largely unfounded, but I do feel there will be a need to provide

RHE-2

RHE-1

adequate signage to alert people to proper conduct and that dogs not be allowed - as they already are not allowed in Shoreline Park.

Thank you again for the fine work you are doing to convert this land from its industrial use into something of greater benefit to the community.

Ross Heitkamp

If you have questions about this automatically-generated message, please email <u>sbrfeedback@sfei.org</u>

Response to Ross Heitkamp

- RHE-1: Comment acknowledged. This comment does not address the adequacy of the EIS/R.
- RHE-2: Comment acknowledged. No changes to the EIS/R are warranted.
- RHE-3: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of public access and impacts to wildlife.

74 Mizpah Street San Francisco, CA 94131

May 3, 2007

Mr. Clyde Morris US Fish and Wildlife Service

Dear Mr. Morris:

I have some serious concerns regarding the adequacy of the EIS/R for the South Bay Salt Pond Restoration Project. RG-1 First, the geographic scope is inadequate in that it does not even include consideration of the ponds in Newark.

Also, the adaptive management program assumes that changes that occur may not be the result of pond management activities; it appears more focused on external causes, such as happenings on the flyway, to explain potential problems.

Sincerely,

Ruth Gravanis

Response to Ruth Gravanis

RG-1: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the scope of the EIS/R.

RG-2: As noted in Section 2.3.1 of the EIS/R, adaptive management acknowledges that uncertainties exist in predicting how restoration actions affect important resources. As noted in Section 2.3.2 of the EIS/R, monitoring would be conducted as part of the Adaptive Management Plan to observe changes and determine whether they are a result of the SBSP Restoration Project or external factors. Several of the monitoring activities identified Section 2.3.2 and the adaptive management studies described in Section 2.3 focus on improving our understanding of ecosystem response to very specific restoration actions (e.g., foraging and nesting of birds in highly reconfigured ponds with intensive water management). One of the key purposes of the adaptive management plan is to use an improved understanding of ecosystem response to specific design features and pond management techniques so that future phases of Project implementation can be improved. At the same time, it is important to understand if observed changes in the ecosystem are a result of Project actions or external factors. If it is not clear whether the Project or external factors caused an adverse change, then additional studies would be conducted and/or management actions would be implemented to pinpoint the cause and to reduce adverse effects.

Forwarded by Clyde Morris/SFBAY/R1/FWS/DOI on 05/03/2007 02:16 PM

JLucas1099@aol.com To <u>Clyde_Morris@fws.gov</u> 05/03/2007 01:57 PM Subject SBSP DEIR/EIS - comments

Clyde Morris, USFWS Don Edwards San Francisco Bay National Wildlife Refuge 9500 thornton Ave., Newark, CA 94560

Dear Clyde,

Evaluation of this South Bay Salt Pond DEIR/EIS is a daunting proposition, which I have postponed too long.

There are four elements which I do feel are of paramount importance: ~ continuity of refugia vegetation and habitat around entire shore and/or uplands of South San Francisco Bay

 \sim management and design of salt pond restoration to protect seasonal wetlands and salinity of salt marshes

~ seasonal flood-up, circulation and dry back of marshes to coordinate with natural ecosystem life cycles, in consideration of California and BCDC species protection restrictions (ie for Clapper Rail, Salt Marsh Harvest Mouse, resident nesting and migratory waterfowl) and RWQCB water quality criteria;

 \sim management of vegetation on levees, in marshes and uplands to maximize foraging resources and refugia. for both resident and migratory wildlife.

The wildlife refuge is by its name and very nature intended to protect and nurture unique resources of wildlife, not only for residents of the Bay Area but for the Nation, even extending to the continent. Flood protection and recreation access can be planned in and around this resource to protect and expand its integrity, and in this mandate is the basic challenge to the proposed salt pond restoration plan.

If I was to detail initial deficiencies that I believe are in this DSEIR/EIS (though must submit disclaimer that it was very difficult for me to read report in hard copy in Mountain View Library under flickering florescent light or on a disc) it would be that basic element of geomorphology of South Bay and tributary streams seems to be omitted which is essential aspect of sediment supply, tidal prism action, and seasonal stream surges.

Rather than evaluation of seismic, seiche and sunami waves on South Bay levees it would be more generic to reference well documented degree of three-foot wave ride-up at end of South Bay due to wind and storm and barometric pressure fluctuations. An evaluation of El Nino stormwater runoff from rivers into exceptional high tides is also a critical issue. Alviso and downtown San Jose flood events came from watershed not Bay. LL1-1

LL1-2

LL1-3

Rather than cantilever (tier) the US COE super levee design for South Bay on the salt pond restoration plan, I feel it is imperative that US COE and Santa Clara Valley Water District establish design levels and distinct parameters that will be needed for basic controls of storm flood flows, given predicted sea level rise in Bay.

It would be my guess that ultimately canals, locks and pumps will be needed to get rivers over a super levee as is done in Holland. Until those expensive and drastic measures are needed, frontage channels that once extended around South Bay and are still in existance between Lockheed and Moffett Field and Sunnyvale treatment plant ponds, offer a practical and quite functional flood control method. Why I am particularly fond of this simple holdover from 19th century farmers is that they can sustain critical inboard seasonal wetlands.

Another important aspect to US COE super levee design would be height of levee, given estimated sea level rise. A high enough levee might have to be placed further out into Bay at end of Moffett Field Airfield runway and beyond Palo Alto Airport. This levee placement should be integrated into recreation circulation access as this will be the permanently maintained levee most suitable for year-round recreation use.

This super levee could then incorporate a more gradual outboard slope to support high calibre vegetation for foraging and upland refugia. I would refer restoration planners to Howard Shellhammer's studies on the Salt Marsh Harvest Mouse presence in the South Bay and its need for continuity of shoreline salt marsh habitat. At blockage points, such as Stevens Creek, a vegetated wildlife bridge might even be put into levee design.

In regards marsh management I would refer salt pond restoration planners to the Suisun Marsh Managed Wetlands Existing Management Cycle and plan. At least one duck hunter who works within Suisun Marsh Resource Conservation District guidelines has made extensive studies on how best to grow grasses and marsh vegetation so migratory waterfowl gain sufficient body weight to enable them to complete trip north. Such criteria for managing marsh and wetlands need to be put into salt pond protocols as soon as possible.

If you don't mind, I will forward first segment of comment letter to you now as have unavoidable interruption.

Libby Lucas 174 Yerba Santa Ave. Los Altos, CA 94022 LL1-4

LL1-5

Response to Libby Lucas (1)

- LL1-1: Comment acknowledged. The restoration alternatives have been developed with these principles in mind.
- LL1-2: The Project proponents recognize that geomorphic analyses are an important component in evaluating the potential impacts and long-term success of the SBSP Restoration Project. A geomorphic assessment was performed for the South Bay (see the South Bay Geomorphic Assessment, Appendix I) that considered sediment supply and long-term bathymetric change trends within the Bay. A separate assessment evaluated geomorphic change associated with the South Bay tributaries (see the Tidal Channel Hydraulic Geometry Analyses, Appendix G). Additional geomorphic assessments were performed for the tidal restoration Phase 1 actions (refer to Eden Landing Ponds E8A, E9, and E8X Hydrodynamic Modeling and Geomorphic Analysis, Alviso Pond A8 Hydrodynamic Modeling and Geomorphic Analysis, Appendix G). Potential impacts to South Bay hydrodynamics and tidal prism were also evaluated in the Hydrodynamic Modeling Report (Appendix J). The modeling addressed both short term changes (without geomorphic changes such as tidal channel scour) and long term changes (including geomorphic changes such as tidal channel scour, pond sedimentation and marsh establishment). Levees along the creeks will be lowered, as funding allows, to more directly connect creek flows and sediment delivery within the tidally-restored ponds.
- LL1-3: The commenter suggests that rather than an evaluation of seismic, seiche and tsunamiinduced waves in the South Bay, it would be more appropriate to reference elevated Bay water levels due to wind, storm and barometric pressure fluctuations, and El Niño high stormwater runoff conditions. The EIS/R addresses the primary contributors of flooding in the South Bay: (1) abnormally high bay water levels and wind waves that allow wave runup to overtop levees, and (2) high bay water levels coincident with high rainfall runoff. Typically, Bay water levels are elevated due to storm conditions (low barometric pressure and wind). Both Bay water levels and rainfall runoff tend to be elevated during El Niño periods, increasing flood risks. Therefore, the coastal South Bay is a combined floodplain, with flood risks associated with both coastal and fluvial sources, and the coincident (joint or combined) occurrence of extreme coastal and fluvial conditions. Available information indicates that tsunamis and seiches do not contribute significantly to flood risk within the 100-year recurrence frequency considered in this study.
- LL1-4: Comment acknowledged. The Shoreline Study would develop its own alternatives for the coastal flood protection levee landward of the SBSP Restoration Project. The Shoreline Study does not have any alternatives yet and the need for flood-protection levees will be evaluated by this study once flood risks have been quantified, including flood risks arising from possible future restoration actions. It is expected that the SBSP Restoration Project and the Shoreline Study alternatives will be generally compatible given the consistency of the objectives of the two projects. The ultimate form and/or height of any potential future flood-protection levees would be determined during

subsequent project-level design. It is agreed that upland transition zones integrated into the flood protection levee would provide valuable upland refugia for sensitive species, and continuity of salt marsh habitat is preferred for the salt marsh harvest mouse. Both elements have been integrated into the long-term alternatives. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the relationship of the Shoreline Study and the SBSP Restoration Project.

LL1-5: Comment acknowledged. Both the restored tidal habitats and the managed ponds will serve a variety of species, not just ducks, and thus they need to be designed and/or managed to meet the needs of a number of species groups. The Suisun Marsh's managed wetlands are largely impounded wetlands, rather than fully tidal wetlands as are proposed in the SBSP Restoration Project Area. Whereas management of wetlands (*e.g.*, water and salinity levels) for ducks may be appropriate in the Suisun Marsh managed wetlands, no management (with the possible exception of invasive plant management) is expected to be needed after breaching to allow for the restoration of high-quality tidal marsh in the SBSP Restoration Project Area.

JLucas1099@aol.com To <u>Clyde_Morris@fws.gov</u> 05/03/2007 04:08 PM Subject South Bay Salt Pond DEIR/EIS

Clyde Morris, USFWS Don Edwards San Francisco Bay National Wildlife Refuge 9500 Thornton Ave., Newark, CA 94560

Dear Clyde,

To continue on comment and related concerns on South Bay Salt Pond DEIR/EIS, I seem to be salt pond upland marsh interface oriented at the moment but this is a critical aspect of effecting a naturally sustainable marsh ecosystem. Therefore it might be worthwhile to summarize existing conditions in a few communities.

The western shore of South Bay has highly representative examples of riverine wetlands interface with Bay sloughs in rapidly urbanizing floodprone areas.

~ City of Palo Alto's flood basin is cross-hatched on one DEIR/EIS map as candidate for marsh restoration. Please note that flood basin wetlands are already a mitigation marsh as mandated by US fish & Wildlife to compensate for City filling in large portion of Mayfield Slough for refuse disposal. Can provide documentation for this if desirable. Emily Renzel Marsh is a mitigation marsh for water quality control plant.

This flood basin is presently being used for Matadero, Barron and Adobe Creeks' outflow to Bay, with City of Mountain View additional pumped stormwater basin flows from Permanente Creek. Historically, and in El Nino storms, when San Francisquito Creek overbanks it flows back to historic Mayfield Slough floodbasin. This natural stream shift to historic slough alinement and outfall southward to end of San Francisco Bay, when wind and rising tide preclude Creek from flowing toward Golden Gate, can be observed in other creeks. It also gives more rationale for frontage channels devised by farmers which disperse storm runoff peaks from watershed to least impacted stream outfall. Inboard seasonal wetlands provide critical buffer for storm surge. Such geomorphology of South San Francisco Bay and its tributaries needs to be included in the DEIR/EIS.

~ City of Mountain View has diverted high streamflows to Stevens Creek on east and Adobe Creek on west, and its Shoreline Park provides a highground interface with saltponds and an active recreation staging area. It has mitigation wetlands along Stevens Creek and Permanente Creek and manages Crittenden Marsh.

~ City of Sunnyvale has treatment plant pond interface with Refuge ponds outboard of Moffett and Lockheed, and with inboard garbage parkland, and diked in upland and wetland complex adjacent to San Tomas Aquino Creek marsh and outfall to Bay. These wetlands connect to CalTrans Route #237 LL2-1

LL2-2

_L2

mitigation wetlands. This is a very foxy wetlands interface that seems to be functioning and probably needs documentation and review.

~ Guadalupe River, Alviso, and Grand Avenue inboard wetlands have equally complex hydrology and need to be documented by Santa Clara Valley Water District. There is CalTrans and VTA wetlands mitigation here.

~ Coyote Creek Salt Marsh Harvest Mouse mitigation marsh and riparian corridor is not clearly delineated on maps I observed so will have to submit documentation again for the record. Thought I did submit years ago to regulatory review but will do so again if you would be so kind to hold open deadline for me to get it in mail.

Actually I will assemble maps of all aforementioned mitigation wetlands sites that can find as believe they are part of critical regulatory tribal memory that should be a positive building block in restoration process.

I hope this lengthy review of wetlands and mitigation interface with salt pond restoration is admissable in your deliberations as feel continuity of marsh habitat around shoreline and with tributaries is integral to plan.

Sincerely,

Libby Lucas 174 Yerba Santa Ave., Los Altos, CA 94022 LL2-2 continued

Response to Libby Lucas (2)

LL2-1: The commenter states that the Palo Alto Flood Basin is cross-hatched on one EIS/R figure as a "candidate for marsh restoration." The lead agencies believe the commenter is referring to Figure 3.6-1. Figure 3.6-1 reflects existing conditions and does not identify the Palo Alto Flood Basin as a candidate for future tidal marsh restoration. As noted in the legend of Figure 3.6-1, the Palo Alto Flood Basin is designated as "Planned or Ongoing Tidal Restoration" and "Muted Tidal/Diked Marsh", both of which are appropriate designations for the existing marsh. Figure 3.6-1 is consistent with the text in Section 3.6.1 of the EIS/R, which states that "the Palo Alto Flood Control Basin provides freshwater, brackish, and salt marsh in a managed system that supports numerous waterbirds."

The commenter provides additional information regarding the historic and existing condition of the Palo Alto Flood Basin and suggest similar discussion and geomorphology of the South Bay and its tributaries be included in the EIS/R. Section 3.3.1 of the EIS/R, as well as the Hydrodynamics and Sediment Dynamics Existing Conditions Report and the Flood Management and Infrastructure Existing Conditions Report (both incorporated by reference to the EIS/R) provides existing condition information for the South Bay and its tributaries. Please refer to the response to Comment LL1-2 with respect to the geomorphic analyses performed for the Project.

LL2-2: The information regarding upland/salt pond interfaces in the South Bay and the restoration/public access opportunities presented at each of these locations is appreciated. These factors were considered in the development of the Project alternatives, as well as design elements such as upland transition zones.

Message-Id: <<u>20070504055127.D49432400D9F@mail.sfei.org</u>> Date: Thu, 3 May 2007 22:51:27 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Scott Last Name: Demers Organization: Humboldt State University Street Address: 372 4th St. Street Address2: Apt. B City: Arcata State: CA Zip Code: 95521 Country: USA Email: sad29@humboldt.edu

Subject(s) of question or comment: EIR; Habitat;

Question or Comment:

I would like to commend you for putting together such a thorough and detailed environmental impact document. The dedication that your team has given to the restoration process is laudable. I have a few questions regarding the impacts the tidal marsh restoration efforts will have on wintering and breeding waterbirds. I apologize in advance if the answers to my questions are within the document, as it is very lengthy and it is possible I overlooked the information.

I have some concerns about the significance criteria that will be used to determine if the project will have significant impacts on wintering shorebirds, western snowy plovers, and other breeding waterbirds (avocets, stilts, terns) in the South San Francisco Bay. I am curious why a three year period is used to determine if these species are in decline. Most shorebird and tern species, including those in the Bay Area, are long-lived birds that may not breed until 2-3 years of age and may skip breeding seasons when conditions are poor. It is possible that 3 years of relatively stable population levels may not be adequate to detect long-term problems caused by the decrease in salt pond acreage or other effects of the restoration process. In fact, population level analyses are often confounded by undetectable time lags that mask long-term population declines. Since stilts, avocets, and terns are such long-lived species, a 10% decline in population levels may not be detectabl

e for many years, even if there are several years of poor reproductive success.

As your document states, it is possible that a reduction in salt pond acreage may create higher breeding bird densities, which may increase disease and predation risk. The EIS/R indicates that predator control will be an option if large-scale depredation occurs. It is likely that the largest predator threat is the California gull, especially if current gull breeding areas are inundated. Will the refuge be able to control gull numbers given that they are a California Species of Special Concern?

I am certain that you will be able to share insight regarding the issues and concerns that I raise in this letter. I appreciate the opportunity to comment on the document and look forward to seeing the progress of the restoration efforts in the near future.

Thank you, Scott Demers SD-1

SD-2

SD-3

Response to Scott Demers

SD-1: Comment acknowledged.

- SD-2: Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of wildlife significance thresholds and triggers.
- SD-3: Applied studies regarding the effects of California gulls on sensitive South Bay biota, the factors that affect gull use of the South Bay (such as availability of anthropogenic food supplies), and the effects and feasibility of gull management methods are being developed. The species' status as a California species of special concern, per se, would not preclude gull control efforts, if such control was found to be necessary to protect other sensitive species. However, no gull control that would reduce survivorship or productivity of California gulls will be implemented without intensive study of the need for gull control, the potential effects of gull control on statewide and continental California gull populations, and consideration of other alternatives.

South Bay Salt Pond Restoration Project NEPA/CEQA Draft EIS/R Comment Form

Name: SUSAN ROSELLI Mailing Address: 628 YENTURA AVE SAN MATEO CA 94403 Telephone No. (optional): e-mail (optional): e-mail (optional): Comments: 2 have been a duck hunter for many years 2 am excited about hunting the bay – My uncle and father did many years ago so it is a way of confirming My herituge to hunt where once did Supar Resell; 2
SAN MATEO CA 94403 Telephone No. (optional): e-mail (optional): Comments:
Telephone No. (optional): e-mail (optional): Comments:
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Sujan Koselli,

SUBMIT WRITTEN COMMENTS (POSTMARKED BY 4/23) BY EITHER:

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

SR

Response to Susan Roselli

SR-1: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Message-Id: <<u>20070511232801.19D712140004@mail.sfei.org</u>> Date: Fri, 11 May 2007 16:28:01 -0700 (PDT)

A question or comment has been submitted at www.southbayrestoration.org

First Name: Archana Last Name: Sudame Organization: Santa Clara University Street Address: Street Address2: City: State: CA Zip Code: Country: Email: archanasudame@gmail.com Subject(s) of question or comment: Other Question or Comment: In the last few months two articles in the S. J. Mercury News caught my attention. First on published on Jan. 26.2007 about the Risk of Rising Sea Water. "Underwater by 2100". This kind of rise would take away all the restored wetlands. The wetland restoration project would literally go down the drains. The second Article was in the Mar. 8. 2007 Mercury News and is titled as "Reclaiming 10 percent of lost acreage will take 50 years and 1 billion dollars"--Restoring Wetlands.

Has the probable water level rise been taken into consideration?

If you have questions about this automatically-generated message, please email sbrfeedback@sfei.org

AS-1

Response to Archana Sudame

AS-1: Please see the response to Comment NASA-6. In addition, please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of the impacts of sea level rise.

2.2.5 Comments from Public Meetings

Comments from public meetings and the responses to those comments are presented in this section.

South Bay Salt Pond Restoration Project NEPA/CEQA Draft EIS/R Comment Form

Name: Mike Neyers	
Mailing Address: 911 Ormonde Dr	
Mountain View, CA 94043	
Telephone No. (optional): 650/988-0443	
e-mail (optional): Mucyers @ SZCHRONULE, Con	
Comments:	
Please continue the excellent	 MM-1
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- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

MM

South Bay Salt Pond Restoration Project NEPA/CEQA Draft EIS/R Comment Form

Mailing Address: 911 Ormonone Dr Mountain View, CA 94043 Telephone No. (optional): 415/254-1457 cell 650/988-1443 e-mail (optional): Multiplers & SFCHRONICLE. com Comments: A note to Support John Kraus' Mangement of the waterfood hunting	Name: MIKE MEINERS			
Mountain View, CA 94043 Felephone No. (optional): 415/254-1459 cell 650/988-1443 -mail (optional): Mun eyers @ SFCHRONICLE. com Comments: A note to support Jehn Kraus' Mangement of the waterfood hunting program at Eden Landing. Limited hunting opportunities G-10 days per year works well! Min Min Mangen	Mailing Address:	are For		
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- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

South Bay Salt Pond Restoration Project NEPA/CEQA Draft EIS/R Comment Form

Name: Mailing Address NUSP 676 PA 9404 10ml ALIN Telephone No. (optional): lo e-mail (optional): FCHRONICLE, CON **Comments:** h9 Hund MM-4 15 MM-5⁻ a Not LIMIT 0 Very . Please use additional pages if necessary.

SUBMIT WRITTEN COMMENTS (POSTMARKED BY 4/23) BY EITHER:

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

Response to Mike Meyers

MM-1:	Comment acknowledged. Please refer to Section 2.1, Master Responses, of this
	Response to Comments document for a discussion of hunting.
MM-2:	Comment acknowledged. No changes to the EIS/R are warranted.

- MM-3: Comment acknowledged. This comment does not address the adequacy of the EIS/R.
- MM-4: Comment acknowledged. No changes to the EIS/R are warranted.
- MM-5: Comment acknowledged. No changes to the EIS/R are warranted.

South Bay Salt Pond Restoration Project NEPA/CEQA Draft EIS/R Comment Form

John Name: Rose Mailing Address: Are 628 entura San Matico Telephone No. (optional): 1878 S e-mail (optional): 2000 @ yahoo rose Sm COMMEN **Comments:** bv id 25 Sour d OU rde (\mathcal{C}) eek OVRV. -ttex Sía eeK \circ e e 0 -enable easier wor 10 X C - eSStorou JR-1 0 de Moch Wo MOV WHO - 91 -e .. than. 00 ridges ea Of lace eas · V/ UND DVC 07 sh Oldi ep Can 01 \mathcal{C} Â Usutis Ge. Store Simple Please use additional pages if necessary ୍ତ୍ରତ୍ୟ ପ JR-2 Q + V Same amount days open CUVV ently SUBMIT WRITTEN COMMENTS (POSTMARKED BY 4/23) BY EITHER: COVER) U.S. Postal Mail (fold this page in half, affix postage, mail);

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- Online at: http://www.southbayrestoration.org/EIR/

JR

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Don Edwards San Francisco Bay National Wildlife Refuge Clyde Morris, Refuge Manager 9500 Thornton Avenue

Newark, California 94560

Name: John Roselli
Mailing Address: 628 Ventura Are
San Moteo, CA 94403
Telephone No. (optional): (650) 574-18 28
e-mail (optional):
Comments:
Please keep hunting open
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a hunter and has said this
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- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

Name: John Rosell.	1
Mailing Address: 628 Ventura Ave	1
San Mateo CA 94803	
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e-mail (optional):	
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- Online at: http://www.southbayrestoration.org/EIR/

Response to John Roselli

- JR-1: The Project proponents appreciate the commenter's suggestions. There is a proposed bridge connection proposed between Ponds E6 and E6A, crossing Old Alameda Creek in Alternative B. The final location and design of any bridges in this vicinity will be determined in future phases of the Project and the commenter is encouraged to stayed involved in the Project to make the suggestions known at such time when this area undergoes detailed design.
- JR-2: Comment acknowledged. This comment does not address the adequacy of the EIS/R.
- JR-3: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.
- JR-4: Comment acknowledged. This comment does not address the adequacy of the EIS/R.

Name: Jeff Sicklestee)	
Mailing Address: 203 Spindnift Dr	
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Telephone No. (optional):	. •
e-mail (optional):	
	l .
Comments: Ravenswood	
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- U.S. Postal Mail (fold this page in half, affix postage, mail);
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- Online at: http://www.southbayrestoration.org/EIR/

JS2

Name: Jeff Sicklesteel	
Mailing Address: 703 Spindrift Dr	
SanJose, CA 95134	
Telephone No. (optional):	
e-mail (optional): chry300 sler@sbcglobal.net	JS2-4
Comments: What for the second to the second	
Comments: Waterfoul managment Eden Landin	IJ
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I prefer the quality of hunting	
vs- quantity of hunting days	· · · · · · · · · · · · · · · · · · ·
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be a good thing	
De or good proved	
more blind restoration might	JS2-6
be good	
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Please use additional pages if necessary.	

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

Response to Jeff Sicklesteel

JS2-1:	Comment acknowledged. As shown in Figures 2-4c, 2-5c, and 2-7c (also Figures ES-2c, ES-3c, and ES-4c), Pond R1 would change to a seasonal pond under Alternative A and tidal habitat under Alternatives B and C.
JS2-2:	Comment acknowledged. This comment expresses support for the SBSP Restoration Project Area and does not address the adequacy of the EIS/R.
JS2-3:	Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.
JS2-4:	Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.
JS2-5:	Comment acknowledged. The Project does not currently propose foot bridges at Eden Landing to increase walk-in access for hunting. However, hunting access will be maintained. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting. Also, please see response to JR-1.
JS2-6:	Comment acknowledged. This comment does not address the adequacy of the EIS/R.

LL3

LL3-3

	RE, HLUISO AR	Ē
	Name: LIBBY LUCAS	
	Mailing Address: 174 YERBA SANTA AUE	
	Los ALTOS CA 94022	
	Telephone No. (optional): 650 948-3552	
	e-mail (optional): TLUCAS 1099 Paolicom.	
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2	A BAY TRAIL ALONG NORTHERN CHANNEL AT NASA 3	7
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- Fax: 510/792-5828; or
- **Online at: http://www.southbayrestoration.org/EIR/**

OG NOT FEEL SUXO 60 ISLANDS IN PONDS IS NECESSARY - ISN'T THIS FILLING SIF. BAY?

Response to Libby Lucas

- LL3-1: Upland transition zones have been planned in certain areas of proposed tidal restoration; these proposed upland transition zones are depicted on Figures 2.5a-c and 2.7a-c (also Figures ES-3a-c and ES-4a-c).
- LL3-2: Please refer to the response to Comment NASA-4 for a discussion of Western Pond Turtle issues.
- LL3-3: The number of islands proposed in Ponds A16 and SF2 is large to provide nesting, foraging, and roosting habitat for large numbers of pond-associated birds. These islands comprise less than seven percent of the area of Ponds A16 and SF2.

Name: GRBSS $\in \mathcal{D}$ Mailing Address: 10 LUE CAROLYN 5125 Telephone No. (optional): e-mail (optional): (a) com hot mai eda **Comments:** TG2-1 was ┢ Mri uet Â Com <u>م م</u> C. TG2-2 Please use additional pages if necessary.

SUBMIT WRITTEN COMMENTS (POSTMARKED BY 4/23) BY EITHER:

- U.S. Postal Mail (fold this page in half, affix postage, mail);
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- Online at: http://www.southbayrestoration.org/EIR/

TG2

Response to Ted Gross

- TG2-1: It is not anticipated that any segments of the existing or proposed Bay Trail spine will be closed due to hunting at the Alviso pond complex. While hunters may utilize the proposed Bay Trail spine segment proposed at Alviso, for instance, this will be for access to blinds only and hunting is not permitted from this trail/levee. Hunting from ponds will be a significant distance away from the Bay Trail spine and it is not anticipated to become a conflict. However, if at any time it becomes a conflict whereby public health safety or welfare is threatened, then the land managers may opt to close segments of the trail during hunting season. These closures would be short term and of short duration and are not anticipated to limit public access such that "maximum feasible public access" would not be achieved.
- TG2-2: Comment acknowledged. This comment does not address the SBSP Restoration Project or the EIS/R.

Name: VICAMO HVGCTA NATO Mailing Address: OALCIAND. Telephone No. (optional): e-mail (optional): Comments: Haw CAN WE MAKE MESE MTUS. MUE REPUENT	
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SUBMIT WRITTEN COMMENTS (POSTMARKED BY 4/23) BY EITHER:

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

RH

Response to Ricardo Huerta ____

RH-1:

Comment acknowledged. As described in Section 1.5 of the EIS/R, public involvement is an integral part of the SBSP Restoration Project planning process. The Project proponents invite regional and local agencies, organizations, and interested public to participate in the development of the SBSP Restoration Project. Notice of the EIS/R has been circulated to public agencies, organizations, and interested individuals. The EIS/R is available for viewing online (<u>www.southbayrestoration.org</u>), at the USFWS Don Edwards San Francisco Bay National Wildlife Refuge in Fremont, the Corps's San Francisco District offices in San Francisco, SCVWD's administrative offices in San Jose, CDFG Region 3 offices in Napa, and seven libraries throughout the South Bay. The Project proponents strive to engage local communities to participate in the planning process. The impacts of the SBSP Restoration Project on people, communities, and the environment are identified in Chapters 3 and 4 of the EIS/R.

Name: ALVARADO DON Mailing Address: PALM HAVEN AVE 725 SAN JUSE. 95125 Ća Telephone No. (optional): 408 293 4125 e-mail (optional): donalvaradorabcelobal. no Comments: ИS tral impressed WV very 6 Wild like 's ഹ DA-1 CL. Do nteris ave m Norson propole mani encerno are I fic nocess round NRAN DA-2 M 241 DA-3 Hatmarking levers 3 insport DA-4 contra 100 σ nb 224 ÛĿ MA ive tos for cha. DUNING DA-5 t conl CURRE En aVVa Please use additional pages if necessary.

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- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

DA

Response to Don Alvarado

- DA-1: Comment acknowledged. This comment does not address the SBSP Restoration Project or the EIS/R.
- DA-2: The comment expresses support for hiking and cycling access year round. Both Alternatives B and C provide such access at different locations in the Project Area.
- DA-3: This comment expresses support for tidal restoration to improve wildlife breeding habitat.
- DA-4: This comment expresses support for predator management to benefit sensitive wildlife species. The Project has already begun investigating the effects of gulls on sensitive wildlife species in the South Bay; whether there is a need for management of gull populations and/or access to anthropogenic food sources and sensitive species' nesting areas; predator management options; and the potential effectiveness of various predator management options in controlling predators without adversely affecting target sensitive species. Regardless of the outcome of these initial investigations, the Project will continue to monitor the effects of, and numbers of, nesting gulls in the South Bay.
- DA-5: Comment acknowledged. Please refer to Section 2.1, Master Responses, of this Response to Comments document for a discussion of hunting.

Name:	
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- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

Response to Anonymous

ANON2-1: Comment acknowledged. This comment does not address the SBSP Restoration Project or the adequacy of the EIS/R.

MA **South Bay Salt Pond Restoration Project** NEPA/CEQA Draft EIS/R Comment Form Name: 45 Mailing Address: WARD, O RECE, H. Telephone No. (optional): 10 4400, COM e-mail (optional): Comments: PONNS OPEN TO THE HEN 10 PLE JOINA ENTER ZOI HORE LAEN THE F MA-1 CONCERN 0 OPE 70 VON C Ĕ. ESPONSE. Please use additional pages if necessary.

- U.S. Postal Mail (fold this page in half, affix postage, mail);
- Fax: 510/792-5828; or
- Online at: http://www.southbayrestoration.org/EIR/

Response to Maria L. Adas

MA-1: As noted in Sections 2.4.3 and 2.4.4 in Chapter 2 of the EIS/R, recreational facilities and public access would be offered at the Eden Landing pond complex under Alternatives B and C. Figures 2-5a and 2-7a (also Figures ES-3a and ES-4a) show the location of the proposed recreational features, which includes trails, kayak launch, and viewing areas. As shown, the facilities are concentrated in the vicinity of Ponds E11, E12, and E13.

The ELER Restoration Project is located immediately east of Ponds E12, E13, and E14. As described in Chapter 2 and Section 3.12 of the EIS/R, a staging area accommodating 58 vehicles is being built as part of the restoration plan for the 835-acre ELER Restoration Project. This lot, located in the northern portion of the site, would accommodate some of the expected users of the recreational facilities proposed at the Eden Landing pond complex under the SBSP Restoration Project. This area would also serve as the primary entrance to the Eden Landing pond complex.

The EIS/R acknowledges that because the demand for parking spaces from the new recreation facilities has not yet been determined, the adequacy of existing on-and off-site parking is not known, and parking impacts would be considered potentially significant (SBSP Impact 3.12-3 in Section 3.12 of the EIS/R). Subsequent environmental review would be conducted for all future phases of the Project to determine whether adequate parking would available for proposed facilities. Mitigation Measure 3.12-3 would require the landowners to coordinate with cities to design facilities with sufficient parking spaces to accommodate the projected increases in vehicles that access the site. Landowners will consider the need to locate parking facilities away from the Eden Shores Development.

3. **REFERENCES**

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A. REVISIONS TO THE EIS/R MADE BY THE LEAD AGENCIES

A.1 Introduction

This section identifies corrections/clarifications made to the Draft EIS/R by the lead agencies, USFWS and CDFG. These changes are different from those identified in the Response to Comments document, as they were initiated by the lead agencies and were not made in response to the issues raised by the commenters during the public review period.

Similar to the Response to Comments document, text revisions are indented and shown in <u>underline</u> and strikeout format. Text shown in underline format is new text added to the EIS/R. Text shown in strikeout format is text deleted from the EIS/R. Indented text that is presented in normal format (no underline or strikeout) is original text in the Draft EIS/R that will remain in the Final EIS/R and is shown in relation to the revisions for context only.

A.2 EIS/R Corrections and Clarifications Made by the Lead Agencies

A.2.1 General

The US Corps of Engineers has been removed as a lead agency to clarify that the South San Francisco Bay Shoreline Study is not part of the SBSP Restoration Project. However, the Corps remains a partner agency.

A preferred alternative has been identified for regulatory reasons. However, the ultimate configuration would be determined by the Project's adaptive management approach and be somewhere between Alternatives B and C. Please refer to Section S.6 in the Executive Summary of the EIS/R or Section 2.1, Master Responses, of this Response to Comments document for a discussion of the preferred alternative.

The treatment of sea level rise in the EIS/R has been revised for consistency. Estimates of expected sea level rise and its effects are described consistently and correctly throughout Chapters 3 and 4 of the Draft EIS/R. However, the treatment of sea level rise was not consistent in Sections 3.3, Hydrology, Flood Management and Infrastructure; 3.6, Biological Resources; and Chapter 4, Cumulative Impacts. The lead agencies have revised certain impacts in Chapters 3 and 4 to correct this inconsistency. Please see Section 2.1, Master Responses, of the Response to Comments document for more information.

A.2.2 Executive Summary

The legends of the long-term alternatives maps (Figures ES-2a, ES-2b, ES-2c, ES-3a, ES-3b, ES-3c, ES-4a, ES-4b, and ES-4c) have been revised to clarify flood management features.

A.2.2 Chapter 1

A new figure was added to Chapter 1 that shows the Refuge's Authorized Expansion Boundary and publicly-owned open space parcels within the Boundary (please see Figure 1-4).

A.2.3 Chapter 2

Section 2.2.3, Alternatives Considered But Eliminated from Detailed Study, includes a discussion of the Expanded Geographic Scope Alternative.

More information has been added to the Adaptive Management Summary Table regarding public access and recreation. Please refer to Table 2.3 and Section 2.5 in Chapter 2. In addition, an adaptive management staircase diagram for recreation and public access was added to Chapter 2 (see Figure 2-3b in Chapter 2).

The Phase 1 actions have been refined based on the additional design work that has been completed to date. Specifically, one-third of Pond SF2 would consist of snowy plover habitat and the Eden Landing Shoreline Trail has been moved to the south bank of Mt. Eden Creek. Please see Chapter 2 of the Final EIS/R for descriptions of the Phase 1 actions.

Text in Section 2.4.3, under the subheading Coordination with the Invasive Spartina Project, has been revised to include a set of best practices that the Project developed with the Invasive Spartina Project.

Section 2.4.5 provides additional discussion on Project operations and maintenance and related permits.

Text in Section 2.5.1, under the heading Recreation and Public Access, has been revised as follows:

The Phase 1 actions are subject to the laws and regulations of the land-owning agencies CDFG and USFWS as well as the Bay Conservation and Development Commission (BCDC) and other regulatory agencies, and the property rights of parties adjacent to or within the Project boundary (such as PG&E easements). For Phase 1 actions at the Alviso and Ravenswood pond complexes, USFWS would prepare a Compatibility Determination to ensure that the Phase 1 actions meet the National Wildlife Refuge System Improvement Act, which requires that public use be wildlife dependent compatible with the purposes of the Refuge. See Section 3.7, Recreation Resources, of this EIS/R for more information on regulatory requirements pertaining to Project recreation components.

The legends of Figures 2-4a, 2-4b, 2-4c, 2-5a, 2-5b, 2-5c, 2-6a, 2-6b, 2-6c, 2-7a, 2-7b, and 2-7c have been revised to clarify flood management features.

The existing levee around Pond A18 (outside the SBSP Restoration Project Area) has been extended as shown on Figures 2-4b, 2-5b, 2-6b, and 2-7b.

Ponds A4 and A18 have been identified as having separate planning processes in Figures 2-4b, 2-5b, 2-6b, and 2-7b.

The Shoreline Trail and viewing area within Eden Landing pond complex have moved from the north side of Mt. Eden Creek to the south side and the trail designation has changed from seasonal to year-round.

The legend of Figure 2-16a has been revised. The text "Armored notch (closed)" has been changed to "Armored Notch (open)." The text "two–way connection between A7-A8" has been removed.

A.2.4 Section 3.7

Text in Section 3.7.2, under the subheading US Fish and Wildlife Service, has been revised as follows:

These uses sometimes referred to as the "Big Six" or "Priority Uses" are: waterfowl hunting, fishing, wildlife observation, photography, environmental education, and interpretation.

A.2.5 Section 3.16

Several impacts have been revised to include updated information on PG&E activities. These clarifications resulted in revisions to the conclusions from Less than Significant to No Impact. Please see the discussions for Phase 1 Impact 3.16-2, for the Alviso Phase 1 No Action, Alviso Phase 1 actions, and Ravenswood Phase 1 actions.

A new mitigation measure has been included for SBSP Impact 3.16-8 to address potential impacts on existing railroad tracks in Pond A6 from Project implementation. This mitigation measure would reduce the level of significance from Potentially Significant to Less than Significant with Mitigation.