# 14.1 Introduction

This chapter contains the comments received on the SMP Draft EIS/EIR. Each letter has been assigned a unique code. Each comment within the letter also has been assigned a unique code, noted on the right margin. For example, the code "NMFS-5" indicates the fifth distinct comment (indicated by the "5") in the NMFS letter. The chapter is organized by presentation of each comment letter immediately followed by the responses to that letter. Table 14-1 summarizes the commenting party, comment letter signatory, and date of the comment letter.

**Table 14-1. List of Comment Letters** 

Code	Agency	Comment Letter Signatory, Date
Federal Agencies		
NMFS	National Marine Fisheries Service	Robert S. Hoffman, Assistant Regional Administrator for Habitat Conservation—December 21, 2010
NPS	National Park Service	Debbie Allen, Partnerships Programs, PWR—December 20, 2010
EPA	U.S. Environmental Protection Agency	Kathleen M. Goforth, Manager, Environmental Review Office, Communities and Ecosystem Division—January 13, 2011
State Agencies		
BCDC	San Francisco Bay Conservation and Development Commission	Jessica Davenport, Coastal Planner—December 29, 2010
DSC	Delta Stewardship Council	P. Joseph Grindstaff, Executive Officer—December 27, 2010
SWRCB	State Water Resources Control Board	Diane Riddle, Chief, Bay-Delta Unit—January 19, 2011
Regional and Local Agencies		
CCWD	Contra Costa Water District	Leah Orloff, Water Resources Manager—December 29, 2010
FSSD	Fairfield-Suisun Sewer District	Gregory G. Baatrup, Chief Operating Officer—December 30, 2010
JIRD	Joice Island Reclamation District	Leonard Stefanelli, President—December 28, 2010
RWQCB	Regional Water Quality Control Board, San Francisco Bay Region	Naomi Feger, Planning Program Manager—January 10, 2011
SC	Solano County, Department of Resources Management	Bill Emlen, Director of Resources Management—December 29, 2010
Non-Governmental Organizations		
CWA	California Waterfowl Association	Gregory S. Yarris, Vice President, Policy and Communications— December 28, 2010
DU	Ducks Unlimited	Mark Biddlecomb, Director, Western Region—December 23, 2010
Individuals		
GB	Individual	George Boero, Morrow Island Land Co. #702—January 17, 2011
JG	Individual	June Guidotti—December 22, 2010
RM	Individual	Robert T. Marks—November 18, 2010
RV	Individual	Roberto Valdez—December 29, 2010

# 14.2 Comments and Responses

NEPA and CEQA regulations direct the lead agencies to make a "good faith, reasoned analysis" in response to "significant environmental issues raised" in comments on a Draft EIS/EIR (see State CEQA Guidelines Section 15088(c); 40 CFR 1503.4). All public comments received during the comment periods are responded to in this Final EIS/EIR. Per CEQA and NEPA guidance, where there has been voluminous response, similar comments have been summarized and consolidated; however, all substantive issues raised in comments received on the Draft EIR/EIS are represented. This section contains Master Responses that address common comments received, and responses to individual comments received on the Draft EIS/EIR.

## 14.2.1 Master Responses

Some comments were made frequently, indicating common concerns among those submitting comments. Master Responses have been prepared for those topics that were raised in a number of comments from agencies, interested groups, and members of the public. Each Master Response allows a well-integrated response that addresses all facets of comments received.

- Master Response 1: Project-Specific Analysis
- Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR
- Master Response 3: Alternatives
- Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh
- Master Response 5: Inclusion of an Adaptive Management Plan
- Master Response 6: Significance of Wetland Conversion
- Master Response 7: Mitigation and Recovery Accounting

### 14.2.1.1 Master Response 1: Project-Specific Analysis

Commentors raised concerns about the detail of analysis in the EIS/EIR, how future projects would be analyzed, and how modeling of future restoration activities would be conducted.

The SMP EIS/EIR analyzes and discloses the potential impacts of future tidal restoration activities in the Marsh, assuming a typical approach that includes: property acquisition from willing sellers, interim management, pre-breach facility maintenance, any required levee improvements, breaching mechanisms, and projected transition to tidal habitat. Considerations for property acquisition are shown in Table 2-3. Additionally, sites would be selected based on the regional targets shown in Table 2-4. Together, these provide information about how tidal restoration may be implemented in the Marsh under the SMP. It is anticipated that the impacts of the tidal restoration projects are fully addressed in this EIS/EIR. In that case, the project proponent may rely on this EIS/EIR to comply with CEQA and/or NEPA. In instances where additional impacts or mitigation measures beyond the scope of this EIR/EIS may need to be disclosed, or if it is determined that the severity of an impact has increased substantially compared to what was described in this EIS/EIR, additional CEQA and/or NEPA compliance may be required. The determination of if and when this would be necessary is the responsibility of the implementing agency during project planning and design.

Modeling presented in the EIS/EIR relies on general regional assumptions about how restoration could be configured. For impacts related specifically to water quality and/or hydraulics, this EIS/EIR relied on the RMA Bay-Delta model. This model assumed approximately 7,000 acres of tidal restoration under the alternatives was in place. To model this potential change, RMA developed zones of areas where restoration may occur consistent with the regions shown in Figure 1-3. While the modeling looked at simultaneous restoration, the SMP would be implemented over a 30-year period and only portions of the total restoration would be completed at any one time, based on regulations and permit conditions. Figures 5-17 and 5-18 of Appendix A of this EIS/EIR show the general areas that were modeled as tidal restoration. The purpose of this modeling exercise was not to determine the effects of restoring specific areas but rather to present the comparative differences in regional areas of tidal restoration in the Marsh.

Additionally, this EIS/EIR relies on the best available information regarding water quality mechanisms related to DO, methylmercury, and other constituents. As described below under the Adaptive Management Plan Master Response, new information would be incorporated into subsequent project designs as the tidal restoration component of the SMP is implemented. As such, based on the current best available information, the EIS/EIR discloses the full range of potential water quality impacts related to tidal restoration under the alternatives.

Whether or not additional CEQA and/or NEPA analysis will be warranted with specific project approvals in the future, the EIS/EIR commits on page 2-19 that, "as part of each site-specific tidal restoration action, project proponents will use an accurate tidal hydraulics and salinity model (e.g., the RMA Bay-Delta model or other appropriate model) to simulate the proposed action to ensure that impacts on scour, changes in tidal stage, sedimentation, salinity, and other hydraulic processes do not exceed those described in this EIS/EIR." Additionally, the EIS/EIR provides site-selection considerations (in Table 2-3), guidance for designing and implementing tidal restoration, and targets for tidal restoration in each of the four regions shown in Figure 1-3. These design and implementation parameters provide the basis for assumptions related to the impacts described in this EIS/EIR, and tidal restoration projects that are implemented in accordance with these assumptions are not likely to require additional CEQA/NEPA disclosure. Page 2-46 provides an overview of the anticipated project-specific implementation of the SMP.

# **14.2.1.2** Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR

Commentors raised concerns about the existing managed wetland activities and operations and how their effects were addressed in the analysis.

The CEQA/NEPA baseline for comparison of impacts for this EIS/EIR is the environmental conditions, or setting, at the time of the NOP/NOI, and the analysis of impacts is based on the potential changes resulting from implementation of the alternatives compared to these conditions. The existing management activities are a component of the baseline, and therefore the current level of implementation of these activities is not analyzed as part of the project alternatives. However, the impacts of the proposed increase in magnitude for some of these activities, as well as the impacts of new activities (e.g., dredging), have been fully analyzed and disclosed in this EIS/EIR. For example, as described in the Wildlife section (6.3) and in the Environmental Commitments section of Chapter 2, many restrictions and minimization measures currently in place would continue to avoid and minimize effects on species that use the Marsh. Additionally, improved operation and maintenance

of managed wetlands and tidal restoration under the proposed project is expected to improve ecosystem conditions for many native Marsh species.

Similarly, the water quality analysis focuses on the potential changes to water quality that could occur with the new activities and increased frequency of currently implemented activities, compared to existing conditions. Many of the water quality issues in the Marsh are ongoing and are considered a component of the CEQA/NEPA existing conditions. They have largely been addressed through various permit processes and management regimes. The historical context of these efforts and their effectiveness are described in Section 5.2. Additionally, the SMP EIS/EIR includes environmental commitments for landowners to continue to implement applicable terms and conditions relative to operations of the managed wetlands.

Another component of the baseline is the existing landscape, which is approximately 50,750 acres of managed wetlands and 7,600 acres of tidal wetlands. Conversion of managed wetlands to tidal wetlands is a change in the landscape that is analyzed for each of the alternatives in the EIS/EIR. Relative to climate change, the EIS/EIR (in Chapter 2 and in Section 5.9) describes how this conversion would result in greater resiliency to sea level rise and other anticipated climate change factors by providing tidal wetland 'buffers'. As such, compared to the existing and no action conditions, the SMP EIS/EIR action alternatives would provide climate change adaptability.

ESA, CESA, and other regulations may rely on a different baseline and therefore may determine that the change resulting from SMP activities is greater than what was described in the EIS/EIR and would require mitigation. Additionally, the EIS/EIR was drafted in a manner that takes into account all of the various activities proposed in the SMP, so that some activities that could have impacts on tidal wetlands would be more than offset by the proposed tidal restoration. In these instances, no mitigation is required in the EIS/EIR. However, regulatory agencies may more explicitly describe the tidal restoration components that would be required specifically to mitigate impacts on resources under their jurisdiction in permits for the proposed project, such as the biological opinions.

#### **14.2.1.3** Master Response 3: Alternatives

Several comments received raised concerns about the range of alternatives evaluated in the EIS/EIR.

As described in Chapters 1 and 2, the impetus for developing the SMP was to implement the component of the ERP calling for restoration of 5,000 to 7,000 acres of tidal wetland restoration and 44,000 to 46,000 acres of managed wetland protection and enhancement. The stated goal of the Charter Group that was formed and tasked with the development of the SMP is to "Develop a regional plan that balances implementation of the CALFED Program, Suisun Marsh Preservation Agreement, and other management and tidal restoration programs within Suisun Marsh in a manner responsive to the concerns of stakeholders and based upon voluntary participation by private land owners." This goal provided the basis for establishing the SMP Objectives/Purposes. The SMP Principal Agencies completed the screening process, described on pages 2-3 through 2-6, to determine the reasonable range of alternatives that would be analyzed in detail in this EIR/EIS, as described in Chapter 2. The Proposed Project/Preferred Alternative is the magnitude of restoration called for in the CALFED ROD (Volume II: ERPP, Suisun Marsh/North San Francisco Bay Ecological Management Zone Vision, June 1999, pages 138 and 139) and is the alternative most likely to fully meet the goal and be feasible to implement.

As part of the screening process, the Principals reviewed the salinity modeling conducted for the SMP as well as other modeling results for other projects to determine the upper limit of tidal

restoration that could be implemented in the Marsh without affecting the ability to meet the SMPA and D-1641 salinity objectives. It was determined that above 9,000 acres of tidal restoration, western Marsh salinities were increasingly difficult to manage with the existing facilities and current water projects operational constraints available. Because maintenance and possible improvement of water quality as well as public and private land uses are objectives of the SMP, alternatives that would preclude the ability to meet the Revised SMPA and D-1641 salinity objectives for the Marsh were screened out. However, it is important to note that implementation of the SMP does not preclude additional tidal restoration from occurring in the Marsh. Rather, it provides a framework for implementation of tidal restoration. Entities desiring to implement additional tidal restoration are able to plan, analyze, and implement tidal restoration outside the assumptions of the SMP.

# 14.2.1.4 Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh

Commentors raised questions and concerns about how the SMP is related to other plans, policies, and projects that could affect the Marsh that are being implemented or in the planning process.

There are several other plans and policies in place or currently being developed that have the potential to affect the Marsh. This EIS/EIR describes its relationship to each of these plans on pages 1-18 through 1-27, and where relevant, assesses the cumulative impacts of these plans in conjunction with the implementation of the SMP. In general, comments focused primarily on the relationship to the Bay-Delta Conservation Plan (BDCP) and the Delta Plan, both of which are under development.

Table 14-2 outlines the status of the plans that commentors were most concerned about and the level of detail available about each plan at the time of this Final EIS/EIR.

Table 14-2. Status of Other Plans Affecting the Delta and Suisun Marsh

Plan	Status
Delta Plan	Currently under development
Bay Delta Conservation Plan	Currently under development
Draft Recovery Plan for Tidal Marsh Ecosystems for Northern and Central California	Draft released in February 2010
CVP and SWP Operations	In place; BOs in December 2008 (USFWS) and June 2009 (NMFS); currently being implemented
Delta Fish Restoration Plan	In place; adopted in October 2010
San Francisco Bay Plan	In place; adopted in 1969 and periodically revised

As shown in Table 14-2, the BDCP is under development, and detail about how it would affect the Suisun Marsh is limited. In general, the BDCP could affect the Suisun Marsh through changes in operations of the SWP and/or CVP that would affect water quality and flows in the Marsh as well as conversion of managed wetlands to tidal wetlands and other potential restoration actions. November 2010 draft information on the BDCP calls for tidal restoration of up to 75,000 acres, of which at least 7,000 acres will be in Suisun Marsh. A portion of these 7,000 acres (3,600 to 4,800 acres) would be restored tidal brackish emergent wetland natural community. The BDCP also includes the construction and operation of an isolated conveyance facility along the eastern boundary of the Delta. This new facility would have intakes that would be operated in conjunction

with the existing south Delta exports. This would result in a substantial shift in CVP/SWP operations that in turn could cause considerable changes to the Delta environment, including Suisun Marsh. The details of how the new conveyance system would be operated have not been developed, and therefore it is speculative to describe how the BDCP in its entirety would affect the Marsh. However, the cumulative analysis provided in this EIS/EIR attempts to describe the potential changes as they are currently understood. Overall, the restoration component as described in the November 2010 draft information is consistent with the SMP. Additional changes to the landscape through tidal restoration (beyond those analyzed in the SMP action alternatives) and/or changes in CVP/SWP operations and the construction and implementation of the new conveyance system will be the subject of separate environmental review depending on the final proposal. The SMP is a stand-alone land use plan for the Marsh and in no way precludes additional tidal restoration or encourages the implementation of tidal restoration and managed wetlands enhancements in the Marsh, which BDCP and other programs may choose to adopt.

In November 2009, the California Legislature enacted SBX7 1 to ensure statewide water supply reliability and ecosystem health for the Delta and Suisun Marsh. SBX7 1 became effective on February 3, 2010, and includes the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act) that requires development of a legally enforceable, comprehensive, long-term management plan for the Delta and Suisun Marsh, referred to as the Delta Plan. The Delta Plan will be a legally enforceable management plan for the Delta that will establish state policy related to the Delta and guide the actions of state and local agencies. Proposed projects that occur in whole or in part in the Delta ("covered actions," as defined in California Water Code Section 85057.5) must be consistent with the Delta Plan. As shown in Table 14-2, the Delta Plan is under development and is in its very early stages. In February 2011, the Delta Stewardship Council released the first version of four draft Delta Plans before it begins environmental review in summer 2011. In March 2011, a second draft was released. This first draft focuses primarily on the current conditions in the Delta and Marsh and presents key findings related to objectives in the Delta Reform Act and an overview of the kinds of strategies necessary to achieve those objectives. The second draft provides substantially more detail about the process that will be in place for projects funded or carried out by state or local agencies within the Delta and/or Suisun Marsh to comply with the Delta Plan. No specific tidal restoration or other goals are currently identified, other than the co-equal goals of water supply reliability and ecosystem restoration. Based on the information currently available, the SMP is consistent with the goals of the Delta Reform Act. As SMP activities subject to the Delta Plan are implemented (after the Delta Plan is adopted), the process for consistency determinations will be followed. In August of 2011 a fifth draft of the seven draft versions expected of the Delta Plan was released, as it continues to be reviewed and revised per stakeholder and agency comments.

The USFWS Draft Recovery Plan for Tidal Marsh Ecosystems for Northern and Central California (Draft Tidal Marsh Recovery Plan) was circulated in February 2010, and a final plan is expected to be adopted in fall 2011. This plan outlines an approach for tidal restoration throughout the Bay and Suisun Marsh. The regions shown in Figure 1-3 and the tidal restoration acreage targets shown in Table 2-4 are based on this draft plan, which outlines mechanisms to recover species and habitats that rely on tidal wetland habitats.

The USFWS Biological Opinion on the Coordinated Operations of the Central Valley Project (CVP) and State Water Project (SWP) and NMFS Biological Opinion on the Long-Term Operations of the Central Valley Project and State Water Project (U.S. Fish and Wildlife Service 2008; National Marine Fisheries Service 2009) (CVP/SWP Operations BOs) require the tidal restoration of 8,000 acres in

the Delta and Suisun Marsh. These BOs govern the operations of the CVP and SWP and currently are being implemented. The USFWS CVP/SWP Operations BO explicitly states that tidal restoration occurring in the Marsh must be done in a manner consistent with the SMP. The Incidental Take Permit (ITP) for longfin smelt (LFS) for the operations of the SWP also requires 800 acres of tidal restoration of LFS habitat. To implement these tidal restoration requirements, DWR and DFG signed a Fish Restoration Program Agreement in October 2010. This agreement outlines the approach for accomplishing the tidal restoration, and focuses primarily on areas outside of the Marsh (with the exception of Hill Slough). As tidal restoration proceeds in the Delta and San Francisco Bay, the focus may shift to the Suisun Marsh. DWR or others implementing tidal restoration to comply with the CVP/SWP Operations BOs and the LFS ITP may use the SMP as a framework for implementation of that tidal restoration.

The San Francisco Bay Plan (SFBP), adopted and implemented by the Bay Conservation and Development Commission (BCDC), includes policies related to management of the Bay's resources. The Suisun Marsh is within the jurisdiction of the SFBP, and the SMP would need to demonstrate consistency with it. Based on review of the SFBP, the Principals have determined that the tidal restoration component of the SMP is consistent with Major Plan Proposal 4 (Develop Waterfront Parks and Recreation Facilities) because it would allow increased public access in the Marsh. The SMP is consistent with Major Plan Proposal 6 (Maintain Wildlife Refuges in Diked Historic Baylands) because it would facilitate and improve the management of managed wetlands on DFG wildlife areas in the Marsh. The Principals will submit a consistency determination application to BCDC as part of the SMP planning process.

Regardless of if and how these other plans are implemented in the Marsh, the SMP is a stand-alone plan that may be used to implement components of these other plans or may be implemented completely separately from all other efforts. The SMP is intended to provide a framework for tidal restoration and managed wetland enhancement in the Marsh. As described above and in Chapter 1, the SMP does not preclude additional tidal restoration in the Marsh. Additionally, it does not involve any changes in SWP or CVP operations, including any potential BDCP-proposed conveyance.

## 14.2.1.5 Master Response 5: Inclusion of an Adaptive Management Plan

Commentors demonstrated interest in the content of the proposed Adaptive Management Plan (AMP).

The SMP AMP is provided as Appendix E, and is intended to serve two purposes: (1) to provide a feedback loop for assessing impacts described in this EIS/EIR and ensuring they do not exceed the intensity described in this EIS/EIR, and (2) to further expand the information about the Marsh and how tidal restoration can be most effective so that this information can be applied to subsequent tidal restoration activities.

Regarding the first purpose, the only impact identified in this EIS/EIR that relies on adaptive management to ensure it stays below the significance described is Impact FISH-33: Reduction in Benthic Macroinvertebrate Abundance as a Result of Dredging. This particular impact describes the thresholds of significance and commits to a Benthic Monitoring Program to ensure that dredging does not result in exceedance of this threshold. It also outlines the process for remedial actions should the impacts of dredging on benthic organisms approach the significance thresholds. This Benthic Monitoring Program will be implemented by SRCD and DFG in accordance with the USFWS and NMFS Biological Opinions.

Regarding the second purpose of the AMP, the AMP is intended to provide guidance for specific project proponents related to monitoring of tidal restoration areas and collecting information that would be useful in subsequent tidal restoration design and implementation. As described in the AMP, despite the extensive scientific information available, the SMP conceptual models identified a number of scientific uncertainties and knowledge data gaps that still exist. However, not all the uncertainties can be resolved before restoration starts. In fact, many data gaps can be addressed only by implementing restoration actions and learning from the results. Therefore, these uncertainties form the basis for potential monitoring that could apply to specific restoration projects. Each restoration project will be unique and have distinct questions appropriate for monitoring or additional scientific studies. All new information gathered will be combined with existing monitoring data for the Marsh and collected to formalize knowledge, develop expectations of future conditions and outcomes that can be tested by further monitoring, and assess the likelihood of outcomes. The Appendix of the AMP contains a list of uncertainties identified in the conceptual models that could be monitored as appropriate for specific tidal restoration projects. Examples of key uncertainties that could apply to restoration project modeling and provide information for adaptive management include:

- tidal restoration effects on waterfowl populations,
- regional waterfowl habitat availability and quality,
- producer population growth in newly restored tidal habitats,
- nutrient cycling in newly restored tidal habitats,
- zooplankton growth and availability in newly restored tidal habitats,
- fish habitat use and residence time in newly restored tidal habitats,
- carbon production with tidal restoration and potential for transport and trihalomethane production.
- burial or exposure of existing mercury deposits in the Marsh and reducing potential for methylmercury exposure and transport in tidal restoration site design, and
- effects of short-term pulses of methylmercury versus long-term annual concentrations.

These are a few examples of monitoring that could be implemented for tidal restoration projects under the SMP based on key uncertainties identified in the conceptual models. However, it is recognized that specific tidal restoration projects will have individual objectives and there may be other monitoring that is appropriate for them. Additional monitoring elements could include those developed for the Recovery Plan, the Bay Delta Conservation Plan Independent Science Advisors, or the Delta Stewardship Council. In addition, uncertainties not identified here could be realized during specific tidal restoration project design and through information learned from completed tidal restoration–project monitoring. Such information would be used to update the conceptual models and this AMP, as necessary. Tidal restoration project proponents will receive input from the Suisun Marsh Adaptive Management Advisory Team and Suisun Principals regarding project planning, design, and monitoring. Additionally, guidance is provided in Chapter 2 of this EIS/EIR related to selecting tidal restoration sites, preparing sites, selecting breach locations, and upgrading or constructing new exterior levees. Through monitoring of tidal restoration activities, this guidance can be improved upon.

The private and public managed wetlands in the Suisun Marsh are adaptively managed. All individually owned and DFG properties have management plans that were written as part of the Suisun Marsh Preservation Act. Additionally, SRCD assists the landowners, through the Water Managers program, in the implementation of the Individual Ownership Adaptive Management Plan (IOAMP). The IOAMP is not a parcel-specific plan but provides a general overview of management options with targeted desirable habitat outcomes in the context of each managed wetland unit's physical, environmental, and regulatory constraints and the landowner's fiscal limitations. Although this approach may not be scientifically documented through a detailed study design, there is a positive feedback loop, with midyear adjustments, and annual on-the-ground assessment of the landowners' success at achieving the objectives of desirable habitat quality and quantity. This is on-the-ground, real time adaptive management. The ever-changing environmental conditions of the Marsh directly influence annual management actions and resulting habitat conditions. Knowledge gained and applied over multiple years of experience and observation is shared with other landowners and the SRCD Water Managers to better inform future managed wetlands operational decisions.

Although not specifically a component of the AMP, tidal restoration occurring in the Marsh would need to consider all relevant available information in planning, analyzing, and implementing tidal restoration activities. Should the BDCP or other major changes in SWP/CVP or Delta operations occur, specific project proponents would need to consider those as part of the baseline and potential future conditions for tidal restoration projects. As described above under the Project-Specific Analysis Master Response, specific project proponents would need to conduct analyses to determine if and how the impacts of the specific tidal restoration activity differ from the impacts disclosed in this EIS/EIR and determine whether additional analysis and/or disclosure is necessary.

### 14.2.1.6 Master Response 6: Significance of Wetland Conversion

Commentors raised concerns about how impacts on managed wetlands and associated resources were determined to be less than significant.

The determination that the conversion of 5,000 to 7,000 acres of managed wetlands to tidal wetlands would be less than significant was based on observations of other tidal restoration areas as well as the following reasoning.

- Tidal restoration activities are anticipated to occur over a 30-year period. Additionally, the SMP includes regional targets for tidal restoration as shown in Table 2-4. This would ensure that tidal restoration is geographically spread throughout the Marsh. This spatial spread would allow tidal wetlands to establish in a way that limits the change in land uses adjacent to remaining managed wetlands.
- Each region in the SMP has a tidal restoration acreage target as shown in Table 2-4. In summary, under the Proposed Project (tidal restoration of 5,000 to 7,000 acres and enhancement of 44,000 to 46,000 acres of managed wetlands), resulting in approximately 13% of Region 1, 19% of Region 2, 18% of Region 3, and 9% of Region 4 being restored.
- The remaining 87%, 81%, 82%, and 91% of these regions would remain managed wetlands and would be provided the regulatory stability to improve operations and maintenance, in addition to increased funding under the SMPA and the ability to dredge materials from adjacent tidal sloughs. These activities allow landowners to better manage properties by providing the necessary resources and regulatory authorizations to improve flood and drain times on the

managed wetlands. The control over timing and height of water would allow for a greater variety of waterfowl and wildlife food production, increasing the current values. These increased food and cover values also will benefit multiple terrestrial species that depend on the managed wetlands. Absent the SMP, these enhancement components would not occur and as described on pages 2-8 through 2-11 (No Action Alternative), it is likely that managed wetland operations would nearly cease altogether for lack of permits to operate or maintain them.

• Tidal marsh provides benefits and values to a variety of species, including providing resting, foraging and breeding habitat for dabbling ducks (Goals Project 1999).

### 14.2.1.7 Master Response 7: Mitigation and Recovery Accounting

Commentors raised concerns about how mitigation accounting would work under the SMP and how this would relate to the timing of tidal restoration and implementation of managed wetland activities.

The SMP is intended to provide a framework for an approach to implementing the CALFED ROD ERP Stage 1 actions for the Suisun Marsh (described under Master Response 3: Alternatives). To accomplish this, the implementation strategy for the SMP, as outlined in the EIS/EIR, includes incremental tidal restoration goals to ensure that the tidal restoration proceeds in a timely manner and that any impacts related to managed wetland enhancement are mitigated as they occur. Overall, the impacts of the managed wetland activities that would be increased in frequency or would be new (i.e., dredging) would be mitigated by a relatively small portion of the total tidal restoration included in the Proposed Project (5,000 to 7,000 acres). (The EIS/EIR describes the limitations on these activities and the associated impacts.) The remainder is assumed to contribute to recovery of listed species that use the Marsh. (It is important to note that 2,500 acres of conservation areas already have been established to mitigate current/ongoing impacts of managed wetland operations and maintenance.) The exact acreage of tidal restoration required for specific impacts will depend on each regulatory agency's approach and jurisdiction. For example, NMFS is concerned primarily with impacts on fish, and mitigation of impacts on fish may require a different mitigation strategy than, for example, mitigation required by the RWQCB for impacts on water quality because of the nature of each agency's authority. As such, the EIS/EIR describes a mechanism for ensuring that tidal restoration occurs incrementally and requires that these 10-year incremental targets be met to allow managed wetland activities to proceed, and relies on the regulatory agencies to dictate how the tidal restoration or other mitigation would be implemented to meet their requirements. As described in the EIS/EIR, the implementation of the SMP meets the mitigation requirements of CEQA and NEPA, while also meeting the recovery objective of the SMP. The intention of completing one third of the restoration every 10 years is to ensure that restoration and managed wetland activities are implemented concurrently.

## 14.2.2 Federal Agencies

# 14.2.2.1 NMFS—National Marine Fisheries Service, Robert S. Hoffman, Assistant Regional Administrator for Habitat Conservation, December 21, 2009



Comment Letter NMFS

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region

501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

DEC 2 1 2010

In response, refer to: SWR/F/SWR3:KS

Richard J. Woodley Regional Resources Manager U.S. Bureau of Reclamation Mid-Pacific Regional Office 2800 Cottage Way Sacramento, California 95825-1898

Dear Mr. Woodley:

Thank you for the opportunity to provide comments on the Suisun Marsh Habitat Management, Preservation and Restoration Plan (Suisun Marsh Plan) Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) dated October 2010. As you know, the National Oceanic and Atmospheric Administration (NOAA's) National Marine Fisheries Service (NMFS) Habitat Conservation Division is a cooperating agency in the development of the DEIS/EIR. We have worked directly with the Bureau of Reclamation (BOR), U.S. Fish & Wildlife Service (USFWS), California Department of Water Resources (DWR), California Department of Fish & Game (CDFG) and other Suisun Marsh Charter agencies in the development of the Suisun Marsh Plan since before the 2003 scoping meetings.

NMFS' future involvement will also include the completion of consultations pursuant to the Endangered Species Act, Essential Fish Habitat provisions of the Magnuson-Stevens Fishery Conservation and Management Act, and Fish and Wildlife Coordination Act. During the consultation process, NMFS will evaluate effects of the proposed action on listed species and their critical habitat and to EFH. We understand the ESA biological assessment and EFH assessment needed for consultation are currently under development.

As a cooperating agency with jurisdiction and special expertise regarding the environmental impacts involved in the proposed Plan, NMFS offers the following comments on the October 2010 Suisun Marsh Plan DEIS/EIR.

 As stated in our letter to you dated August 14, 2008, within the context of the proposed action, NMFS supports the 5,000-7,000 acres of tidal restoration included in the preferred project alternative. However, this does not represent the upper limit for acres of tidal

NMFS-1



restoration supported by NMFS and potentially other participating Suisun Marsh Charter agencies. Rather, this range represents the acreage currently acceptable to local landowners who utilize managed wetlands for water fowl hunting and other purposes. NMFS-1 NMFS would support additional proposals to restore tidal wetland habitats in Suisun cont'd Marsh beyond 7,000 acres. Restoring additional acres of salt marsh habitat would contribute to important habitats and ecosystem functions within Suisun Marsh which sustain and support NMFS trust resources. 2) The DEIS/EIR states that with implementation of the proposed project, benefits to fish and wildlife from tidal restoration would compensate for impacts resulting from managed wetlands operations and contribute to recovery of listed species. While NMFS agrees with this concept from an ecological perspective, the DEIS/EIR should include a clear explanation of the legal mechanism for this compensation, given that wetland restoration NMFS-2 will likely occur through use of federal and state funds, in fact the DEIS/EIR references potential Bay Delta Conservation Plan funds, while managed wetland operations will be conducted primarily by private landowners 3) The DEIS/EIR states that restoration and managed wetlands operations would proceed simultaneously, and to track progress of restoration and managed wetlands activities, NMFS-3 implementation status reports would be submitted "no less frequently than every other year to CDFG, NMFS and USFWS." NMFS requests that status reports be submitted on a more frequent basis, preferably every year. 4) We have the additional page-specific comments to offer: a. Pg 2-46, Project Specific Implementation: The statement "The managed wetland NMFS-4 activities would be implemented by the SMPA Agencies as described for each activity..." should be corrected to clarify that private landowners and Reclamation Districts also would implement activities; b. Pg ES-3, Table ES-1: NMFS actions related to the Suisun Marsh Plan should read NMFS-5 "Issuance of Biological Opinion; Issuance of Essential Fish Habitat Conservation Recommendations"; c. Pg 1-4, Table 1-1: The column for NMFS' activities should include "EFH NMFS-6 Conservation Recommendations"; d. Pg 1-26, Relationship to the National Marine Fisheries Service and U.S. Fish and Wildlife Service Recovery Plans: The DEIS/DEIR should recognize that NMFS is currently working on a recovery plan for threatened green sturgeon; and e. Pg 10-16, Federal Requirements: Section should include Essential Fish Habitat NMFS-8 provisions of the Magnuson-Stevens Fishery Conservation and Management Act.

Thank you again for the opportunity to comment and be a cooperating agency on the development of the Suisun Marsh Plan DEIS/EIR. If you have any questions regarding this letter, please contact Mr. Steve Edmondson at (707) 575-6052 or Ms. Korie Schaeffer at (707) 575-6087. Assistant Regional Administrator For Habitat Conservation cc: Shelby Mendez, NMFS, Long Beach, California Dick Butler, NMFS, Santa Rosa, California Becky Victorine, Bureau of Reclamation, Sacramento, California Cay Goude, USFWS, Sacramento, California Scott Wilson, CDFG, Stockton, California

#### **Responses to Comment Letter NMFS**

#### NMFS-1

See Master Response 3: Alternatives.

#### NMFS-2

For those activities listed in Table 2-8 of the EIS/EIR, federal and/or state funds could be applied in the cost-sharing agreement of the Suisun Marsh Preservation Agreement (SMPA). The SMPA is an agreement between DWR and Reclamation and the landowners (as represented by SRCD) and DFG to mitigate the impacts on the Marsh related to CVP and SWP operations. As such, the funding associated with these activities is to meet CVP/SWP mitigation obligations, and these activities could require additional mitigation to offset the impacts of implementing the SMPA. For other activities not funded through the SMPA, the landowners would be responsible for implementing these activities and providing any necessary mitigation. The funding mechanism for this mitigation is not relevant to its being completed in compliance with CEQA, NEPA, ESA, CWA, or other regulatory requirements.

#### NMFS-3

Progress toward the implementation of regional tidal restoration targets and the managed wetland activities conducted each year will be submitted annually, as now described in Chapter 2.

#### NMFS-4

Added: "...including SRCD, which represents private landowners and reclamation districts in the Marsh"

#### NMFS-5

Table revised as suggested by comment.

#### NMFS-6

Table revised as suggested by comment.

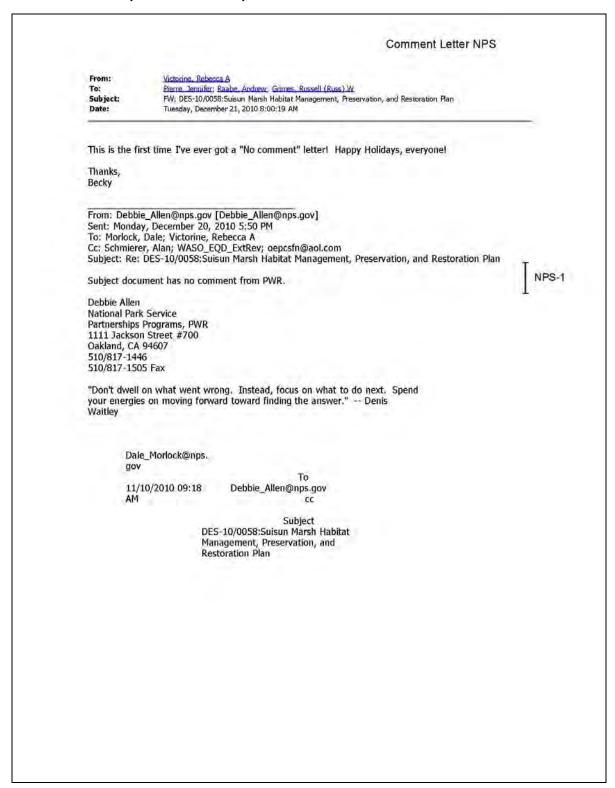
#### NMFS-7

Text revised per comment.

#### NMFS-8

Added section under federal requirements for Magnuson-Stevens Act.

# 14.2.2.2 NPS—National Park Service, Debbie Allen, Partnerships Programs, PWR, December 20, 2009



NPS External Affairs Program: ER2000 Program Email Instruction Sheet United States Department of the Interior National Park Service Environmental Quality Division 7333 W. Jefferson Avenue Lakewood, CO 80235-2017

> EIS/Related Document Review: Detail View http://er2000/detail.cfm?ernum=14859

**Document Information** 

Record #14859

**ER Document Number** 

DES-10/0058

Document Title

Suisun Marsh Habitat Management, Preservation, and

Restoration Plan

Location

State

County

California

Solano County

Document Type

Draft Environmental Impact Statement and Land and Resource

Management Plan

Doc. Classification

Federal Management Plan

Applicant

Bureau of Reclamation - US Fish & Wildlife Service

Web Review Address

http://www.usbr.gov/mp/nepa/nepa\_projdetails.cfm?Project\_ID=781

http://edocket.access.gpo.gov/2010/2010-27364.htm

**Document Reviewers** 

WASO Lead Reviewer

()

WASO Reviewers

Joe Carriero(2310), Jennifer Lee(2340), Kerry Moss(2360), Fred Sturniolo(2420), David Vana-Miller(2380), Carl Wang(2420), Tammy

Whittington(2310), Steven Elkinton(2220), Bill Commins(2200), Dale Morlock(2310), Tokey Boswell(2510), Dave Kreger(2033), Jeffrey Cross(2380), Bill Hansen(2380), Sharon Kliwinski(2380), Charlie Stockman(2510), John Wullschleger(2380)

Regional Lead Reviewer Alan Schmierer (PWR-O)

Regional Reviewers

Alan Schmierer(PWR-O), Debbie Allen(PWR-O), Sarah Bransom(HFC), Lee Kreutzer(PWR-O), Sharon Powell(PWR-S), Michael Taylor(PWR-O)

Cultural Lead Reviewer Jeffrey Durbin

Cultural Reviewers

Jeffrey Durbin

Action

Lead Bureau None Response Type None

Instructions

Comments sent directly to Applicant. NPS Lead consolidates comments, prepares and sends comment/no comment letter directly to Applicant with copy to EQD (WASO-2310), OEPC, and (if applicable) appropriate REO. See DI Remarks Section below for specifics.

#### **Topic Context**

The Bureau of Reclamation, Fish and Wildlife Service and the State of California Department of Fish and Game have made available for the Suisun Marsh Habitat Management, Preservation, and Restoration Plan (SMP) Draft EIS/EIR.

The SMP is a comprehensive 30-year plan designed to address various conflicts regarding use of resources within approximately 51,000 acres of the Suisun Marsh (Marsh), with the focus on achieving an acceptable multi-stakeholder approach to the restoration of tidal wetlands and the enhancement of managed wetlands and their functions.

This is the largest contiguous brackish water marsh remaining on the west coast of North America, the Marsh is a critical part of the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) estuary ecosystem.

#### DI Remarks

Reviewers: Please email comments to NPS Lead Alan Schmierer, PWR-O by December 17, 2010.

NPS Lead: Alan Schmierer, please consolidate NPS comments in memo format and send directly to BOR, Sacramento, CA, rvictorine@usbr.gov by December 28, 2010 with copy to: waso\_eqd\_extrev@nps.gov and oepcsfn@aol.com

Applicant Address for Alan Schmierer: Becky Victorine, Bureau of Reclamation, 2800 Cottage Way, Sacramento, CA 95825.

\* FAX: (510) 792-5828.

#### CONTACTS:

- \* Becky Victorine, Bureau of Reclamation, (916) 978-5035, rvictorine@usbr.gov
- \* Cay Goude, Fish and Wildlife Service, (916) 414-6600, cay\_goude@fws.gov

Email Comment Address rvictorine@usbr.gov

#### Workflow

Send Comments to Lead Office: PWR-O Send to: Alan Schmierer (PWR-O) by 12/17/10

Lead DOI Bureau: DUE TO: Lead Bureau by 12/28/10 DATE DUE OUT: 12/28/10

OEPC Memo to EQD: 11/10/10 Comments Due To Lead WASO Div: Comments Due Out to OEPC/Wash or Applicant: 12/28/10

Comments Due To Lead Region: 12/17/10

Comments Due in EQD: Comments Due to REO: Tracking Dates Rcvd. Region Comments: Comments Sent to OEPC: New Instructions; Recvd. Ext. Letter: Reg. Cmts. to Bureau: Cmts. Called In: Comments Sent to EQD Chief: Comment Letter/Memo Signed: Recvd, Extension: Sent Add. Info: Reg, Cmts. Listed: Rcvd. Bureau Cmts: Tracking Notes Reviewer Notes Documentation Document Last Modified: 11/10/2010 Complete: False Date Created: 11/10/2010 Date Last Email Sent:

### **Responses to Comment Letter NPS**

#### NPS-1

No response necessary.

# 14.2.2.3 EPA—U.S. Environmental Protection Agency, Kathleen M. Goforth, Manager, Environmental Review Office, Communities and Ecosystem Division, January 13, 2011



Comment Letter EPA

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

JAN 1 3 2011

Ms. Becky Victorine Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, MP-700 Sacramento, CA 95825

Subject:

Draft Environmental Impact Statement for the Suisun Marsh Habitat Management, Preservation, and Restoration Plan, Solano County, California [CEQ# 20100435]

Dear Ms. Victorine:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the above project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments are provided in accordance with our December 14, 2010 agreement that EPA provide our comments no later than January 14, 2011. We appreciate the additional time to conduct our review.

EPA supports the overall goals of the Suisun Marsh Plan (SMP) to restore tidal wetlands and to address conflicts regarding use of Marsh resources. The SMP represents a unique restoration opportunity to begin to return Suisun Bay and Marsh to its historic role as a large contiguous tidal marsh that serves as a nursery for countless species in the San Francisco Bay-Delta (Delta) ecosystem. Tidal wetlands have a central role in the functioning of a healthy estuarine ecosystem. Restoration of historical tidal marsh land will provide habitat for declining threatened and endangered species and help buffer Suisun Marsh from adverse effects of climate change and sea level rise.

Based on our review of the DEIS, we have rated the Proposed Project and environmental document as *Environmental Concerns – Insufficient Information* (EC-2). Please see the enclosed "Summary of EPA Rating Definitions." The DEIS presents a programmatic evaluation of a 30-year restoration plan concluding that the majority of potential adverse effects would be less-than-significant due to a commitment to adaptive management and environmental commitments. EPA is concerned that anticipated improvements and reduction of adverse effects may not be achieved especially given climate change, predicted sea level rise, increasing urban pressures, and the many other environmental challenges facing the Delta.

1

Printed on Recycled Paper

First developed in 1993 and revised in 2007, the San Francisco Estuary Partnership's regional planning document, the Comprehensive Conservation and Management Plan (CCMP), provides overarching guidance to resource agencies to expand the Delta wetland resource base through restoration (Objective WT-4). This guidance was refined by the Baylands Ecosystems Goals Report (Goals Report) identifying alternatives for wetlands restoration by region, including the Suisun Subregion. The Goals Report identifies the need for restoration of tidal marsh "... from about 13,000 acres to about 30,000 to 35,000 acres, while maintaining approximately 32,000 to 37,000 acres of diked wetlands."

None of the three alternatives considered in this DEIS provide a significant contribution to the tidal marsh restoration recommended by the authors of the Goals Report, a cooperative effort by local, state and federal agencies. EPA strongly recommends development of an alternative with tidal marsh restoration more in alignment with recommendations of the Goals Report. We recommend reliance on nonintrusive management methods, to the maximum extent possible, such as opening up wetland parcels to tidal action and allowing "natural processes" to reconfigure and restore the tidal marsh. At a minimum, we urge selection of Alternative C: Restoration of 7,000 to 9,000 acres of tidal restoration as the Preferred Alternative for implementation.

EPA-1

The SMP will guide near-term and future actions related to restoration of tidal wetlands and managed wetland activities. Environmental review of specific restoration projects would tier off of this programmatic DEIS. Given the 30-year planning period, EPA recommends the Final Environmental Impact Statement (FEIS) include a firm commitment to detailed project-specific environmental analysis for tidal restoration projects and major managed wetland activities (e.g., new interior levees, riprap, dredging program).

EPA-3

Of concern is the ability of the Proposed Project to significantly improve water quality, levee system integrity, and the ability to adapt to climate change. We recommend the FEIS provide more information and citations supporting DEIS assumptions and conclusions regarding effects and benefits of project activities. In particular, the FEIS should better substantiate the conclusion that restoration of more than 9,000 acres of restored tidal marsh would result in the inability to meet water quality, land use, and habitat objectives of the SMP or the Delta. The FEIS should include, in an appendix, a long-term, comprehensive monitoring, assessment, and reporting plan for the SMP.

g EPA-4
EPA-5
EPA-6

EPA appreciates the opportunity to provide input regarding the proposed restoration project. When the FEIS is released for public review, please send one hard copy and one CD to the address above (Mail Code: CED-2). If you have questions, please contact me at 415-972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at 415-972-3852 or fujii.laura@epa.gov.

<sup>1</sup> See link here: http://www.sfestuary.org/userfiles/ddocs/Habitat\_Goals.pdf

Sincerely, James Munson For:

Kathleen M. Goforth, Manager

Environmental Review Office (CED-2) Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions

**Detailed Comments** 

Cay Goude, US Fish and Wildlife Service Scott Wilson, California Dept. of Fish and Game

Jennifer Pierre, ICF International

#### SUMMARY OF EPA RATING DEFINITIONS\*

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

#### ENVIRONMENTAL IMPACT OF THE ACTION

#### "LO" (Lack of Objections)

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

#### "EC" (Environmental Concerns)

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

#### "EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that 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)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the 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 or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### "Category 2" (Insufficient Information)

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

#### "Category 3" (Inadequate)

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

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

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR SUISUN MARSH HABITAT MANAGEMENT, PRESERVATION, AND RESTORATION PLAN, SOLANO COUNTY, CA., JANUARY 13, 2011

#### **Preferred Alternative and DEIS Conclusions**

Support selection of Preferred Alternative and DEIS conclusions with concrete scientific-based data and references. Alternative A, Proposed Project, includes tidal restoration of 5,000 to 7,000 acres and increased managed wetlands activities on 44,000-46,000 acres. This alternative has been selected as the Preferred Alternative because it is consistent with the CALFED Bay-Delta Program Record of Decision (CALFED ROD), its ability to contribute to recovery of listed species, and its acceptability to Suisun Marsh landowners. However, consistency with the CALFED ROD and ecological superiority of this alternative is not clearly supported by information in the Draft Environmental Impact Statement (DEIS) or by current scientific data or citations. For example, the DEIS does not provide a convincing demonstration, supported by data and citations, that greater than 9,000 acres of tidal restoration would be unable to meet water quality, land use, habitat objectives for the Suisun Marsh Plan (SMP) or the Delta (p. 2-5).

#### Recommendations:

The Final Environmental Impact Statement (FEIS) should include specific scientific-based data, citations, and information from the CALFED ROD and other sources supporting the DEIS conclusion that 5,000 to7,000 acres of tidal restoration is consistent with the CALFED ROD and objectives for the Delta. Include information and data to demonstrate that greater than 9,000 acres of tidal restoration would be unable to meet water quality, land use, and habitat objectives for the SMP or Delta. State why the other alternatives are not consistent with the CALFED ROD or would be less able to meet Delta ecosystem goals.

The FEIS should provide the underlying rationale for each of the components that shaped the action alternatives. The FEIS should also include a description of current scientific research and findings regarding the appropriate balance of tidal and managed wetlands that would maximize ecosystem benefits for Suisun Marsh and the Delta.

# EPA-11

EPA-7

EPA-8

EPA-9

#### **Water Quality**

Provide in-depth analysis of water quality effects. Suisun Bay and Suisun Marsh Wetlands have been listed by EPA and the California State Water Resources Control Board for multiple pollutants. The Water Quality section of the DEIS does not appear to address all pollutants of concern, such as Polychlorinated Biphenyls (PCBs), selenium, and nutrients. As details of potential effects have not been provided for Alternatives B and C, EPA cannot ascertain how much more or less these alternatives address water quality impairment as compared to Alternative A or No Action.

<sup>&</sup>lt;sup>2</sup> For a complete list use this link: http://www.waterboards.ca.gov/water\_issues/programs/tmdl/docs/303dlists2006/epa/state\_usepa\_combined.pdf

#### Recommendation:

EPA requests a more in-depth analysis of potential water quality effects. At a minimum, the FEIS should provide a firm commitment to project-specific quantitative assessment and disclosure of potential water quality impacts.

EPA-12

Address in detail potential adverse impacts from, and alternatives to, the proposed dredging program. The proposed project includes yearly dredging of up to 100,000 cubic yards of material from existing tidal channels for levee improvement material. Proposed dredging activities would be tracked using geographic information systems (GIS) to ensure dredging does not occur more than once every 3 years in any specific location and would not remove material deeper than 4 feet per dredging cycle (p. 2-36). Nevertheless, EPA remains concerned that the proposed new dredging program may have adverse effects, especially indirect effects, on marsh hydrology and geomorphology (e.g. erosion), water quality, fish, and invertebrate species. In addition, the DEIS does not demonstrate whether alternative sources of material, including reuse of navigation-based dredge material, have been exhausted.

#### Recommendations:

The FEIS should more thoroughly evaluate other alternatives to the proposed dredging program. Project proponents should work with the Long-Term Management System for dredged material (LTMS) agencies to investigate opportunities for establishing a dredge material reuse site in the area to facilitate the use of dredge material in levee maintenance and restoration.

EPA-13

The FEIS should better substantiate the conclusion that any proposed dredging would not adversely affect existing habitat and restoration goals. For instance, provide information on the assumptions made, and proposed monitoring, testing, and adaptive management actions. Provide a summary of the science that indicates a net benefit would occur, such as a description of the effects of current dredging practices.

EPA-14

#### **Levee System Integrity**

Demonstrate that the Preferred Alternative would maintain and enhance levee system integrity. The poor condition of the Suisun Marsh levee system is well documented (p. ES-5, Section 5.4 Flood Control and Levee Stability). The DEIS states that due to "current restrictions preventing dredging from sloughs and constraints on importing materials, landowners in the Marsh have maintained their exterior levees using primarily material from ditch cleaning or pond bottom grading for more than a decade, a practice that increases subsidence and potentially weakens the existing levee foundations. These factors combined have exhausted the supply of levee maintenance material in the managed wetlands and have forced maintenance to be deferred on some exterior levees, increasing the risk of catastrophic flooding."

#### Recommendation:

The FEIS should provide scientifically-supported information demonstrating that the Preferred Alternative can maintain and enhance levee system integrity given the conditions described above. One approach would be to provide examples where managed

EPA-15

wetland activities or restoration of tidal marsh have provided a noticeable improvement in levee integrity.

EPA-15 cont'd

*Provide a more robust impact analysis of additional riprap.* EPA is concerned with the potential adverse effects of the proposed additional riprap. While riprap can provide a stabilizing benefit, it does not provide marsh habitat and should not be reflected as such (p. 5.4-7), unless supported by scientific data and evidence that such ecological benefits occur.

#### Recommendation:

The FEIS should include a more robust impact analysis of the proposed additional riprap. The claim that benches, berms, and erosion protection such as brush boxes, vegetation, and riprap would provide a range of marsh habitats and serve to protect the levee from wind and wave erosion should be substantiated with scientific data, demonstration studies, and other supporting information.

EPA-16

#### Climate Change

Clarify how the Preferred Alternative addresses climate change effects. The DEIS appears to discuss the threat of sea level rise without planning for it within the context of proposed activities.

#### Recommendation:

The FEIS should clarify how the Preferred Alternative addresses expected climate change impacts over its 30 year planning timeframe.

EPA-17

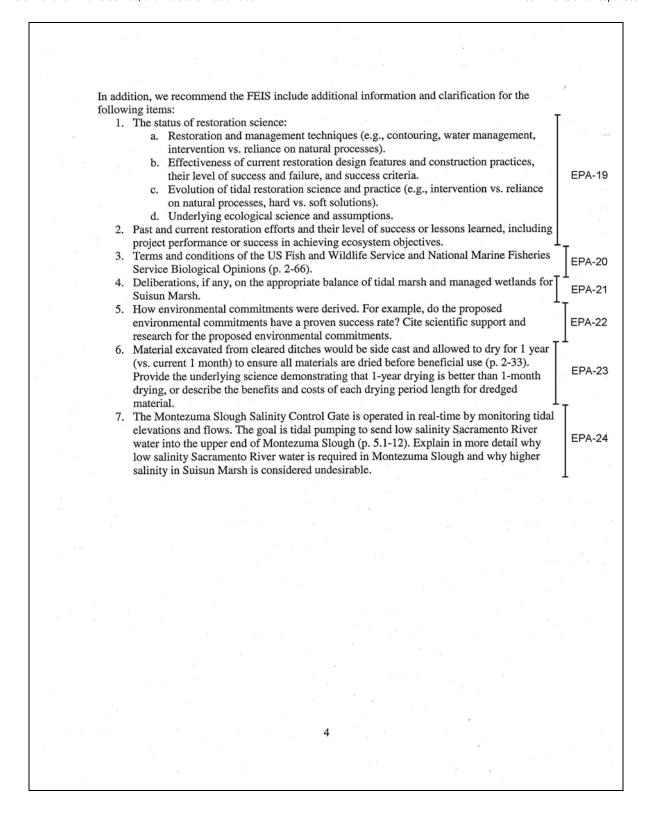
#### Clarification and Full Disclosure

The DEIS states that "The managed wetland activities would be implemented only if at least one third of the total restoration activities would be implemented in each of the 10-year increments. ... This would ensure that all actions would be implemented in a timeframe similar to that of the impacts and that restoration efforts would contribute toward recovery throughout the plan implementation period (p. ES-9)."

#### Recommendation:

The FEIS should provide a more detailed explanation of the rationale for the above statement regarding "at least one third of the total restoration activities would be implemented in each of the 10-year increments." For instance, does the above statement mean that the proposed restoration is required by the CALFED ROD and US Fish and Wildlife Service and National Marine Fisheries Service Biological Opinions (FWS/NMFS BOs) to offset anticipated adverse impacts of operations of the State Water Project and Central Valley Project?

EPA-18



#### **Responses to Comment Letter EPA**

#### EPA-1

The SMP is intended to provide a balanced approach to tidal restoration and managed wetland enhancement activities. While other programs, plans, and proposals, including the GOALS Report (1999), may recommend different amounts or approaches for tidal restoration, the SMP is intended to meet the CALFED Stage 1 ERP goals, which calls for restoration of 5,000 to 7,000 acres of tidal marsh and 44,000 to 46,000 acres of managed wetland enhancement. However, the SMP does not preclude additional restoration from being implemented in the Marsh, so restoration recommended in the GOALS Report or other plans, programs, or proposals still could occur. As part of the development of the SMP, more than 20 existing plans were reviewed for information pertinent to the Marsh and to help guide the alternative screening process. These plans are listed in Chapter 2 and include the South Bay Salt Ponds project, GOALS Report, and the Suisun Marsh Protection Plan. The SMP is also consistent with the Draft Tidal Marsh Recovery Plan, which is the most recent scientifically based plan for this area.

Also see Master Response4: Relationship to Other Plans Affecting the Delta and Suisun Marsh.

#### EPA-2

The restoration approach described in the SMP involves preparing sites prior to breaching and selecting breach locations and sizes in a way that facilitates the establishment of natural processes as efficiently and quickly as possible. Based on this design and implementation approach, minimal to no management is expected to be needed in the restored areas. Restoration of 5,000 to 7,000 acres is the preferred alternative because it best meets all of the objectives of the SMP.

#### EPA-3

See Master Response 1: Project-Specific Analysis.

#### EPA-4

See Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR.

#### EPA-5

See Master Response 3: Alternatives.

#### EPA-6

See Master Response 5: Inclusion of an Adaptive Management Plan.

#### EPA-7 through EPA-11

See Master Response 3: Alternatives.

#### EPA-12

See Master Response 1: Project-Specific Analysis.

#### **EPA-13**

For more than two decades, no dredging has been authorized in the Marsh, and landowners have attempted to supplement materials from within the managed wetland areas with materials imported from non-Marsh dredging and other projects. The process for obtaining these imported materials has been onerous, cost prohibitive, and testing requirements combined with extremely limited site access of loaded barges, the environmental impacts from the placement of material (slurry or clamshell), and the need to commit to the materials very quickly render most attempts to use these materials unsuccessful. However, these sources of material are considered ongoing and are part of the CEQA/NEPA baseline. The SMP does not preclude landowners from pursuing the use of imported materials. For approximately 30% of the exterior levees in the Marsh, dredging would not be permitted to avoid impacts to fringing tidal marsh habitats. However, the development of dredge reuse sites was not considered because it would affect existing wetlands and have environmental consequences related to permanent and/or temporary fill beyond what is described in the EIS/EIR.

#### **EPA-14**

See Master Response 5: Inclusion of an Adaptive Management Plan.

As described above for the response to EPA-13, dredging has not been authorized in the Marsh for more than two decades. Because the Marsh is a unique area and there are minimal data to support conclusions regarding the potential effects, the analysis of dredging impacts relies on available data related to benthic recovery (as cited in the Draft EIS/EIR); implementation of seasonal work windows; regional distribution of dredging activities associated with adjacent aquatic habitats, and minimization measures to avoid emergent vegetation and other sensitive areas such as tidal berms; and adaptive management will study, assess, and improve dredging techniques to ensure impacts are less than significant.

#### EPA-15

The levee integrity objective of the SMP would be achieved through the increased availability of levee maintenance materials through dredging and the use of brush boxes. Decreasing the amount of material taken from pond bottoms to maintain levees would minimize lowering of managed wetland land surface elevations and therefore would maintain elevations for potential future tidal restoration activities. The only tidal restoration recently completed in the Suisun Marsh was DWR's Blacklock site. The pre-breaching levee protections and improvements have been successful at maintaining new exterior levee integrity.

#### **EPA-16**

The SMP proposes to place no more than 2,000 linear feet of riprap on exterior levees over the 30-year implementation period (less than 0.02% of the levees per year). As described in Chapter 2, riprap would be used only in areas where tidal action would preclude the use of other bio-technical levee toe stabilization and erosion control methods. While this is a potential loss of shoreline habitat, the increase in tidal habitat gained through the restoration activities more than offsets the minor loss attributable to placement of riprap. Of the more than 200 miles (1,056,000 feet) of levees in the Marsh, only 2,000 linear feet of levees could be riprapped over the 30-year SMP implementation period (0.001%). Additionally, new riprap is limited to areas that would not support alternative bank protection measures as described in Chapter 2 of this EIS/EIR.

#### **EPA-17**

Section 5.9 provides an analysis of how the project would perform under predicted climate change scenarios as well as how the alternatives would affect climate change (i.e., contribute GHG emissions). Additionally, as described on page 2-47 of the EIS/EIR, even with higher rates of sea level rise than currently predicted by the IPCC and OPC, the tidally restored wetlands would be expected to accrete sediment and eventually support vegetated tidal marsh. In the meantime, they still would provide valuable intertidal or shallow open-water habitat for aquatic species. The managed wetland enhancement component of the Preferred Alternative would address climate change through improvements to levee stability and a reduction in the amount of material removed from managed wetland areas to achieve these levee stability improvements. Additionally, overall, the SMP is expected to reduce GHG emissions through the conversion of managed wetlands to tidal wetlands, and the development of more wetland/upland transition areas in the restored areas would provide an elevation gradient over which tidal wetland could shift upslope when tidal levels rise.

#### **EPA-18**

See Master Response 7: Mitigation and Accounting Master Response. The intention of completing one third of the restoration every 10 years of the SMP implementation period is to ensure that restoration goals and species recovery actions are being met concurrent with managed wetland goals.

#### **EPA-19**

Various documents were used for underlying scientific support (as shown on page 2-4), including the South Bay Salt Pond Project, the Draft Tidal Marsh Recovery Plan, the GOALS Report, and the conceptual models created specifically for the SMP. Only one site (DWR's Blacklock), which includes 70 acres of tidal marsh, has been actively restored in the Suisun Marsh in recent history. Initial site evolution and species response support the SMP restoration objective and strategies analyzed in this document.

#### **EPA-20**

The ESA consultation process is a related, but separate, process to the NEPA/CEQA process, which is the basis of this EIS/EIR. The BOs, once issued, will become part of the record for the SMP and will be made publicly available. However, because the SMP and this EIS/EIR were developed in close coordination with the USFWS and NMFS, it is expected that all of the terms and conditions that will be included in the BOs have been included in the EIS/EIR. As stated on page 2-66 of the Draft EIS/EIR, any terms and conditions will be followed by landowners implementing applicable managed wetland activities in the Marsh.

#### **EPA-21**

See Master Response 3: Alternatives.

#### EPA-22

The environmental commitments included in Chapter 2 of the EIS/EIR, like the rest of the SMP, were developed in coordination with active Marsh resource managers and experts and are based on experience in the Marsh and with other restoration projects; anticipated requirements from various

permitting agencies; existing and prior requirements of BOs, the Draft Tidal Marsh Recovery Plan, the SMP Conceptual Models, information and lessons learned from the South Bay Salt Ponds project; other permits for managed wetland activities; and standards typically imposed on projects of similar nature.

#### **EPA-23**

Material excavated from ditches is not "dredging" as defined by the project description of the SMP. Ditch cleaning is the maintenance activity to remove accumulated silt and vegetation that diminishes the efficient operation of water conveyance facilities and impairs wetland habitat conditions. The current Corps Regional General Permit (RGP) 3 states: "Material excavated from these ditches may be side cast and left adjacent to the ditch for up to one month, then must be used for an authorized activity (e.g. levee maintenance or grading) or removed to an area outside the Corps jurisdiction (i.e. crown of the levee, above Mean High Water (MHW) elevation." The SMP includes an extension of this time period from 1 month to 1 year that would address the issue that is sometimes encountered when the sidecast material is still too wet to handle, spread, or relocate in an efficient and beneficial manner.

#### **EPA-24**

The Montezuma Salinity Control Gate (MSCG) was constructed and is operated by DWR and Reclamation as part of the 1984 Plan of Protection, the Revised SMPA, and Water Rights Decisions 1485, 95-6, and 1641. The MSCG and the initial facilities are operated to ensure that a dependable water supply is maintained to mitigate adverse effects on the Suisun Marsh of the CVP and SWP and a portion of the adverse effects of other upstream diversions. When Delta outflow is not sufficient to produce water quality to meet the objective for fish and wildlife beneficial uses and the required eastern and western Suisun Marsh numeric salinity standards (October through May), the MSCG is operated to meet these required regulatory standards.

# 14.2.3 State Agencies

# 14.2.3.1 BCDC—San Francisco Bay Conservation and Development Commission, Jessica Davenport, Coastal Planner, December 29, 2010

Comment Letter BCDC



December 29, 2010

Becky Victorine Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825

SUBJECT: Comments on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan, Draft Environmental Impact Statement/Environmental Impact Report

Dear Ms. Victorine:

On November 1, 2010, the Commission received a Notice of Completion and Environmental Document Transmittal for the Suisun Marsh Habitat Management, Preservation, and Restoration Plan, Draft Environmental Impact Statement/Environmental Impact Report (SMP Draft EIS/EIR).

Although the San Francisco Bay Conservation and Development Commission (Commission) has not reviewed the Draft EIS/EIR, the following staff comments are based on the McAteer-Petris Act, the Suisun Marsh Preservation Act (Marsh Act), the Commission's San Francisco Bay Plan (Bay Plan), the Suisun Marsh Protection Plan (Marsh Plan), the Commission's federally-approved coastal management program for the San Francisco Bay, the federal Coastal Zone Management Act (CZMA), and the Suisun Resource Conservation District's (SRCD) certified local protection program (LPP) component for the Marsh.

The Commission staff supports the SMP's goal of balancing tidal wetland restoration with other habitat protection and enhancement efforts in the Marsh.

**Jurisdiction.** The Commission's permit jurisdiction includes all tidal areas of the Bay up to the line of mean high tide or, in areas of tidal wetlands, up to five feet above mean sea level, including all areas formerly subject to tidal action that have been filled since September 17, 1965; and the shoreline band that extends 100 feet inland from and parallel to the Commission's Bay jurisdiction. The Commission also has jurisdiction over certain managed wetlands adjacent to the Bay, salt ponds, and certain waterways, and the Suisun Marsh.

Commission permits are required for placement of fill, construction, dredging, and substantial changes in use within its jurisdiction. Permits are issued when the Commission finds proposed activities to be consistent with its laws and policies. In addition, federal actions (including plans), permits, projects, licenses and grants affecting the Commission's coastal jurisdiction are subject to review by the Commission, pursuant to the federal CZMA, for their consistency with the Commission's federally-approved coastal management program for the Bay.

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@bdd.ca.gov • www.bdd.ca.gov

Ms. Becky Victorine December 29, 2010 Page 2

The Marsh Act grants the Commission regulatory authority to issue marsh development permits in the primary management area of the Suisun Marsh, defined as water-covered areas, tidal marshes, diked wetlands, seasonal marshes, and certain lowland grasslands specified on the Marsh Plan Map. The Marsh Act also established a secondary management area composed principally of upland grasslands and cultivated lands, also specified on the Marsh Plan Map, to serve as a buffer between the primary management area and developed lands outside the Marsh. Within the secondary management area, local governments issue marsh development permits pursuant to an LPP certified by the Commission, and these permits can be appealed to the Commission.

From our review of the Draft EIS/EIR, the staff has identified the following issues within the Commission's Bay and Marsh jurisdictions that require further discussion in the Final EIS/EIR: consistency with the SRCD's certified LPP component, habitat protection and restoration, public access and recreation, dredging, minimizing harmful effects to the Bay, mitigation, water quality, fresh water inflow, climate change, and adaptive management.

SRCD's Certified LPP. Unlike the other components of the LPP, the SRCD's component applies to the primary area of the marsh where the Commission has permit authority. The SRCD component of the LPP is a "management program designed to preserve, protect and enhance the plant and wildlife communities within the primary area of the marsh, including, but not limited to, enforceable standards for diking, flooding, draining, filling and dredging of sloughs, managed wetlands, and marshes." Such activities do not require BCDC permits as long as they are consistent with the standards in the LPP. The SMP would include changes to maintenance activities to reduce their adverse environmental impacts, but would be inconsistent with the currently certified LPP. Therefore, the SRCD component of the LPP would need to be updated to enable the SRCD to implement maintenance activities without project-by-project permitting by BCDC.

BCDC-1

Habitat Protection and Restoration. Adoption of the preferred alternative in the Draft EIS/EIR would result in restoration of 5,000 to 7,000 acres of tidal marsh and protection and enhancement of 40,000 to 50,000 acres of managed wetlands. This goal is consistent with Commission's laws and policies, which call for protecting the diversity of habitats in the Suisun Marsh, restoring tidal habitats, and protecting fish, other aquatic organisms and wildlife, particularly threatened and endangered species and their habitats.

The Marsh Plan policies state, in part:

The diversity of habitats in the Suisun Marsh and surrounding upland areas should be preserved and enhanced wherever possible to maintain the unique wildlife resource....

Where feasible, historic marshes should be returned to wetland status, either as tidal marshes or managed wetlands. If, in the future, some of the managed wetlands are no longer needed for private waterfowl hunting, they should be restored to tidal or subtidal habitat, or retained as diked wetland habitat and enhanced and managed for the benefit of multiple species....

The Suisun Resource Conservation District should be empowered to improve and maintain exterior levee systems as well as other water control facilities on the privately owned managed wetlands within the primary management area.

BCDC-2

BCDC-3

BCDC-4

BCDC-5

Ms. Becky Victorine December 29, 2010 Page 3

In accordance with these policies, the staff supports the SMP's goals of enhancing seasonal and managed wetlands that provide essential wintering habitat for waterfowl of the Pacific Flyway, supporting tidal restoration, and supporting maintenance of Suisun Marsh levees.

Public Access and Recreation. The Commission's laws and policies call for providing a wide range of public access and recreational opportunities, consistent with public safety and the protection of natural resources. More specifically, the Recreation and Access Policies of the Marsh Act call for encouraging continued recreational use of privately-owned managed wetlands, i.e., duck hunting, as well as acquisition of land to provide for increased public recreational use, including fishing and nature study. The policies state that these areas should be located primarily on the outer portions of the Marsh near the population centers and easily accessible from existing roads. The policies further state that public agencies acquiring land in the Marsh for public access and recreational use should provide for a balance of recreational needs by expanding and diversifying opportunities for activities such as bird watching, picnicking, hiking, and nature study. The Final EIS/EIR should discuss opportunities for diversifying or increasing the range of recreational opportunities in the Marsh.

**Dredging.** The Commission's dredging policies state, in part, that dredging should be authorized when the Commission can find that "dredging is needed to serve a water-oriented use or other important public purpose, such as navigational safety" and "the siting and design of the project will result in the minimum dredging volume necessary for the project." The Commission's laws and policies also require that dredging and dredged material disposal be conducted in an environmentally and economically sound manner and that projects be designed to minimize and, if feasible, avoid any harmful impacts on fish, other aquatic organisms, wildlife and aquatic plants.

The Draft EIS/EIR states that dredging from sloughs to maintain managed wetland levees is currently restricted to protect threatened and endangered species, and describes a range of dredging practices that minimize impacts on listed species, with remaining impacts to be offset by habitat restoration. In addition, the Draft EIS/EIR states, "Dredging will be avoided within 200 feet of storm drain outfall and urban discharge locations, unless suitable preconstruction contaminant testing is conducted."

The Final EIS/EIR should note that the Commission must consult with the state and federal resource agencies, and not authorize any dredging resulting in a "taking" of a listed species unless the appropriate authorization has been issued by the resource agencies. The Commission is also authorized to require mitigation for adverse impacts of dredging that cannot be avoided or minimized. (See comments on mitigation below.) With respect to contaminant testing, the Final EIS/EIR should note that dredging within 200 feet of storm drain outfall and urban discharge locations will require the testing specified by the Dredged Material Management Office (DMMO), and project sponsors should consult with the DMMO for the need for evaluation and determination of suitability for placement on levees or other sites. The DMMO is operated by the agencies of the Long Term Management Strategy (LTMS) for the Placement of Dredged Material in the San Francisco Bay Region.

Minimize Harmful Effects to the Bay. The proposed plan would need to be consistent with all applicable Bay Plan policies. Therefore, the Final EIS/EIR should address other applicable Bay Plan policies, including a discussion about the Commission's regulatory requirements governing the protection of the Bay's natural resources, including fish, other aquatic organisms, and wildlife, and certain habitat needed for their protection, including tidal flats and marshes and subtidal areas. The Bay Plan policies regarding subtidal areas state, in part, that dredging projects in such areas should be thoroughly evaluated to determine the local and Bay-wide

BCDC-6

Ms. Becky Victorine December 29, 2010 Page 4

effects such projects would have on bathymetry, tidal hydrology and sediment movement, fish, other aquatic organisms and wildlife; aquatic plants; and the introduction and spread of invasive species. The Bay Plan policies on fish, other aquatic organisms, and wildlife, state that marshes, mudflats, and subtidal habitat should be "conserved, restored, and increased." According to the Bay Plan policies on tidal marshes and tidal flats, and subtidal areas, all projects subject to Commission consideration should also be sited and designed to minimize or avoid adverse resource impacts at these areas. Furthermore, the Commission must consult with and give appropriate consideration to the state and federal resource agencies, and not authorize any project resulting in a "taking" of a listed species unless the appropriate authorization has been issued by the resource agencies.

BCDC-7

BCDC-8

**Mitigation.** In the event that projects and activities described in the SMP would result in adverse environmental impacts that cannot be avoided, mitigation measures will be required. The Commission's policies regarding mitigation state, in part, that "projects should be designed to avoid adverse environmental impacts to [the] Bay" and, further, that "[w]henever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable....[and] measures to compensate for...impacts should be required."

The Draft EIS/EIR states that, "The managed wetland activities would be implemented only if at least one third of the total restoration activities would be implemented in each of the 10-year increments.... Under this strategy, the restoration and managed wetland goals would be achieved concurrently. How the restoration acres would be applied for purposes of other regulatory permitting requirements (i.e., recovery vs. mitigation) would be specified through each permit as applicable."

The Draft EIS/EIR states the impacts of managed wetland activities are "less than significant" before mitigation. This appears to conflict with the statement that some permitting agencies will require mitigation. The Final EIS/EIR should clarify this issue.

BCDC-9

**Water Quality.** Pursuant to the Commission's water quality policies in the Bay Plan, pollution in the Bay's water "should be prevented to the greatest extent feasible." Further, per the Bay Plan policies, the Commission would need to consult with and base its decision regarding the water quality impacts of any proposed projects undertaken pursuant to the SMP on evaluation by and advice of the San Francisco Bay Regional Water Quality Control Board. Therefore, we request that the SMP require that project proponents conduct early consultation with and obtain all necessary authorization from the Regional Board to aid the Commission in determining whether any projects would adversely impact the Bay's water quality.

BCDC-10

Fresh Water Inflow. Water Supply and Quality Finding 2 in the Marsh Plan states, "Today the most important factor in Marsh water quality is salinity. Slough salinities are presently determined by fresh water inflow, which dilutes the saltwater carried into the Marsh by tidal action from the ocean. The most important source of fresh water inflow to the Suisun Marsh is the outflow from the Sacramento-San Joaquin River Delta."

The Bay Plan and Marsh Plan policies call for adequate freshwater inflow to the Bay and Suisun Marsh. The Bay Plan recognizes the importance of fresh water inflows to the ecosystem of the Bay. Bay Plan findings state that "conserving fish, other aquatic organisms and wildlife depends, among other things, upon availability of ...proper fresh water inflows, temperature, salt content, water quality, and velocity of the water."

Ms. Becky Victorine December 29, 2010 Page 5

The Bay Plan's fresh water inflow policies state, in part:

Diversions of fresh water should not reduce the inflow into the Bay to the point of damaging the oxygen content of the Bay, the flushing of the Bay, or the ability of the Bay to support existing wildlife....

High priority should be given to the preservation of Suisun Marsh through adequate protective measures including maintenance of freshwater inflows....

The Marsh Plan recognizes that the Suisun Marsh, located where salt water and fresh water meet and mix, contains "the unique diversity of fish and wildlife habitats characteristic of a brackish marsh."

Marsh Plan policies state, in part:

There should be no increase in diversions by State or Federal Governments that would cause violations of existing Delta Decision or Basin Plan standards....

Water quality standards in the Marsh should be met by maintaining adequate inflows from the Delta.

Changes in water project operations that may result from other planning processes, such as the Bay Delta Conservation Plan and the Delta Plan, could affect the future extent to which tidal restoration in the Suisun Marsh results in brackish marshes versus salt marshes. These issues should be addressed in the adaptive management plan and the Final EIS/EIR.

BCDC-11

Climate Change. The Bay Plan requires the design and evaluation of any tidal restoration project to include an analysis of the effect of relative sea level rise. The Draft EIS/EIR states that sea level rise and storms associated with climate change could breach levees in the Suisun Marsh, resulting in the loss of managed wetland habitat. The risk of levee breaches and wetland habitat loss will increase over time due to accelerating sea level rise and high rates of subsidence in the managed wetlands. Restoration of managed wetlands that are not yet highly subsided would create opportunities for tidally restored wetlands to accrete sediment and eventually support tidal marsh. Restoration sites around the edge of the Suisun Marsh may have the potential for sea level rise resiliency, if they are allowed to flood adjacent uplands over time so that wetlands can migrate landward. These issues should be addressed in the adaptive management plan.

BCDC-12

Adaptive Management. The Bay Plan's policies on tidal marshes and tidal flats state, in part:

Any tidal restoration project should include clear and specific long-term and short-term biological and physical goals, and success criteria and a monitoring program to assess the sustainability of the project. Design and evaluation of the project should include an analysis of: (a) the effects of relative sea level rise; (b) the impact of the project on the Bay's sediment budget; (c) localized sediment erosion and accretion; (d) the role of tidal flows; (e) potential invasive species introduction, spread, and their control; (f) rates of colonization by vegetation; (g) the expected use of the site by fish, other aquatic organisms and wildlife; and (h) site characterization. If success criteria are not met, appropriate corrective measures should be taken.

Ms. Becky Victorine December 29, 2010 Page 6

In other words, an adaptive management approach is required. Bay Plan policies on restoration of subtidal areas contain the same requirements. Although the SMP calls for applying adaptive management to the implementation of tidal marsh restoration, an adaptive management plan for restoration in the Suisun Marsh with specific goals, success criteria, a monitoring program, and potential corrective measures has not yet been completed. An adaptive management plan should be provided as an appendix to the Final EIS/EIR.

BCDC-13

Thank you for the opportunity to comment on this Draft EIS/EIR. If you have any questions regarding this letter or the Commission's policies, please call me at (415) 352-3660 or email me at jessicad@bcdc.ca.gov.

Sincerely.

JESSICA DAVENPORT Coastal Planner

JD/gg

By U.S. Mail and e-mail (rvictorine@usbr.gov)

### **Responses to Comment Letter BCDC**

### **BCDC-1**

The SMP Principal Agencies will continue to coordinate with the BCDC to ensure consistency and compliance with commission requirements. SRCD will work with BCDC staff to evaluate, and if appropriate, update elements of the SRCD component of the LPP.

### BCDC-2

The Draft EIS/EIR includes a description of current recreation opportunities, how these opportunities would be changed, and potential new or expanded opportunities as a result of implementation of the SMP (Section 7.4, Recreation Resources). Restoration areas would generally be purchased from private willing-sellers by public entities, and public access would be encouraged where it is compatible with the protection of wildlife and habitats, and adjacent land uses. As described in this section, additional fishing opportunities would occur under the SMP. Additionally, opportunities for bird watching, hiking, and other non-consumptive recreational activities could increase in the Marsh but would depend on site-specific design and constraints related to access, sensitive resource presence in the area, and compatibility with adjacent land uses. However, the SMP does not discourage these recreational opportunities, but in fact encourages these non-consumptive uses through the conversion of areas from private to public from willing sellers.

### BCDC-3

The SMP Principals (or a subset depending on the actual permit or approval needed) are simultaneously applying for permits under ESA, CESA, CWA Sections 404 and 401, and California Fish and Game Code 1602 and consulting with the SHPO. The SMP Principal Agencies will continue to coordinate with the BCDC to ensure consistency and compliance with commission requirements.

### **BCDC-4**

The SMP Principal Agencies will continue to coordinate with the BCDC to ensure consistency and compliance with commission requirements, including applying for a consistency determination.

### BCDC-5

Page 2-69 of the Draft EIS/EIR commits to no dredging within 200 feet of a storm drain outfall unless preconstruction contaminant testing is conducted. The Final EIS/EIR clarifies that testing specifically for these areas includes coordination and consulting with the DMMO relative to evaluation and placement of these specific described materials.

### **BCDC-6**

See Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh

### **BCDC-7**

The dredging proposed under the SMP would occur over a 30-year period and has been designed to avoid emergent vegetation and other sensitive resources and to limit disturbances to the same area in a way that avoids changes in bathymetry or composition of benthic organisms. However, the Marsh is a unique area, and there are uncertainties regarding the potential effects. As described in Section 6.1, Fish, the dredging program would require an adaptive management component that

would require dredging entities to investigate and document the actual effects of dredging to ensure that no impacts occur above those that have been identified and analyzed in this document.

### BCDC-8

The SMP Principals (or a subset depending on the actual permit or approval needed) are simultaneously applying for permits under ESA, CESA, CWA Sections 404 and 401, and Streambed Alteration Agreement and consulting with the SHPO. The SMP Principal Agencies will continue to coordinate with BCDC to ensure consistency and compliance with commission requirements.

### BCDC-9

The CEQA/NEPA baseline for analysis of potential impacts of the alternatives is the current conditions, including currently implemented management activities. The EIS/EIR therefore analyzes the potential changes to the environment as a result of new activities or a change in frequency of currently implemented activities. As such, the EIS/EIR may not identify an impact as requiring mitigation compared to this baseline. However, ESA, CESA, and other regulations may rely on a different baseline and therefore may determine that the effect of SMP activities is greater than what was described in the EIS/EIR and require mitigation. Additionally, the EIS/EIR was drafted in a manner that takes into account all of the various activities proposed in the SMP, so that some activities that could have impacts on tidal wetlands are more than offset by the proposed restoration. In these instances, no mitigation is required in the EIS/EIR. However, regulatory agencies may want to describe more explicitly the restoration components that would be required specifically to mitigate impacts on resources under their jurisdiction.

### BCDC-10

The only currently identified specific projects in the SMP are the managed wetland activities. For these activities, SRCD, DFG, DWR, and Reclamation will submit an application for a Regional General Permit and Letter of Permission, and a Section 401 Water Quality Certification to comply with the CWA. For future restoration activities that would occur under the SMP, the specific project proponent would be required to submit the necessary applications to the Corps and RWQCB based on the specific analysis for that particular site. As has been done throughout the development of the SMP, the restoration proponents will engage the RWQCB and other regulatory agencies as early in the process as possible to ensure the impacts of each specific project are properly analyzed and disclosed.

#### BCDC-11

See Master Response 5: Inclusion of an Adaptive Management Plan and Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh.

### BCDC-12

As presented in the Draft EIS/EIR, Chapter 2, Page 2-47, a number of features can be built into the restoration efforts to support achieving long-term ecological functions. Providing for the tidal wetland to advance "upslope" can be achieved through constructing a gradually sloping wetland/upland transition zone at interior sites and selecting restoration sites at the wetland-upland edge of Suisun that provide an elevation gradient over which tidal wetland could shift upslope as sea level rises.

Table 2-3 includes consideration of landscape position, the potential to accommodate sea level rise and adjacent land uses in restoration site selection. Thus, the potential for sea level rise is acknowledged in the site selection considerations and will be a recurring consideration based on best available science for each restoration project. Administration of this criterion will recognize the dynamic nature of the land/water interactions, including subsidence, sediment accretion potential, and biomass accumulation potential. This will enable project designs to be based on habitat trajectory (as opposed to current or static conditions) over the 30-year planning horizon. This approach will help minimize "sunk cost" of habitat and facility investments as well as help ensure that the targeted habitat type occurs as planned.

In addition to site selection and project design considerations, the AMP provides a framework for adapting to sea level rise. Also see Master Response 5: Inclusion of an Adaptive Management Plan.

### BCDC-13

See Master Response 5: Inclusion of an Adaptive Management Plan.

### 14.2.3.2 DSC—Delta Stewardship Council, P. Joseph Grindstaff, Executive Officer—December 27, 2010

### Comment Letter DSC

DELTA STEWARDSHIP COUNCIL

A California State Agency

980 Ninth St., Suite 1500 Sacramento, California 95814 www.DeltaCouncil.ca.gov (916) 445-5511

December 23, 2010

Ms. Debbie Hultman California Department of Fish and Game Bay Delta Region P.O. Box 47 Yountville, CA 94599. Fish & Game DEC 27 26 s Yountville Phil Isenberg

MEMBERS

Randy Fiorini
Gloria Gray
Patrick Johnston
Felicia Marcus
Hank Nordhoff
Don Nottoli

Dear Ms. Hultman:

P. Joseph Grindstaff

Please find comment by the Delta Stewardship Council on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIR/EIS (SMP).

DSC staff finds that the draft SMP is a comprehensive attempt to reconcile 1) restoration and enhancement goals under the CALFED ROD, 2) water management actions under the Suisun Marsh Preservation Agreement (SMPA), and 3) Biological Opinion conflicts over a Regional General Permit application by the Suisun Resources Conservation District (SRCD) and the Department of Fish and Game (DFG). The Draft makes good progress toward these goals. The DSC comments herein focus on four shortcomings of the SMP compared to goals of the Sacramento-San Joaquin Delta Reform Act of 2009 (Div. 35 of the Water Code). This Act updates State policy for the Delta and Suisun Marsh.

- Managed wetland land management practices cause ongoing land subsidence. Provisions of the SMP offer enhancements to managed wetland operations that do little to solve the root cause of the problems that create the need for enhancement. In addition, the subsidence related greenhouse gas inducing effects of the Plan are not identified.
- The approach to tidal restoration lacks scientific foundation. There is little evidence of the Plan's claim to be a "science-based management plan." An adaptive management plan is not included.
- 3. The tidal marsh restoration plan calls for what appears to be an arbitrary allocation of restoration land in four geographic regions of Suisun Marsh with little justification.
- 4. Modeling analysis conducted for the Plan is inaccurately referenced for key conclusions of the Plan.

If you have questions or comments, please contact Lauren Hastings (lauren.hastings@deltacouncil.ca.gov) or Chris Enright (cenright@deltacouncil.ca.gov).

Sincorely

Joseph Grindstaff
Executive Officer

Attachment

Coequal goals means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Deitalecosystem. The coequal goals shall be scriving in a manner that protects and enhances free unique cultural recreational, natural resource, and agricultural values of the Deitalas an evolving place.

—CA Water Code §85054

Role of the Delta Stewardship Council with respect to Suisun Marsh and the Suisun Marsh Plan

The Delta Stewardship Council staff has reviewed the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIR/EIS (SMP). Our review focused on assessing the consistency of the SMP with provisions of the Delta Reform Act. In general, the Act calls for a legally enforceable comprehensive management plan for the Delta and Suisun Marsh that balances coequal goals for a more reliable water supply for California and Delta ecosystem restoration (achieved in a manner that protects and enhances the unique values of the Delta as an evolving place). Referred to as the Delta Plan, its ecosystem goals will promote characteristics of a healthy Delta ecosystem including:

- · Viable populations of native resident and migratory species.
- · Functional corridors for migratory species.
- Diverse and biologically appropriate habitats and ecosystem processes.
- · Reduced threats and stresses on the Delta ecosystem.
- Restore large areas of interconnected habitats within the Delta and its watershed by 2100.
- · Achieve a more natural salinity regime in parts of the Delta.
- Manage the Delta's water and environmental resources and the water resources of the state over the long term.
- Provide for the sustainable management of the Sacramento-San Joaquin Delta ecosystem.
- Use the best available science.

"Restoration" is defined in the Act as: "...the application of ecological principles to restore a degraded or fragmented ecosystem and return it to a condition in which its biological and structural components achieve a close approximation of its natural potential, taking into consideration the physical changes that have occurred in the past and the future impact of climate change and sea level rise."

The Delta Plan may incorporate other completed plans related to the Delta and Suisun Marsh, such as the SMP, but only to the extent that these other plans promote the coequal goals in a manner consistent with the Delta Reform Act.

The Act also assigns ongoing CALFED Bay-Delta Program responsibilities to the DSC. The DSC is therefore a "Principal Agency" under the SMP with responsibility for providing guidance on restoration science through the Science Program (pg. ES-3 of the SMP).

### Summary comments

DSC staff finds that the draft SMP is a comprehensive attempt to reconcile 1) restoration and enhancement goals under the CALFED ROD, 2) water management actions under the Suisun Marsh Preservation Agreement (SMPA), and 3) Biological Opinion conflicts over a Regional General Permit application by the Suisun Resources Conservation District (SRCD) and the Department of Fish and Game (DFG). The Draft makes good progress toward these goals. The DSC comments herein focus on four shortcomings of the SMP compared to goals of the Delta Reform Act.

SMP comments by the Delta Stewardship Council

- Managed wetland land management practices cause ongoing land subsidence. Provisions of the SMP offer enhancements to managed wetland operations that do little to solve the root cause of the problems that create the need for enhancement. In addition, the subsidence related greenhouse gas inducing effects of the Plan are not identified.
- The approach to tidal restoration lacks scientific foundation. There is little evidence of the Plan's claim to be a "science-based management plan." An adaptive management plan is not included.
- 3. The tidal marsh restoration plan calls for what appears to be an arbitrary allocation of restoration land in four geographic regions of Suisun Marsh with little justification.
- 4. Modeling analysis conducted for the Plan is inaccurately referenced for key conclusions of the Plan.

#### Specific comments

#### 1. Land subsidence

Staff is concerned that no consideration appears to have been given to subsidence control and reversal, the very problem that drives the need for many of the managed wetland enhancement actions. This is a key impact of the wetland enhancement actions that is not identified by the plan. Land subsidence is the direct result of diked wetland management practices. It is caused primarily by aerobic microbial oxidation of soil organic carbon, which also produces CO<sub>2</sub> greenhouse gas emissions. Subsidence also can occur through anaerobic decomposition, dried soil compaction, wind erosion, and wetting/drying cycles (e.g., Deverel and Rojstaczer 1996). Each of these processes is promoted by common management practices that require dry soil between late spring and early fall. While dry, common maintenance practices include discing and burning undesirable vegetation. These permitted activities (USCOE 404 RGP) are powerful drivers of land subsidence.

Levee system integrity is a primary focus of the managed wetland enhancement portion of the Plan. The Plan would permit phased dredging of 5.9 million cubic yards of tidal slough material for levee maintenance over the 30-year life of the Plan (approximately 100,000 cy per year). The stated needs for levee enhancements are that 1) landowners are otherwise forced to use diked wetland soils as source material for levee maintenance which exacerbates land subsidence and 2) tidal restorations will require upgrades to boundary levees to exclude tidal water from adjacent land. Each of these needs is driven by 2-8 feet of land subsidence across the managed lands of Suisun Marsh. Other portions of the plan point out the lack of public funding for managed wetland levee maintenance and the likelihood that levee failures could result in salinity intrusion and affects on drinking water quality. Again, land subsidence is the root cause.

Finally, the nature of microbial decomposition of organic soil means that land subsidence contributes to CO<sub>2</sub> emissions. The Plan gives good coverage to the carbon sequestration benefits of tidal marsh restoration (Chap. 5.9-12), but does not describe the opposite, and possibly larger, effect of land subsidence. These impacts should be estimated in the alternatives as well as the "no action alternative."

DSC-1

SMP comments by the Delta Stewardship Council

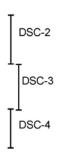
<u>Recommendation</u>: Provisions of the SMP provide enhancements to managed wetland operations that do little to solve the root cause of the same problems that require enhancement. To be consistent with Delta Reform Act goals for ecosystem restoration, stressor reduction, and sustainable resource management, the Plan should describe the direct and indirect impacts of wetland enhancements including land subsidence and contributions to greenhouse gas emissions.

DSC-1 cont'd

#### 2. Science foundation

The plan clearly states that the SMP will be based on "sound science... and science-based adaptive management" (pg. 1-19). The plan describes a "Science Integration Strategy" that employs a Science Advisor and, notably, a suite of conceptual models covering managed wetland and tidal habitat functions developed specifically to inform plan actions. The plan also asserts that it is guided by Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) conceptual models (pg. 1-20). Despite these claims, review of the key chapter called "Habitat Management, Preservation, and Restoration Plan" (Chapter 2), reveals a no reference to any conceptual models or peer reviewed literature. The unpublished U.S. Fish and Wildlife Service (USFWS) *Draft Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (TMRP) is briefly referenced for justification of the Plan's regional approach (discussed below). Chapter 2 contains description of the Plan elements, the alternatives analysis, and the implementation strategy. Later chapters, especially Chapter 6 ("Biological Environment"), reference the "Draft Report of Suisun Marsh Plan Tidal Marsh Conceptual Model." The chapter appears to be a complete recitation of the conceptual model. While the conceptual model is solid, there is no evidence that it was used to inform the key analyses underpinning the choice of a preferred alternative, or any other important Plan element.

Recommendation: The Plan's claim to a "Science Integration Strategy" is not evidenced. Lacking a clear scientific basis, the alternatives appear somewhat arbitrary and the Plan elements merely derivative of other, poorly referenced plans. At a minimum, the Plan should better explain how it uses that USFWS Tidal Marsh Recovery Plan (TMRP) to determine restoration acreages and locations. Further improvements would reference the Draft Report of Suisun Marsh Plan Tidal Marsh Conceptual Model to describe how tidal marsh restoration in the Suisun region would contribute to life history requirements of species of concern. Finally, an adaptive management plan for guiding restoration and assessing managed wetland enhancements should be produced for the next draft in order to be consistent with the "best available science" principle of the Delta Reform Act.



### 3. Four region approach

There is weak rationale or scientific evidence provided for the fundamental organizational approach of dividing Suisun Marsh into geographical regions. In one sentence, the Plan claims the four region approach is consistent with the USFWS Tidal Marsh Recovery Plan by "providing the range of environmental gradients necessary to contribute to the recovery of listed species" (pg 2-17). The TMRP is also briefly referenced in a description of the relationship between the SMP and TMRP on page 1-26. This level of detail is inadequate for justifying the approach. As such, the regional approach appears arbitrary and unnecessary.

SMP comments by the Delta Stewardship Council

Recommendation: Improve the explanation of why the SMP divides the Marsh into four regions. If the TMRP is the rationale, then more justification is needed. Alternatively, completely drop the four region approach and appeal instead to best available scientific understanding of landscape ecology in relation to listed species. This approach would consider species conservation relevant issues of landscape scale, patch context, and land-water interface porosity and complexity. The Plan should explicitly consider the life history requirements of listed species and how their growth, reproduction, and survival are affected by landscape attributes and connecting aquatic corridors.

DSC-5

#### 4. Use of Modeling

The three restoration alternatives differ only in acreage of tidal marsh restored and managed wetland enhanced. Compared to the geographic area of Suisun Marsh, the acreage range is rather small. Restoration acreage is bounded by Alternative B that proposes 2-4,000 acres of restoration and Alternative C that proposes 7-9,000 acres of restoration with concomitant reduction in managed wetland enhancement acreage (subtract from 52,112 acres of existing managed wetlands). With nonspecific reference to modeling, and no reference to conceptual models or other peer reviewed literature, the Plan claims that the higher end restoration acreage (Alternative C) is unacceptable to landowners because it would be "more difficult to maintain duck populations necessary for heritage hunting in the Marsh and protect species, such as the millions of migratory birds that depend on the managed wetland habitats." Staff has extensive familiarity with the referenced modeling and the statement is difficult to reconcile with information gathered from the modeling analysis. The modeling analysis (covered in Appendix A) did not specifically seek to differentiate between the salinity impacts of the three alternatives. While tidal connections and acreage clearly affect salinity transport in the northern reach of the estuary, the impacts depend entirely on the details of restoration location, tidal connections, and land topography. The range of salinity responses issuing from the restoration design alone likely overwhelms any incremental change due to the narrow range of alternative acreages. While the modeling analysis uncovered many important consequences of tidal marsh restoration location and design, it does not support the claim that the 5-7,000 acre preferred restoration alternative is clearly distinguishable from the 7-9,000 acre alternative on the basis of salinity impacts. The SMP should conduct additional modeling to specifically support the claim.

<u>Recommendation:</u> The SMP should conduct additional modeling to specifically support the claim that the alternatives are distinguishable on the basis of salinity. Further, a thorough sensitivity analysis should be conducted to characterize the relative effects of restoration design on salinity mixing. Finally, the Plan should seek consistency with the Delta Reform Act by demonstrating how changes in Suisun geometry will help to create a more natural salinity regime.

DSC-6

#### Citations

Deverel, S. J., and S. Rojstaczer (1996), Subsidence of Agricultural Lands in the Sacramento-San Joaquin Delta, California: Role of Aqueous and Gaseous Carbon Fluxes, *Water Resour. Res.*, 32(8), 2359–2367, doi:10.1029/96WR01338.

SMP comments by the Delta Stewardship Council

### **Responses to Comment Letter DSC**

### DSC-1

As described above under Master Response 2: CEQA/NEPA Baseline for This EIS/EIR, the CEQA and NEPA baseline for comparison includes the existing operations and management activities currently conducted by landowners in the Marsh. As such, the impact is the incremental change from the existing condition to the proposed condition, which is minimal in most instances related to managed wetlands operations. An exception is the dredging program. The EIS/EIR fully evaluates the potential effects of these changes. The enhancement activities that would continue under the SMP are not in and of themselves causing flooding and drainage issues on managed wetlands. Rather, an increased capability to implement these activities is expected to improve flood and drain cycles, which can substantially improve conditions in adjacent tidal channels, reduce the lowering of managed wetland land surface elevations (by decreasing pond bottom grading thus reducing exposure of peat surfaces and associated subsidence) and earthwork required in the managed wetlands, and provide a better overall habitat for terrestrial and aquatic species than what is occurring today. Subsidence is recognized on page 5.3-8 as occurring in the Marsh and is also a consideration for property acquisition for tidal wetland restoration, as shown in Table 2-3. Overall, as a result of SMP tidal restoration actions, the subsidence potential in the Marsh would be reduced.

The SMP does not include dredging for the purposes of upgrading levees in tidal restoration areas. However, grading or importation of material to create new or improved levees may be done prior to breaching existing exterior levees for new tidal restoration areas. The SMP dredging program was developed as part of the SMP to provide materials to support the maintenance of levees protecting managed wetlands. Levee maintenance for managed wetlands is an ongoing activity required to repair storm damage from erosion, and to accommodate future sea level rise and the settlement of levee foundation materials. This level of maintenance would be required even without reducing historical subsidence, prior to today's management of seasonal and semi-permanent wetlands habitats. The dredging program itself would help minimize subsidence by minimizing the materials removed from the managed wetland areas to support levee maintenance activities, and careful selection of restoration sites would help offset future subsidence in the Marsh. The baseline includes existing tidal wetlands (approximately 7,000 acres), and restoration under the proposed project would double this amount in the Marsh. Other potential future efforts also likely would result in further increases in tidal wetland. Additionally, many of the areas within the managed wetlands acreages are not currently flooded (i.e., upland habitat) but with tidal restoration, could be converted to tidal wetland habitats.

Under the No Action Alternative, it is likely that managed wetland activities would cease and that operations would be substantially limited because of regulatory constraints. This could have variable effects on GHG emissions. Without permits, water diversions would be limited or cease, meaning the flooding regimes of managed wetlands would be limited to direct precipitation, thus introducing a drier regime that would likely reduce carbon sequestration, reduce methane production and increase peat oxidation relative to current conditions. Without maintenance, exterior levees would likely breach over time, although it is hard to predict where and to what extent. Where levees breach, this would result in the flooding of managed wetlands which would reduce microbial oxidation of soil organic carbon and associated subsidence, increase carbon sequestration and increase methane production relative to current conditions. The specific nature and extent of changes in flooding regime for the No Action Alternative over the next 30 years cannot

be estimated without speculation; as such the effect on GHG emissions is also considered speculative.

Under Alternatives A through C, only the change in conditions compared to the existing conditions (which include most of the managed wetland activities proposed to continue) constitutes an impact for CEQA and NEPA (See Master Response: Alternatives). The overall effect of implementation of the SMP alternatives compared to existing conditions, as described in Section 5.9, is a reduction in GHG emissions as a result of conversion of some managed wetlands to tidal wetlands. In addition, the increase in tidal restoration also will reduce future areas of subsidence by inundating areas that would otherwise be subject to oxidation of soil organic carbon.

### DSC-2

The SMP and the analysis in the EIS/EIR rely heavily on the Draft Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (Recovery Plan) (Service 2009), which provides a clear scientific basis for tidal restoration in Suisun Marsh. The goal of the Recovery Plan is the comprehensive restoration and management of tidal marsh ecosystems in five recovery units—Suisun Bay, San Pablo Bay, the Central/South San Francisco Bay, Central Coast, and Morro Bay Recovery Units. The Suisun Bay Recovery Unit is divided into the Western Suisun/Hill Slough Marshes, Suisun Slough/Cutoff Slough Marshes, Nurse Slough/Denverton Slough Marshes, Grizzly Island Marshes, and Contra Costa County Shoreline Marshes. These areas correspond with Regions 1, 2, 3, and 4 of the SMP, excluding the Contra Costa County Shoreline Marshes, which are not included in the SMP.

Depending on the location within Suisun Marsh, different species would benefit from tidal restoration or improved management of diked managed wetlands. The four endangered species that would benefit from implementation of the SMP are the California clapper rail (*Rallus longirostris obsoletus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*), and soft bird's-beak (*Cordylanthus mollis* ssp. *mollis*).

According to the Recovery Plan, in order for California clapper rail to be downlisted within the Suisun Bay Recovery Unit, a minimum of 5,000 acres of contiguous high-quality tidal marsh habitat is required with well-developed channel systems and high-tide refugial/escape cover at the high marsh/upland transition zone and/or inner-marsh of the Western Grizzly and Suisun Bays and marshes of Suisun, Hill, and Cutoff Sloughs (Regions 3, 1, and 2). This is consistent with the proposed project.

Downlisting of the salt marsh harvest mouse in the Suisun Bay Recovery Unit is achievable through 1,000 or more acres of muted or tidal marsh in the Western Suisun/Hill Slough Marsh Complex (Region 1); 1,000 or more acres of muted or tidal marsh in the Suisun Slough/Cutoff Slough Marsh Complex (Region 2); 1,500 or more acres of diked or tidal marsh in the Grizzly Island Marsh Complex (Region 3); 1,000 or more acres of muted or tidal marsh in the Nurse Slough/Denverton Slough Marsh Complex (Region 4); and 500 or more acres of muted or tidal marsh in the Contra Costa County Marsh Complex (not in the SMP). Again, Recovery Plan actions are consistent with the proposed project. Suisun thistle currently occurs only in the Western Suisun/Hill Slough Marshes and the Suisun Slough/Cutoff Slough Marshes Areas (Regions 1 and 2).

Downlisting of Suisun thistle will be achieved if the median area inhabited by this species is 2,000 acres; a total of 4,000 acres or more is permanently preserved; *Lepidium latifolium* populations are reduced to less than 10% cover in Suisun Marsh; natural tidal cycles are restored at Hill Slough; and

the ponded area at Rush Ranch is returned to periodic tidal flooding. Again, the SMP is consistent with the Recovery Plan.

Soft bird's beak is found in the Western Suisun/Hill Slough Marshes, Suisun Slough/Cutoff Slough Marshes, and Nurse Slough/Denverton Slough (Regions 1, 2, and 4). Downlisting of soft bird's beak will be achieved if, over a 5-year period, the median area inhabited by the species is 3,000 acres or more in the Suisun Bay Area and 1,000 acres in the San Pablo Bay Area; a total of 5,000 acres or more in the Suisun Bay Area and the San Pablo Bay Area are permanently preserved and under protective management (including existing or successfully restored tidal marsh areas with suitable habitat for the species and encompassing at least 80% of the species; *Lepidium latifolium* populations are reduced to less than 10% cover in Suisun Marsh; there is less than 10% total cover of other nonnative perennial or nonnative winter annual grass species; natural tidal cycles are restored at Hill Slough; and the ponded area at Rush Ranch is returned to periodic tidal flooding. Lastly, recovery of soft bird's beak is consistent with the proposed project.

Tidal restoration and improved management of diked managed wetlands within each of the four Regions in the SMP would lead to recovery of California clapper rail, salt marsh harvest mouse, Suisun thistle, and soft bird's beak within the Suisun Bay Recovery Unit. Tidal restoration in Regions 1 and 2 would aid in the recovery of California clapper rail, salt marsh harvest mouse, Suisun thistle, and soft bird's beak. Tidal restoration in Region 3 would aid in the recovery of California clapper rail and salt marsh harvest mouse. Tidal restoration in Region 4 would aid in the recovery of salt marsh harvest mouse and soft bird's beak as described in Sections 6.3 and 6.2, respectively.

Additionally, restoration is expected to benefit delta smelt by providing increased food productivity inside and exported from the Marsh as well as provide additional rearing habitat for longfin smelt, salmonids, and other fish species.

### DSC-3

The Draft Suisun Marsh Tidal Marsh and Aquatic Habitats Conceptual Model was developed as part of the Suisun Marsh Plan. It details how tidal marsh restoration in Suisun Marsh would benefit the life history of species of concern. It is available at:

http://www.fws.gov/sacramento/es/documents/Tidal\_marsh\_2010/TM\_CM\_Chapter\_4\_Species.pdf

### DSC-4

See Master Response 5: Inclusion of an Adaptive Management Plan.

### DSC-5

See response to Comment DSC-2.

### DSC-6

The alternatives fully analyzed in this EIS/EIR are not distinguishable on the basis of salinity. Rather, modeling shows that with increasing marsh tidal restoration, meeting D-1461 and SMPA salinity requirements in the western Marsh becomes increasingly difficult. In the alternatives fully analyzed in the SMP, the EIS/EIR describes salinity impacts as generally the same and dependent primarily on the specific locations of restoration areas and breach size and location. The EIS/EIR commits to site-specific water quality modeling for proposed restoration sites to help determine the best configuration of breaches. Regarding creating a 'more natural regime', the SMP addresses the

currently identified beneficial uses of water in the Marsh, which include water supply for managed wetlands and habitat for aquatic species. The SMP is consistent with these uses.

### 14.2.3.3 SWRCB—State Water Resources Control Board, Diane Riddle, Chief, Bay-Delta Unit, January 19, 2011



### State Water Resources Control Board



Division of Water Rights

1001 | Street \* Sacramento, California 95814\* (916) 341-5300 Mailing Address: P.O. Box 2000 \* Sacramento, California \* 95812-2000 FAX (916) 341-5400 \* http://www.waterboards.ca.gov Edmund G. Brown Jr.

Comment Letter SWRCB

JAN 19 2011

Ms. Becky Victorine Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825

Dear Ms. Victorine:

COMMENTS FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT FOR THE SUISUN MARSH HABITAT MANAGEMENT, PRESERVATION, AND RESTORATION PLAN

The State Water Resources Control Board (State Water Board) appreciates the opportunity to review and provide comments on the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Suisun Marsh Habitat Management, Preservation, and Restoration Plan for the Suisun Marsh Plan (SMP). Comments on the Draft EIS/EIR were due on December 29, 2010, and the State Water Board received an extension of time from you to submit comments by January 19, 2011.

The State Water Board's comments pertain exclusively to salinity issues in Suisun Marsh, specifically, issues pertaining to what, if any, changes should be made to the Suisun Marsh salinity objectives included in the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The State Water Board did not review other aspects of the Draft EIS/EIR in detail.

### Background

The State Water Board first established interim salinity objectives for the protection of Suisun Marsh fish and wildlife beneficial uses in the 1978 Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh (1978 Plan) and implemented those requirements in Water Right Decision 1485 (D-1485). In the 1995 Bay-Delta Plan, the State Water Board revised the Suisun Marsh salinity objectives included in the 1978 Plan to include numeric salinity objectives at eight locations in Suisun Marsh and a narrative objective for the Brackish Tidal Marshes of Suisun Bay. The State Water Board did not specify compliance stations for one of the western marsh locations (water supply intakes for waterfowl management areas on Van Sickle and Chipps Islands). In addition, due to evidence showing a potential for the objectives at stations S-97 and S-35 to cause harm to the beneficial uses they are intended to protect, the State Water Board did not implement the objectives at western marsh stations S-97 and S-35 during the subsequent water right implementation phase resulting in revised Water Right Decision 1641.

California Environmental Protection Agency

Recycled Paper

Ms. Victorine -2 - JAN 19 2011

To resolve some of the outstanding management issues concerned with the Suisun Marsh, the State Water Board, in the Program of Implementation for the 1995 Bay-Delta Plan, recommended the formation of an ecological workgroup consisting of representatives from various State, Federal, and private agencies and other interested parties. This recommendation led to the formation of the Suisun Ecological Workgroup¹ (SEW) under the Interagency Ecological Program. Among several tasks the SEW was charged with were to: evaluate the beneficial uses and water quality objectives for the Suisun Bay and Marsh ecosystem; identify specific measures to implement the narrative objective for Brackish Tidal Marshes of Suisun Bay; and make recommendations to the State Water Board regarding achievement of the objective and development of numeric objectives to replace the narrative objective.

The SEW submitted a final report to the State Water Board in 2001 summarizing nearly four years of technical research and discussions, with a range of ecological perspectives, goals and views. The recommendations in the SEW were based on conceptual models detailing the ecological relationships between the physical, chemical, and biological factors affecting the health of Suisun Marsh resources. However, the SEW was unable to determine a single numeric objective for the Brackish Tidal Marshes. Subsequently, in 2001, after the CALFED Record of Decision was issued, the interagency Suisun Marsh Charter Group (SMCG) was formed and tasked with developing environmental documentation and a SMP to resolve the issues of balancing the competing needs in Suisun Marsh.

In the Program of Implementation for the 2006 Bay-Delta Plan, the State Water Board indicated that it would use the SMP and final EIS/EIR for the SMP during the next Bay-Delta Plan update to determine whether and how to convert the narrative objective to a numeric objective for the Brackish Tidal Marshes. The State Water Board also indicated that it would use the results of the final EIS/EIR and SMP to determine in a future Bay-Delta Plan update whether the objectives at stations S-97 and S-35 should be amended or deleted. The State Water Board specified that the objectives at stations S-97 and S-35 may be amended and/or implemented in stages, as appropriate, and shall be implemented no later than either January 1, 2015, or an earlier date, if a further review of these objectives does not determine that they are not needed. Finally, the State Water Board stated that the objectives for water supply intakes for waterfowl management areas on Van Sickle and Chipps Islands, which have no locations specified, may be amended and/or implemented in stages, and shall be implemented no later than January 1, 2015, if a further review of these objectives does not determine that they are not needed.

California Environmental Protection Agency

Recycled Paper

<sup>&</sup>lt;sup>1</sup> The Suisun Ecological Workgroup is comprised of representatives from the California Department of Water Resources, the California Department of Fish and Game, the U.S. Bureau of Reclamation, and the Suisun Marsh Charter Group Principal Agencies that includes the U.S. Fish and Wildlife Service, the Suisun Resources Conservation District, and the State Water Board.

Ms. Victorine - 3 - JAN 19 2011

### Comments

It is not clear what if any changes are recommended to the Suisun Marsh salinity objectives in the Bay-Delta Plan as part of the SMP and the draft EIS/EIR does not specifically address any potential changes. As a result, the draft EIS/EIR does not provide the necessary information for the State Water Board to consider potential changes to the Suisun Marsh and Suisun Bay salinity objectives included in the Bay-Delta Plan. The State Water Board requests that this issue be further addressed in subsequent environmental documentation for implementation of the SMP in order for the State Water Board to consider potential changes to the Suisun Marsh and Suisun Bay salinity objectives prior to the beginning of 2015. The State Water Board would appreciate the opportunity to coordinate further concerning this matter.

SWRCB-1

Please contact Chris Carr, Environmental Scientist, at (916) 341-5305 or <a href="mailto:ccarr@waterboards.ca.gov">ccarr@waterboards.ca.gov</a>, or me at (916) 341-5297 or <a href="mailto:driddle@waterboards.ca.gov">driddle@waterboards.ca.gov</a> to discuss this matter further.

Sincerely,

ORIGINAL SIGNED BY:

Diane Riddle, Chief Bay-Delta Unit

Debbie Hultman
California Department of Fish and Game
Bay Delta Region
P.O. Box 47
Yountville, CA 94599

Cay Goude U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, CA 85825

Naomi L. Feger Planning Program Manager SF Bay RWQCB 1515 Clay Street, Suite 1400 Oakland, CA 94612

California Environmental Protection Agency

Recycled Paper

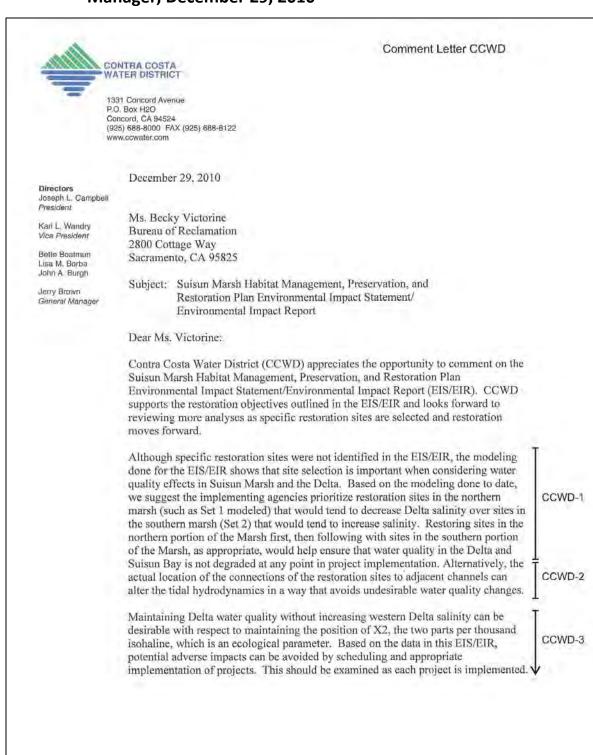
### **Responses to Comment Letter SWRCB**

### **SWRCB-1**

In May 2007, the SMP Principals submitted to the SWRCB a white paper recommending no changes to the current salinity objectives. The SMP evaluation process has provided no new information that would suggest the need for any changes in the existing Suisun Marsh salinity objectives in the Bay-Delta WQMP. As described in Section 5.2, Water Quality, the D-1641 salinity objectives and Delta outflow criteria are adequate for protection of Suisun Marsh fish and wildlife beneficial uses, narrative salinity objectives of the brackish tidal marshes of the Suisun Bay, and to provide water of sufficient quality to managed wetlands to achieve soil water salinities capable of supporting the plants characteristic of a brackish marsh within the SMP. The PAI Fund, as described in Chapter 2, would provide a funding mechanism for DWR and Reclamation to complete their obligation to provide equal or better protection of managed wetlands as required under the SMPA and the 1984 Plan of Protection (described in Chapter 1). All new information obtained through continued monitoring and management activities during the SMP implementation will be available for the SWRCB review in 2015.

### 14.2.4 Regional and Local Agencies

# 14.2.4.1 CCWD—Contra Costa Water District, Leah Orloff, Water Resources Manager, December 29, 2010



CCWD-3

cont'd

Ms. Becky Victorine, Bureau of Reclamation December 29, 2010 Page 2

As individual restoration projects are chosen, we look forward to reviewing site-specific water quality modeling. Important components of the water quality analysis will include the following:

- · Effect on X2 position;
- · Effect on upstream reservoir releases made to meet water quality standards; and
- Effect on Delta drinking water quality, including changes in salinity that could "otherwise substantially degrade water quality" in the absence of standards violations (California Code of Regulations, Division 6, Chapter 3, Article 20, Appendix G).

Please call me at 925-688-8083 or call Maureen Martin at 925-688-8323 if you have any questions. We would be happy to meet with you to discuss water quality modeling as the plan goes forward.

Sincerely,

Leah Orloff

Water Resources Manager

LO/MM:cmn

cc: Ms. Cay Goude, United States Fish and Wildlife Service

Mr. Scott Wilson, Department of Fish and Game

Mr. Russ Grimes, United States Bureau of Reclamation

Suisun Marsh Habitat Management,
Preservation, and Restoration Plan Final EIS/EIR

### **Responses to Comment Letter CCWD**

CCWD-1, CCWD-2, and CCWD-3

See Master Response 1: Project-Specific Analysis.

### 14.2.4.2 FSSD—Fairfield-Suisun Sewer District, Gregory G. Baatrup, Chief Operating Officer, December 30, 2009

Comment Letter FSSD



### FAIRFIELD-SUISUN SEWER DISTRICT

1010 CHADBOURNE ROAD • FAIRFIELD, CALIFORNIA 94534 • (707) 429-5930 • WWW.FSBD.CCM KATHY MOPKINS, GENFRAI, MANAGER

December 30, 2010

Ms. Becky Victorine Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825

\*VIA ELECTRONIC MAIL\*

SUBJECT: Suisun Marsh Habitat Management, Preservation, and Restoration Plan EIS/EIR

Thank you for the opportunity to comment on the EIS/EIR and the effort to document the effects to the physical, biological, and socioeconomic environment that may result from implementing the Suisun Marsh Habitat Management, Preservation, and Restoration Plan (SMP) alternatives.

In multiple locations, the SMP EIS/EIR suggests wastewater discharge causes water quality degradation. As the wastewater discharger into Boynton Slough and Ledgewood Creek, we find these statements to be unsubstantiated and inconsistent with the technical studies that have been the basis for the initial treatment plant siting and numerous renewed discharge permits. The studies supporting the most recent permit issued by the Regional Water Quality Control Board does not find the District's discharge to contribute to degradation of the receiving water. Furthermore, in a recent update of the 1987 Technical Report on Water Quality, the District effluent was determined to provide a net environmental benefit to the Marsh.

FSSD-1

### Discussion

The Fairfield-Suisun Sewer District's (District) NPDES Permit No. CA0038024 was adopted by the San Francisco Regional Water Quality Control Board as Order No. R2-2009-0039 on April 8, 2009. This renewed NPDES permit became effective on June 1, 2009. Provision C.2.d. of the NPDES permit requires the District to update its September 1987 technical report, Technical Report on WaterQuality, Fairfield-Suisun Sewer District Subregional Wastewater Treatment Plant (1987 Technical Report) (FSSD, 1987), using more recent water quality data and including an analysis of any changed conditions (such as the addition of the Ledgewood Creek outfall and the planned flow increase).

The District completed the 1987 Technical Report describing the effects of the District's Wastewater Treatment Plant discharge on water quality and protection of beneficial uses. The report included an evaluation of existing water quality data, impacts to Boynton Slough, and the degree of environmental benefit from the effluent discharge. The report indicated that the discharge had some measurable local effects on Boynton Slough, but that these effects did not significantly impair any beneficial uses. More importantly, beneficial uses that required the input

of freshwater were found to be more fully achieved as a result of the effluent discharge. The report concluded that the discharge results in a net environmental benefit to Boynton Slough and the Suisun Marsh.

In the 2010 update of the 1987 Technical Report, the analysis shows that the District's effluent continues to provide an important source of fresh water to Suisun Marsh. This fresh water discharge aids in lowering salinities in the Marsh thereby helping to maintain healthy plant and animal populations that rely on lower salinities. In addition, the analysis shows effluent does not impair the receiving waters with respect to other constituents, such as dissolved oxygen and trace metals, and therefore does not reduce the ability to achieve beneficial uses in the receiving waters.

The recent upgrades to the District's wastewater treatment facility has greatly increased the Facility's reliability in preventing inadequately treated wastewater from being discharged to the receiving water which would impact the achievement of beneficial use. In addition, the District's extensive Pollution Prevention activities helps improve effluent quality by preventing excess pollutant discharge into the sewer water that is eventually treated and discharged to the receiving waters.

#### Conclusion

The 1987 and 2011 updates show that the District's discharge into Suisun Marsh not only does not impact the receiving waters but provides direct environmental benefits by reducing salinity levels and improving habitat quality.

FSSD-2

Thank you for the opportunity to comment on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan EIS/EIR, please feel free to contact me at (707) 428-9162 if you have any questions.

Since rely,

Gregory G. Baatrup Chief Operating Officer

cc: Talyon Sortor Kathy Hopkins

### **Responses to Comment Letter FSSD**

### FSSD-1

Deleted "degradation" of water quality on page 1-8 to clarify that many factors affect water quality, without implying the effect is beneficial or detrimental. Changes made on Pages 5.2-13 and 5.2-15 also clarify that the FSSD discharge does have a beneficial effect on salinity in the Suisun Slough portion of the Marsh. On Page 5.2-15, discussion of low DO inserted, "although the [FSSD] discharge satisfies the ambient monitoring DO requirements specified by the San Francisco Bay RWQCB.)"

### FSSD-2

Deleted "degradation" of water quality on page 1-8 to clarify that many factors affect water quality, without implying the effect is beneficial or detrimental. Changes made on Pages 5.2-13 and 5.2-15 also clarify that the FSSD discharge does have a beneficial effect on salinity in the Suisun Slough portion of the Marsh. On Page 5.2-15 discussion of low DO inserted, "although the [FSSD] discharge satisfies the ambient monitoring DO requirements specified by the San Francisco Bay RWQCB.)"

### 14.2.4.3 JIRD—Joice Island Reclamation District, Leonard Stefanelli, President, December 28, 2009

Comment Letter JIRD

### JOICE ISLAND RECLAMATION DISTRICT 2960 - 22nd Avenue

San Francisco, CA - 94132 RECEIVED

December 12, 2010

DEC 28:010

SACRAMENTO FISH & WILDLIFE OFFICE

California Department Fish and Game Bay Delta Region Att: Ms. Debbie Hultman Post Office Box 47 Yountville, CA - 94599

Subject:

Opportunity to Comment on Suisun Marsh Draft EIR

Hello Ms. Hultman,

The Joice Island Reclamation District, consists of some 1000 acres of Managed Wetlands, located on Joice Island, Suisun Marsh, adjacent to the 3,500 acre California Fish and Game Refuge. Our property is legally owned by two entities, namely the Joice Island/Mallard Farms and the Volanti Investment Associates, both California Partnerships, doing business as the Joice Island Reclamation District.

We attended the meeting at the Rush Ranch Facility, where The United States Fish and Wild Life /California Fish and Game public hearing was held, where initially we were advised that comments from the public would be allowed, but to the contrary, no participation from the landowners was allowed or requested.

We have requested a copy of the Draft E.I.R. and once we have had the opportunity to completely review in in greater detail, we will offer and/or submit a more detailed response.

However, in the interim, we respectfully submit and/or offer an overview of our thoughts and concerns regarding the current and long terms needs of the Suisun Marsh which we believe reflect the thoughts and concerns of the vast majority of landowners in the Marsh.

Over the years, we have read many articles, authored by proponents/opponents regarding plans to "Save the Delta" with great interest, noting that none of them really address the current severe negative environmental impact on the Delta in general.

It is common knowledge, the Suisun Marsh is experiencing a huge negative environmental impact, loss of fish species, wildlife and fauna and the cause of this negative impact is continually been ignored, especially by the public entities who are allegedly in charge of protecting it.

More specially, the <u>known</u> negative impact on the 77,000 acre Suisun Marsh as a result of the existing system of water diversion to Southern California. Clearly, we should learn from past mistakes before any additional and more important significant volumes of water are diverted, which apparently is going to take place in the forceable future.

We and our partners have hunted the Suisun Marsh for more than 65 years and have seen a dramatic and negative impact on the historical environmental quality of the Marsh, neither of which has these EIR's has properly addressed.



JIRD-1

California Department Fish and Game Ms. Debbie Hultman Page II

Now, our critics will argue that our only interest is in killing ducks and to some degree that may be true, but because we have hunted ducks in the Suisun Marsh, it saddens all us deeply to see the once thriving Marsh, which at one time attracted and held hundreds of thousands migrating waterfowl, now only attracts a fraction of that amount, an event that commenced when the California Canal pumps went on line many years ago and a fact that no one wants to address or worse yet, acknowledge.

We would like to address the use of the water. There is no doubt the farmers are being denied water, and the reason being, it is needed to supply water for residential and commercial needs of the ever growing population in Southern California, who have relied on and dependent on the water supplies coming from Northern California, for more than a half Century.

Regional Planners in Southern California have done nothing to develop new sources of water supplies needed to accommodate the ever growing population, only to demand more water from Northern California and The Mono Lake disaster, is a good example.

To compensate for that lost source of water and ever growing demand in Southern California and including the Sacramento Valley Farming Communities in the Valley also needed water and as a consequence, demand for higher volumes of water from Northern California were being made. As a result, we have the now "infamous" California Canal is now in operations, taking millions of acre feet to farms and Southern California residents.

Conceptually, the California Canal, makes sense, because it was planned to provide a constant and dependable supply of water for the farming communities and for the residents of Southern California.

However, now we find, that farming communities in Southern California and the Sacramento Valley, or being denied water allotments in favor of the residents, leaving farmers wanting.

Simply put, long range regional planners for Southern California, should <u>stop</u> all construction in Southern California until they develop their own fresh water supply and not continue to depend on the Northern California Water and deprive of the Farmers adequate to water to grow our food.

That happening is remote if not impossible, because the vast majority of the voting public resides in Southern California that will surely approve legislation to take even more water from the Sacramento, San Joaquin and Bay Delta water ways, unless the regulatory agencies come to their sanity and accurately acknowledge the severe negative impact on the marsh, resulting in the irreparable damage to the Suisun Marsh

But, our so called California Water Management Board, whose alleged expertise in managing water, along with other so called "Experts" have come up with a convoluted plan to build still another water canal East of Sacramento to transfer even more fresh waste from the Delta, PRIOR to the current water flows into the Delta.

And now, these so called "experts" make claim that such a canal, will actually enhance the Sacramento and San Joaquin Deltas, including the 77,000 acre Suisun Marsh

California Department Fish and Game Ms. Debbie Hultman Page III

What are these so called "Experts" are "smoking" is left to speculation, to suggest such a lame, unsupported claim, and in fact, a ludicrous flat out lie, including your agency and especially the US Fish and Wildlife Services to ignore this fact and worse yet to deny it, as evidenced at this meeting.

As indicated in the beginning of this memo, our primary interest and long time personal knowledge of the Suisun Marsh, which does in fact exemplifies the entire Bay Delta System, including the existing long term NEGATIVE and irreparable impact on the 77,000, acre Suisun Marsh the and what will surely happen IF and when the proposed new bypass canal becomes operational.

Let us explain why we can make this claim, and as noted early on in this memo, by going back to the relatively short time before the California Water Canal became operational, the Grizzly Island/Suisun Marsh Complex, attracted and held hundreds of thousands of migrating water fowl, including a complex family of fish, salmon, stripped bass, sturgeon and including the now infamous Delta Smelt.

Each category of wildlife and fish population have declined significantly since the pumps began operating a well over decade ago. Waterfowl have left the area in significant numbers and do you know why?

The simple truth is, the traditional food supply that attracted the migrating waterfowl to the Suisun Marsh, properties that at one time, grew asparagus, artichokes, hay etc. and no longer exist.

The reason why, is because the once "brackish" water that once irrigated these crops and flooded the managed wetlands in the Suisun Marsh and the same water that currently irrigates the crops in the Sacramento Delta, is now so high in salt content, that it has slowly but surely killing the traditional plant life that provided the necessary food chain to support the migrating waterfowl and irrigate food chain crops in the Suisun Marsh.

A simple thumb rule of physics is:

"for every gallon of water pumped out of the Sacramento River Delta and shipped down the California Canal, is replaced with a gallon of pure salt water......."

In this case, there are millions of acre feet of water shipped down South, all of which is replaced by SALT water into the Suisun Marsh and causing irreversible damage to the historical environmental quality of 77,000 acres of managed wetlands,

Because of the increased salinity, the grasses, plants farms etc., that once thrived on the so called "brackish" water for survival, now are slowly dying or have died, leaving only plants that have no nutritional value for waterfowl. This is not mass hysteria. check the historical records at the Suisun Resources Conservation District, (SRCD) and your own agency.

Then there is a decline in the other fish species, more significantly the Delta Smelt. There is no doubt that the pumps have played havoc on the fish, but there is no doubt that the vast intrusion of salt water into the Delta Smelt breeding environment, has no doubt caused the remaining fish population to move "up river" into water quality of less salinity where they can survive.

California Department Fish and Game Ms. Debbie Hultman Page IV

Are we going to learn anything from this existing man made environmental disaster? One does not have to be a proverbial "Rocket Scientist" to conclude that the intrusion of salt water into the historical delta wetlands, is culprit for the decline of plant, fish and wildlife in the Suisun Marsh Complex.

Now the so called Water Managers and/or "experts" who allegedly have the knowledge and experience in matters such as this, have the audacity to publicly state that by building the new canal (s) East of of Sacramento, will "enhance" the Sacramento/ San Joaquin Delta and the Suisun Marsh Systems.

The sad truth is, that these so called "experts" have learned *nothing* (emphasis added) from the tremendous negative impact that has already occurred in the Suisun March Complex when the California Canal pumps were turned on.

Once again for a fear of sounding repetitious " for every gallon of water taken out of the marsh, it is replaced by a gallon of SALT WATER." Better yet, equate this factor by "Acre Feet" by one million, which is the goal of the "Scam" by recommending to increase the current levels of export by 100 %. and feed that water into the the California Canal.

To do so, they will divert the water from East of Sacramento, by way on a new canal and pump system. It seems logical that if and when this new canal is built, doubling the quantity of water now being exported to Southern California, the water quality in the Suisun Marsh, will surely be 100% salt water, killing any remaining so called "natural" food historically found in the Suisun Marsh Complex.

A simple matter of physics. When that occurs, the water now being used to irrigate the crops in the Sacramento San Joaquin. Delta, will be contaminated with high salinity, that what ever crops are irrigated by this water, will surely be either be disfigured or die and the Aquifers will eventually be contaminated by the intrusion of salt water by its constant presence.

The Salmon, Bass and Delta Smelt, will be driven further up river by the increased presence of salt water through the entire Suisun Marsh Complex and to provide credibility to this statement, can some one explain where all the California Crayfish, which at one time were in such large numbers, found in the complex, not only in the managed, but th tidal wetlands throughout the Suisun Marsh?

There were so many crayfish, the City of Fairfield held a "Crayfish Festival" similar to the Gilroy's Garlic Festival. The Crayfish Festival no longer exists. Why? Because the are no more crayfish in the Suisun Marsh. Why? Because of increased salinity in the water, pure and simple

The facts is, the crayfish, delta smelt and other species, are the "measuring rod" of the environmental health of the marsh, yet. no one, no entity or organization, especially the California Fish and Game, can sit by and not formally protest the construction and implementation of these proposed twin tunnels is incomprehensible.

Take a moment and think what has been written. There can be is no other conclusion as to the impending disaster if this new diversion channel is built. The first one was an environmental disaster to begin with and as already demonstrated, compounded by inept planning, especially the US Fish and Wildlife Agency, who seems to be in full support of this program.

California Department Fish and Game Ms. Debbie Hultman Page V

Learn from past mistakes? Not Likely after reading your draft EIR and the most recent news articles in the San Francisco Chronicle and other news media (See attached)

#### "FED AND STATE BACK TWIN TUNNELS TO "RESTORE DELTA......"

It is clearly apparent the "common and environmental sense" has become forsaken, because of the inability of the so called "experts" to learn, or worst yet, to purposely *ignore* past mistakes already experienced in the Suisun Marsh.

Is it not logical matter of physics and as clearly described in this commentary, if you take an additional 5 million acre feet of fresh water out of the Sacramento River System, East of Sacramento and ship to Southern California, that 5 million acre feet will be replaced by salt water?

How can anyone deny, ignore that fact, worse yet, make claim that the proposed twin tunnels will "restore the Delta" is a out right gross misrepresentation of the facts and in doing so, total disregard for the future environmental quality of the entire Delta system, contrary to what is claimed, especially when once again, one simple question is asked:

"How does taking an additional five million acre feet of fresh water out of the Delta going to enhance or save it......?""

At your hearing, as you know, we were not allowed to ask this question or any others for that matter and when we do ask others, no one has been able to respond with a logical answer and the reason is, there is "no answer" and only a pending disaster if and when the new diversion tunnels are built.

God help the the Suisun Marsh, The San Joaquin/ Sacramento Delta and humanity.

Respectfully submitted,

Leonard Stefanelli, President, Joice Island Reclamation District Managing Partner, Volanti Investment Associates

Lawrence Newhall, Vice President, Joice Island Reclamation District President, Joice Island/Mallard Farms Duck Club.

The Honorable, Diane Fienstein, United States Senator.
The Honorable Jackie Spier, Member of Congress
The Honorable George Miller, Member of Congress
The Honorable Mike Thompson, Member of Congress
The Honorable Doug La Malfa, California State Senator.
The Honorable Mike Reagan, Supervisor, Solano County,
Steve Chappell, Executive Director Suisun Resource Reclamation District.

frew their support 120 | Thursday, December 16, 2010 | SAN FRANCISCO CHRONICLE AND SUGATE.COM WASHINGTON — deral and state officials NATION SOCIATED PRESS derground tunnels as the best option for restoring California's freshwater Wednesday behind the construction of two undelta and meeting the needs of farmers and Southern California The diversion of water to croplands and urban areas has furthered the from the Sacramento-San Joaquin River Delta 44444 siphon drinking and triggation water to more than 25 million Californians and the Central Valley farms that growmuch of the nation's fruits and vegetables. "The status quo is not acceptable. The status quo will only resalt in a continuing and encless cycle of conflict, litigation The federal and state of Intector Ken Salazar said during a conference call with reporters. Officials said the key elements to the plan state's major rivers drain from the northern and central Sterra Nevada, is the harb of California's water supply. The state and federal government run massive pumps that styles a detail of the state o contain measures that would lead people to conserve water. and paralysis," Secretary endangered species. They also said it failed to measure success in pro-tecting salmon and other ronmental groups, who said it doesn't include ate protests from envispecific goals that would The delta, where the estuary in the West Officials are trying to find a solution to reduce the ecological Under the Bay Delta Conservation Plan, two tunnels, 33 feet in diameter and 150 feet below the surface, would deliver water from north of the delta to the south. Water users would pay the tab, an estimated \$13 billion. The tunnels would take ing the state's agricultural economy.



JIM WILSON/NEW YORK TIMES NEWS SERVICE

A canal snakes through California's San Joaquin Valley, supplying water to farms and cities.

### Delta canal gets official support

By Felicity Barringer NEW YORK TIMES NEWS SERVICE

Federal and state officials said Wednesday they support construction of a massive structure around California's environmentally crippled delta to make deliveries of fresh water to farms and cries more reliable

Interior Secretary Ken

Salazar said such a structure would divert water from north of the Sacramento-San Joaquin Delta, where the Sacramento and the San Joaquin rivers meet, to water users in the Central Valley and Southern California.

It would be accompanied by the restoration of "tens of thousands of acres of marshes and flood plains" in the delta to bolster populations of endangered and threatened fish, he said in a telephone news conference.

Farmers and cities in Southern California have been at loggerheads with environmentalists over how significantly to restrict waterflows to the south to help threatened

See CANAL, Page A8

# NAL: Conflicts in negotiations have worsene

From Page A1

species recover. The delta is the central switching yard where water from the Sacramento River is either sent south to agribusinesses and cities or to the west, where it supports dominishing stocks of native fish as it flows into San Francisco

Ultimately, the fate of the degraded delta will be decided in a forum known as the Bay Delta Conservation Plan, where talks between federal and state officials and various constituencies over the delta's future have dragged on for four years.

Issuing separate reports, both the federal government and the California Natural Resources Agency shed a bit more light on solutions they would favor. The state report went further in its recommendations on water conveyance, calling for twin tunnels. It predicted that the water sent southward would match

the average deliveries over the past decade and a half.

The federal report, from six agencies including the laterior Department, avoided giving such specifics.

On Tuesday, a federal judge in Fresno invalidated a 2008 plan by the Interior and Commerce departments to protect the threatened delta smelt, saying that sloppy science and a failure to adequately consider water users made it "farally flawed." The judge sent the plan back to the U.S. Fish and Wildlife Service for redraiting.

Conflicts in the negotiations on the delta's restoration have worsened recently. Last month, the politically powerful Westlands Water District, which is responsible for as much as a quarter of the financing for preparing a plan, withdrew from the talks, saying it did not expect to get federal guarantees of enough water.

The state plan issued Wednesday in cated that about 5.4 million to 5.9 mill acre-feet would be rehably available water users for decades to come. Fet al officials were silent on the quan question. (An acre-foot is equivalen 325,000 gallons.)

Asked if the water estimated in state plan would bring him back to table, Jean Sagouspe, the Westlands p ident, said he saw no prospect of ren

"The short answer is no," he wrot an e-mail. "Our problem is entirely the Interior Department, and until we what they propose we will remain ou Nor did environmentalists seem s

fied.

"The plan needs to say what it's g to do for species of concern," Jonathan Rosenfield, a biologist expert on the delta with the nonprofit Institute. "It needs specific objective

# Solano has fears about Suisun Marsh restoration

y Barry Eberling CNAUGHTON NEWSPAPERS

FAIRFIELD — From more mosquines to ss farmland, Solano County supervisors we concerns about a proposal to restore 000 acres to 7,000 acres of tidal wetlands in usun Marsh over 30 years.

Federal and local officials tried to address ose concerns when they appeared Tuesday the Board of Supervisors meeting. Supersor Mike Reagan on Wednesday said the oof will be in what actually happens.

"Basically, like everything else, it's a comomise," Reagan said. "It doesn't seem to be ompromise that poses a threat to the values the marsh that we've been preserving for arly a century."

The Board of Supervisors heard a presenion on the draft Suison Marsh Habitat magement, Preservation and Restoration

See MARSH, Page A9

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THE DAVIS ENTERPRISE

FROM P

# **MARSH:** Tidal wetlands support different species

From Page A1

Plan. The U.S. Bureau of Reclamation, state Department of Water Resources, U.S. Fish and Wildlife Service and Suisun Resource Conservation District are among the agencies that worked on the draft plan, which has been released for public comment.

Suisun Marsh contains 10 percent of California's remaining wetlands. Most of these wetlands are behind leyees and managed by humans who flood and drain the land, usually to create waterfowl habitat that makes the marsh an important part of the Pacific Flyway migration route for birds. This land is also home to such creatures as tule elk, raccoons and muskrats.

In contrast, tidal wetlands are flooded twice daily by the tides and support different species, such as the rare delta smelt, the Suisun shrew, the delta rule pea and the Suisun song sparrow.

Suisun Marsh historically had more than 60,000 acres of tidal wetlands and has about 7,627 acres today, the plan said Construction of levees in the marsh began around 1865, initially to create dry land for grazing and later for farming, it said.

The plan looked at restoring as much as 9,000 acres of tidal wetlands in Suisun Marsh, but settled on the 5,000- to 7,000- acre goal as the preferred alternative.

One of the proposed plan's stated goals is to find a

"We're trying to drive the policy and future direction of the marsh."

Steven Chappell executive director, Suisun Resource Conservation District

"politically acceptable" change in marsh wetland uses. The marsh has more than 150 duck clubs that are private property, as well as state wildlife preserves.

Supervisor Linda Seifert asked how important it is that the plan be acceptable to marsh landowners.

"It's very important," said Russell Grimes of the U.S. Burean of Reclamation. "We want to make sure what we're doing is compatible with the land use and is acceptable to the folks there."

He noted that there is no money at present for tidal marsh restoration. The plan is supposed to set the rules.

But Reagan expects California water contractors to look to the marsh for land to restore to tidal marsh. A court decision requires about 8,000 acres to be restored to help the delta smelt. That could make money available.

Also, the state is looking at Sinsum Marsh as it tries to solve the water and environmental problems of the adjacent Sacramento-San Joaquin Delta

"We're trying to drive the policy and future direction of the marsh, instead of having someone outside the marsh come in and say, "This is what we're going to do," "Suisun Resource Conservation District Executive Director Steven Chappell said.

Restoration would be done on land purchased from willing sellers, Grimes said. Pach potential site would be evaluated to see if it's suitable for restoration. Among the factors to be considered is how restoration at any particular site would affect salinity in marsh waters.

Supervisor John Vasquez expressed concern that farmland will be lost to tidal wetlands restoration.

Most of the farming done in the marsh is grazing, Chappell said. This is done on land that is unlikely to be turned into tidal wetlands because of its elevation, he said.

Reagan talked of having money set aside to care for tidal wetlands after they've been restored, to deal with such issues as mosquito control and invasive species control. He has long said he doesn't want local governments to bear the costs.

Besides the tidal wetlands restoration, the plan also calls for protecting and improving 40,000 to 50,000 acres of managed wetlands behind levees and improving levees, among other times.

— Reach Barry Eberling at beberling@dailyrepublic.net

### **Responses to Comment Letter JIRD**

### JIRD-1

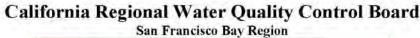
See Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh.

The SMP attempts to create a balanced approach to meeting the needs of aquatic, terrestrial, and waterfowl species in the Marsh, while attaining an overall improvement in management of Marsh resources. The CEQA/NEPA baseline in this EIS/EIR is the current conditions and impacts are based on the potential changes resulting from implementation of the alternatives compared to these existing conditions.

DWR and Reclamation operate the Initial Facilities and SMSCG to meet water quality standards as per SWRCB's D-1641. These facilities were constructed and are operated to mitigate the previously acknowledged impacts of the CVP, SWP, and other upstream diversions on water quality and waterfowl habitat in the Marsh. The SMP does not propose any additional water diversions. The SMP does, however, include potential actions to enhance waterfowl habitat quality in the Marsh, including DWR and Reclamation's continued operation of the Initial Facilities and SMSCG and funding of the Preservation Agreement Improvement Fund, and implementation of marsh management activities as described in Chapter 2 of the EIS/EIR.

The SMP includes the implementation of the Preservation Agreement Implementation Fund, which completes the DWR and Reclamation mitigation obligations agreed to by SRCD, DFG, DWR, and Reclamation relative to impacts on the Marsh from SWP and CVP operations. Additionally, the EIS/EIR acknowledges the important role that landowners have played in the Marsh to retain it as an undeveloped brackish Marsh in the face of surrounding and encroaching development. The SMP also acknowledges the importance of waterfowl hunting in the Marsh and includes measures to help landowners better manage their properties to support waterfowl habitat.

# 14.2.4.4 RWQCB—Regional Water Quality Control Board, San Francisco Bay Region, Naomi Feger, Planning Program Manager, January 10, 2011



Linda S. Adams
Acting Secretary of
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612 (510) 622-2300 • Fax (510) 622-2460 http://www.waterboards.ca.gov/sanfranciscobay



Comment Letter RWQCB

File No.: 709950 Date: January 10, 2011

Ms. Debbie Hultman
California Department of Fish and Game
Bay Delta Region
P.O. Box 47
Yountville, CA 94599
Sent via email: dhultman@dfg.ea.gov

Ms. Becky Victorine Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825

Sent via email: rvictorine@usbr.gov

Ms. Cay Goude U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, Ca. 85825 Sent via email: Cay Goude@fws.gov

SUBJECT: Comments on the Draft Environmental Impact Statement/Environmental Impact Report for the Suisun Marsh Habitat Management, Preservation and Restoration Plan

Dear Ms. Hultman, Ms. Victorine and Ms. Goude:

The San Francisco Bay Regional Water Quality Control Board (Water Board) staff appreciates the opportunity to review the Draft Environmental Impact Statement /Environmental Impact Report (DEIS/EIR) for the Suisun Marsh Habitat Management, Preservation and Restoration Plan (SMP). The Suisun Marsh, located within Southern Solano County, is the largest contiguous brackish water marsh remaining on the west coast of North America. It is part of the San Francisco Bay-Delta estuary ecosystem and encompasses 116,000 acres, including 52,000 acres of managed wetlands, 27,700 acres of upland grasses, 6,300 acres of tidal wetlands, and

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30,000 acres of bays & sloughs. The marsh includes extensive wildlife habitat and public waterfowl hunting areas at Grizzly Island Wildlife Area, as well as 158 private duck clubs.

The Water Board is the State agency responsible for protecting the beneficial uses of water in the San Francisco Bay Region. We are responsible for issuing the Clean Water Act section 401 Water Quality Certification that is required for the Army Corps of Engineer's to issue its 404 Regional General Permit for maintenance activities in the managed wetlands. We are also responsible for issuing permits, e.g., water quality certifications, for wetland restoration projects in Suisun Marsh to ensure protection of water quality.

The San Francisco Bay Water Quality Control Plan (Basin Plan) and the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary establish applicable water quality standards, including beneficial uses and water quality objectives, to protect water quality in Suisun Marsh. The Suisun Marsh wetlands are on the Water Boards' Clean Water Act section 303(d) list of impaired waters due to concerns about mercury, nutrients, organic enrichment, low dissolved oxygen (DO) and salinity and their adverse impacts on beneficial uses in the wetlands. Management activities occurring in managed wetlands in the Suisun Marsh Complex contribute to the water quality problems in the marsh. The Water Board is currently developing a multipollutant Total Maximum Daily Load (TMDL) which is a long term water quality improvement plan for the Suisun Marsh wetlands to address these impairments.

The SMP is a 30-year plan to address the long term use of resources in the marsh. We understand that the SMP is a multi-agency and private landowner framework for the ongoing management of seasonal wetlands for public and private hunting, levee maintenance and

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restoration of tidal wetlands for fish and wildlife habitat and recovery. We look forward to working with you to ensure that water quality is restored and protected in the Marsh and that beneficial uses are protected. We also look forward to working together on future development, permitting and implementation of the SMP. Our comments on the SMP DEIS/EIR are attached. Please direct any questions you have about these comments to Barbara Baginska at (510) 622-2474, or via e-mail at baginska@waterboards.ca.gov.

Sincerely.

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Naomi Feger Planning Program Manager

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#### General Comments

While we agree that the environmental impacts of the SMP described in the DEIS/EIR are largely beneficial and would likely contribute to broader ecological benefits, the SMP is deficient in that it does not sufficiently address water quality concerns that are associated with the management of the existing managed wetlands in the marsh, especially those management activities that cause observed adverse water quality impacts. As a long-term plan, the SMP should specifically address management actions associated with the managed wetlands that impact the adjoining sloughs, e.g., impacts on dissolved oxygen (DO).

The discussion of water quality impacts within the marsh is limited to salinity, DO/temperature, mercury and suspended sediment, and the DEIS/EIR relies heavily on increasing tidal exchange as a means of improving water quality where managed wetlands are concerned. The DEIS/EIR should present more specific information about the impacts of the SMP on water quality resulting from management practices at the managed wetlands; improving water supply and increasing tidal flows in the managed wetlands will likely improve water quality yet that improvement may not be sufficient to meet water quality standards. Impairments including the reoccurring fish kills that have been linked to flooding at the managed wetlands during the fall season and the subsequent discharge of low DO water containing elevated levels of dissolved organic carbon and methymercury (MeHg) to several sloughs in northwestern Suisun Marsh, are not sufficiently addressed in the DEIS/EIR.

The DEIS/EIR claims that "....efforts will be made to improve management of managed wetlands and to lessen adverse effects ..." (page 1-8) but also acknowledges a high level of concern from landowners that restoration actions could affect the duck clubs, their ability to maintain current hunting opportunities and lead to an increase in the cost of maintenance (page. 1-29) making it hard to foresee whether any actions will be required to address this problem. In fact Table 2-5 (page 2-22) shows that nearly no change from baseline in currently implemented managed wetland activities is anticipated and that all new activities focus primarily on levee



-5.

system maintenance. The DEIS/EIR should demonstrate how new/improved interior water control structures, interior ditches or increased frequency of currently implemented managed wetlands activities would contribute to improving water quality and discuss their likelihood of success.

The DEIS/EIR stipulates that tidal restoration of the managed wetlands experiencing low DO events (e.g. see Impact WQ-5, p. 5.2-24) would result in the greatest water quality benefits.

Table 2-3 (page 2-15) lists considerations for selection of sites for restoration, but no information is provided on the process that would ensure the best possible outcome or the type of incentives that could result in the greatest environmental benefit. The DEIS/EIR should devise a process that guarantees that tidal restoration will take place and/or benefit the areas currently experiencing the worst environmental impacts such as fish kills or low DO event.

The DEIS/EIR does not address all potential site-specific project impacts as the tidal marsh restoration and levee system improvement actions are described at a non-site-specific conceptual level. Additional documentation will be required prior to issuance of any 401 certification and/or Waste Discharge Requirements based on the specific sites selected and the construction work that is proposed, including the adaptive management plan that is referred to in the DEIS/EIR. The adaptive management section of the DEIS/EIR lacks project specific information such as phasing, performance indicators and criteria, design modifications, funding assurances, contingency plans and the process for modifying management decisions and communicating results. Monitoring provisions to assess progress toward the objectives or to better inform future management actions proposed to be implemented over the 30-year period are also lacking. The Water Board would appreciate an opportunity to review the Mitigation Monitoring and Reporting Program that will accompany the DEIS prior to final approval.

The San Francisco Bay Ecosystems Goals Project, which the San Francisco Bay Water Board participated in, is referenced in the DEIS/EIR. That Project recommended that between 17,000 and 22,000 acres of tidal marsh be restored in Suisun Marsh. A tidal marsh restoration alternative approaching this recommendation should have been included in the DEIS/EIR. Other



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than the reference to the CALFed ROD, it is still not clear what the basis is for the acreage proposed for tidal marsh restoration in the proposed project. As indicated on page 4-6 of the DEIS/EIR, Alternative C, 7,000 to 9,000 acres of tidal marsh restoration, would provide for greater improvement of water quality and is therefore the more environmentally superior alternative. In that alternative, the water quality benefits of restoration are increased, while reducing the water quality concerns associated with managed wetlands. Alternative C also maximizes the opportunity to provide recovery of many threatened and endangered species. Water Board staff supports selection (adoption) of Alternative C.



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## Specific Comments

1. Chapter 1, Plan Purposes/Objectives: the 1<sup>st</sup> objective, implement the CALFED ROD preferred alternative of restoration of 5,000 to 7,000 acres of tidal marsh. Please provide a specific citation for the reference for this statement. The 4<sup>th</sup> objective of the Plan is to protect and, when possible, improve water quality for beneficial uses in Suisun Marsh, yet the DEIS/EIR lacks key information, especially regarding the beneficial uses that the proposed Project is intended to protect. Please identify the specific beneficial uses, consistent with the Basin Plan that would be protected by the SMP.

#### 2. Page 2-35 - Dredging from Tidal Sloughs:

The statement in the first paragraph that "over time, as tidal restoration occurs, the number of exterior levees in the Marsh may decrease, thus reducing the amount of dredging required to maintain Marsh levees" appears to conflict with statements made under Impact FC-1 on page 5.4-7: "As a result of levee breaches and other actions that may be implemented as part of SMP tidal wetland restoration actions, interior levees may become exterior levees, thus increasing their exposure to tidal action for which they were not intended. To reduce the potential risk for failure of these levees, they would be improved to meet exterior levee standards."

Wouldn't improvements to newly exposed interior levees, which have become, in effect, exterior levees, require placement of dredged material to meet exterior levee standards? Please clarify.

#### 3. Page 2-37:

The plan states that dredged material may be placed on the bay/slough side (exterior) sides of levees as well as the landside backslopes and crowns, and that minimal materials will enter interior managed wetlands or bay/slough waters because the materials will be deliberately "kept" where they've been placed. Water Board permits have not allowed placement of dredged material on exterior levee slopes in the past due to concerns that they may be dislodged by tidal forces and released to adjacent surface waters.

Please clarify how newly placed dredged material will be kept in place on exterior sides of levees, especially prior to grading and integration with the existing levee materials.



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# 4. Pages 2-68 and 2-69 - Managed Wetland Activities and Dredging Practices:

Please clarify how the third bullet-listed dredging practice: "Runoff generated on the job site will be controlled and treated" is related to the seventh bullet-listed practice: "A berm will be constructed on the channel-side of the levee crown to prevent runoff into adjacent aquatic habitats." These two practices seem to be somewhat mutually exclusive.

Please define what is meant by "runoff" (i.e., is it decant water from dredged material?). If you do in fact plan to treat and release it, please explain how it will be treated.

#### 5. Page 2-69:

The sixth bullet-listed dredging practice states: "Dredging will be avoided within 200 feet of storm drain outfall and urban discharge locations, unless suitable preconstruction contaminant testing is conducted," The EIS/EIR should include a map identifying these discharge locations and give some estimation of the areal extent of potentially contaminated sediment relative to levee maintenance needs for sediment.

Please define what is meant by "suitable preconstruction contaminant testing". Is this the LTMS testing protocol for navigational maintenance dredging or something else?

## 6. Section 5.2 Sources of Information:

It would be helpful if sources of information listed on pages 5,2-3 = 5,2-4 are separated into those providing information on the regulatory framework and those that are sources of water quality data. Currently it is unclear what data series were considered in the water quality evaluation in Chapter 5 and why (page 5.2-3). It is also unclear why particular years of data were used. In the discussion of salinity (electrical conductivity) the data from 2002 and 2003 are shown (e.g. see page 5.2-12) and for dissolved oxygen and temperature, data are from 2006 and 2007 data (page 5.2-15). The source of DO and temperature data is not among the key sources of information listed on page 5.2-3. There is no information on spatial and temporal trends in water quality, no discussion of frequency of exceedances or any indication of the length of time they persist.

In general Section 5.2 appears inconsistent and lacks the necessary details to fully evaluate current water quality conditions or to demonstrate improvements in water quality due to the



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proposed Project. We request that at a minimum pH data be included in the discussed water quality parameters. This information, in conjunction with data on DO, would provide an indication of detrimental conditions that could likely affect wildlife and aquatic species. Also, a discussion of how current management practices at managed wetlands are impacting nutrient concentrations in the Marsh is needed.

#### 7. Page 5-2.5:

In 2008, the US EPA approved the mercury TMDL for San Francisco Bay developed by the Water Board. This TMDL applies to all segments of the Bay including Suisun Bay. Therefore the following statement should be modified to reflect the existence of a TMDL for Suisun Bay for mercury: "Mercury, specifically methylmercury (MeHg), in Suisun Bay is one example of a pollutant—water body combination that presumably soon will require a TMDL and follow-up regulatory action by the San Francisco Bay RWQCB".

# 8. Page 5-2.9:

The statement saying "A TMDL for methylmercury specific to Suisun Marsh may be developed in the future." should be replaced with the San Francisco Bay Water Board is currently developing a TMDL to address multiple pollutants, including mercury, in the Suisun Marsh wetlands.

#### 9. Page 5-2.9:

"Free ammonia...., and the RWQCB Basin Plan establishes a region-wide water quality objective of 0.025 mg/l (annual median)" should state 0.025 mg/l as N (annual median).

## 10. Page 5-2.15:

Revise last sentence in the second paragraph "Preliminary results suggest that DO levels have improved in many tidal sloughs with previous problems"; and provide evidence that DO levels have indeed improved.

# 11. Page 5.2-20:

The section on mercury objectives/targets that apply to San Francisco Bay and its segments needs to be re-written as most of the information there is incorrect.



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The 4-day average value of 0.025 µg/l for mercury does not apply to San Francisco Bay; instead, the water quality objectives specified in the Basin Plan Table 3-3B (see below) apply. See "Note b" below the table for information on geographical extent for these objectives. The 1-hour average value of 2.1 µg/l continues to apply to San Francisco Bay. The water quality objective for protection of aquatic organisms and wildlife is 0.03 mg/kg and not 0.05 mg/kg as stated on page 5.2-20. Both the human health and wildlife objectives apply to Suisun Bay and the waters downstream and upstream from Suisun Bay.

Table 3-3B: Marine <sup>a</sup> Water Quality Objectives for Mercury in San Francisco Bay <sup>b</sup>		
Protection of Human Health	0.2 mg mercury per kg fish tissue	Average wet weight concentration measured in the edible portion of trophic level 3 and trophic level 4 fish <sup>c</sup>
Protection of Aquatic Organisms and Wildlife	0.03 mg mercury per kg fish	Average wet weight concentration measured in whole fish 3-5 cm in length

#### Notes:

- a. Marine waters are those in which the salinity is equal to or greater than 10 parts per thousand 95% of the time, as set forth in Chapter 4 of the Basin Plan. For waters in which the salinity is between 1 and 10 parts per thousand, the applicable objectives are the more stringent of the freshwater or marine objectives.
- b. Objectives apply to all segments of San Francisco Bay, including Sacramento/San Joaquin River Delta (within San Francisco Bay region), Suisun Bay, Carquinez Strait, San Pablo Bay, Richardson Bay, Central San Francisco Bay, Lower San Francisco Bay, and South San Francisco Bay (including the Lower South Bay).
- Compliance shall be determined by analysis of fish tissue as described in Chapter 6, Surveillance and Monitoring.

In general, as set forth in Chapter 4 of the San Francisco Bay Basin Plan, freshwaters are those in which the salinity is equal to or less than 1 part per thousand 95% of the time. And the applicable freshwater objectives for mercury are: the 4-day average of  $0.025 \,\mu\text{g/L}$ , and the 1-hour average of  $2.4 \,\mu\text{g/L}$ 



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# 12. Page 5.2-21: - 1st paragraph

"Salinity changes that are less than 10% of the maximum monthly criteria are similar to natural variability and are not likely to cause <u>significant harm</u> to natural habitat or species". Suisun Marsh is a brackish marsh that under natural conditions would experience large salinity variations. The changes exceeding 10% might be undesirable from the point of view of water supply or agricultural uses of the marsh but would not be <u>harmful</u> to natural habitat.

#### 13. Page 5.2-25 - Impact WQ-6:

Add the underlined text to the last sentence: "Because of the short duration, limited extent of local construction activities, implementation of the appropriate best management practices, and environmental commitments to minimize and control erosion...."

#### 14. References in Section 5.2:

a. Please provide a complete citation for the following: California Department of Water Resources. 2001. This citation is too ambiguous to identify the document. Please provide the title of the Report and a link (page 5.2-3).

b. Please provide a date for the following reference: Wesley A. Heim, Dr. Kenneth Coale, and Mark Stephenson. Methyl and Total Mercury Spatial and Temporal Trends in Surficial Sédiments of the San Francisco Bay-Delta, CALFED Bay-Delta Mercury Project Final Report. Moss Landing Marine Lab. (page 5.2-4)



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#### 15. Page 9.12 - Cumulative Effects:

The DEIS/EIR states that "Mobilization and transport of mercury-contaminated sediments is a regional issue proposed to be regulated by the Bay TMDL requirement to reduce the inventory of mercury in the actively resuspended sediment layer. Of all the Regional TMDLs, the Bay Mercury TMDL is farthest along in the regulatory process, having been adopted by the San Francisco Bay RWQCB in August 2006. The Bay Mercury TMDL includes an implementation plan with provisions to avoid exceedance of water quality objectives and TMDL allocations. However, it does not yet apply to restoration actions." This is not accurate.

The S.F. Bay Mercury TMDL Implementation Plan does include provisions that apply to wetlands and restoration actions and calls for management practices that minimize mercury methylation. Please see the language taken from the San Francisco Bay Basin Plan below. Any new tidal restoration project would need to be designed and operated to minimize methymercury production and some level of monitoring, e.g., mercury biosentinal species monitoring, would need to be conducted. We agree in general that tidal wetlands are an improvement in terms of methylmercury production as compared to managed wetlands.

#### "Wetlands

Wetlands may contribute substantially to methylmercury production and biological exposure to mercury within the Bay. Plans for extensive wetland restoration in the San Francisco Bay region raise the concern that mercury methylation may increase, thereby increasing the amount of mercury entering the food web. Implementation tasks related to wetlands focus on managing existing wetlands and ensuring that new constructed wetlands are designed to minimize methylmercury production and subsequent transfer to the food web.

The Water Board issues Waste Discharge Requirements and Clean Water Act Section 401 certifications that set forth conditions related to Bay filling and the construction and management of wetlands. To implement the San Francisco Bay mercury TMDL, the Waste Discharge Requirements and Section 401 certifications for wetland projects shall include provisions that the restored wetland region be designed and operated to minimize methylmercury production and biological uptake, and result in no net increase in mercury or methylmercury loads to the Bay. Additionally, projects must include pre- and post-restoration monitoring to demonstrate compliance. There is much active research on mercury cycling in wetlands. Information about how to manage wetlands to suppress or minimize mercury methylation will be adaptively incorporated into this implementation plan as it becomes available."



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# 16. Page 10-19 under Section 401: Certification and Wetlands:

Note that the lead agencies will need to obtain certification from the San Francisco Bay RWQCB and not the Central Valley as currently stated.

# 17. Page 10-28 - Clean Water Act - Section 303(d):

The discussion in the 2<sup>nd</sup> paragraph is incorrect. Since 2002 the Section 303(d) list of water quality limited segments has undergone two revisions. In August 2010 the State Water Board approved the 2010 Integrated Report, including the changes to the 2006 303(d) list and then submitted the final report for approval to the USEPA. The Integrated Report provides details on the current listings that apply specifically to Suisun Marsh Wetlands and Suisun Bay. All these listings predate the 2002 303(d) list and were upheld during the revisions of the 303(d) list in 2006 and 2010. Following the San Francisco Bay Water Board recommendation to the State Board in January 2009, Suisun Bay, San Pablo Bay and a small portion of the Delta that is within the Region 2 boundaries are no longer considered impaired for nickel and were removed from the 2010 303(d) list.



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18. Basin Plan Prohibitions and Requirements that will be required as part of any future 401 Water Quality Certification issued by the Water Board

The Water Board must certify that any permit, including nationwide permits, issued by the US Army Corps of Engineers pursuant to section 404 of the Clean Water Act (covering dredging or filling of Waters of the United States, including wetlands) complies with the state water quality standards. Section 401 Water Quality Certification is necessary for all 404 permits. All projects that the Water Board approves/certifies under the Section 401 Program or Wastewater Discharge Requirements must adhere to the discharge prohibitions and receiving waters limitation requirements stated in the Basin Plan. These requirements (see the list below) would need to be met before a Water Quality Certification is granted and should be included in any proposed activity.

# Discharge Prohibitions

- The direct discharge of wastes, including rubbish, refuse, bark, sawdust, or other solid
  wastes into surface waters or at any place where they would contact or where they would
  be eventually transported to surface waters, including flood plains, is prohibited.
- The discharge of floating oil or other floating materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
- The discharge of silt, sand, clay, or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
- The wetland and creek fill activities subject to these requirements shall not cause a nuisance as defined in CWC §13050(m).
- 5. The discharge of decant water from active dredging or fill sites and dredged material stockpile or storage areas to surface waters or surface water drainage courses is prohibited, except as conditionally allowed following the submittal of a discharge plan or plans as described in the Provisions.



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- The groundwater in the vicinity of the Project shall not be degraded as a result of the Project activities or placement of fill for the Project.
- The discharge of materials other than storm water, which are not otherwise regulated by a separate NPDES permit or allowed by this Order, to waters of the State is prohibited.
- The discharge of drilling muds to waters of the State, or to where such muds could be discharged to waters of the State, is prohibited.
- The discharge of earthen fill, construction material, concrete, aggregate, rock rip-rap, and/or other fill materials to waters of the State is prohibited, except as expressly allowed by permit.

#### Receiving Water Limitations

- The discharges shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam in concentrations that cause nuisance or adversely affect beneficial uses;
  - Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - Visible, floating, suspended, or deposited oil or other products of petroleum origin; and
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.
- The discharges shall not cause nuisance, or adversely affect the beneficial uses of the receiving water.



# **Responses to Comment Letter RWQCB**

# **RWQCB-1**

See Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR.

As described in Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR, the EIS/EIR baseline for comparison of impacts of the alternatives is the environmental conditions at the time of the NOP. As such, the water quality analysis focuses on the potential changes to water quality that could occur with the new activities and increased frequency of currently implemented activities, compared to existing conditions. Many of the water quality issues in the Marsh are ongoing and are considered a component of the existing conditions. They have largely been addressed through various permit processes and management regimes. The historical context of these efforts and their effectiveness is described in Section 5.2. Additionally, the SMP includes environmental commitments for landowners to continue to implement applicable terms and conditions relative to operations of the managed wetlands. As described in Section 5.2, as tidal restoration occurs, there is a potential for areas that currently contribute to water quality effects to be restored, thus improving water quality in the Marsh.

# **RWQCB-2**

See Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR.

As described in Master Response2: Definition of the CEQA ad NEPA Baseline for This EIS/EIR, the existing managed wetland operations are part of the baseline for comparison, and therefore the effects of these ongoing operations are not analyzed in this EIS/EIR. The SMP is designed to balance water quality improvements in the managed wetland discharges with estuarine habitat improvements through tidal marsh restoration. Section 5.2-22 of the EIS/EIR discloses that "The primary anticipated sources of water quality impairments would be annual discharges from existing managed wetlands and temporary construction activities during tidal wetlands restoration. However, this analysis assesses only the change in restoration and managed wetland activities associated with the SMP alternatives." (Section 5.2, page 2)

The qualitative description of managed wetland discharges in Section 5.2, pages 14 and 15, is based on a review of the most recent available DO monitoring data from the Marsh. As described, improvements in managed wetland practices apparently have reduced the incidence of low DO conditions in the vicinity of flooded marsh discharges. Additionally, the SMP includes environmental commitments to continue implementation of measures that help reduce the occurrence of low DO events. As tidal restoration increases, managed wetlands water quality impacts would decrease.

#### **RWQCB-3**

As described above, the SMP includes environmental commitments to continue implementation of activities for managed wetlands that are required as part of the ESA/Essential Fish Habitat (EFH) consultation terms and conditions (Page 5.2-14).

# **RWQCB-4**

Table 2-3 outlines the types of considerations that will be made prior to purchasing a property from a willing seller for restoration purposes. These considerations include those related to the ability to provide full tidal exchange. As described in the EIS/EIR, properties would be purchased on a willing-

seller basis, thus limiting the potential options for restoration. Additionally, many considerations will come into play as sites are selected and designed. Water quality is one of these considerations, but is not necessarily the only one.

# **RWQCB-5**

See Master Response 1: Project-Specific Analysis, and Master Response 5: Inclusion of an Adaptive Management Plan.

#### **RWQCB-6**

See Master Response 5: Inclusion of an Adaptive Management Plan.

# **RWQCB-7**

The MMRP is included as a component of this Final EIS/EIR and does not provide any additional information compared to the Draft EIS/EIR. Essentially, the MMRP is a summary of environmental commitments and mitigation measures described in the Draft EIS/EIR.

# **RWQCB-8 and RWQCB 9**

See Master Response 3: Alternatives.

# **RWQCB-10**

Page 36 of the CALFED Programmatic Record of Decision (ROD) identifies habitat restoration in Suisun Marsh as a programmatic action. Page 35 of the ROD refers the reader to the Ecosystem Restoration Program Strategic Plan documents for further detail. This detail is provided in Volume II: ERPP, Suisun Marsh/North San Francisco Bay Ecological Management Zone Vision, June 1999, pages 138 and 139.

# **RWQCB-11**

A list of beneficial uses (fish, recreation, wildlife) was added to page 1-9 and page 5.2-5. The 2010 San Francisco Bay basin plan was added to sources of information. Recreation was added to the list of beneficial uses on page 5.2-9.

#### **RWQCB-12**

The SMP outlines a process for tidal restoration to help ensure that interior levees that become exterior levees as a result of restoration require minimal maintenance. Part of the levee design includes establishment of benches and berms that provide not only a tidal gradient but also a buffer for the levee. As such, it is expected that new exterior levees would be vegetated berms that would not require placement of additional material in most instances. Additionally, the SMP prohibits dredging from vegetation berms greater than 50 feet. Overall, the restoration activities described in Chapter 2 are intended to avoid the need for substantial levee maintenance or the need for dredging in the restored areas. These include creating gradually sloping interior levees to help establish a range of intertidal habitats, establishing vegetation within the restoration area prior to breaching, and designing breach locations and sizes to best accommodate desired flows and sediment transport into and out of tidal restoration areas. These measures are expected to be included in USFWS's Biological Opinion.

# **RWQCB-13**

Dredged material would not be placed on the exterior side of the levees. Materials will be placed on the crowns and back slopes of the existing exterior levees.

#### **RWQCB-14**

If a berm is constructed, any "runoff or decant water" from the clamshell or excavator bucket placement of excavated material would be contained within the managed wetlands. Any runoff water from material placement would not be treated, but it would be contained within the adjacent diked managed wetland ditches. Drain gates near the dredging placement site will remain closed or will be physically blocked during the placement of material and 3 days following the completion of the activity to ensure any turbidity is contained within the managed wetland ditches.

## **RWQCB-15**

This was added at the request of the RWQCB. SRCD will prepare a map of known storm drain outfalls in the vicinity of exterior levees that may be maintained using dredged materials under this program as part of the 401 Water Quality Certification application. The areal extent is the 200 feet immediately adjacent to these mapped storm drains as they requested.

## **RWQCB-16**

The Final EIS/EIR clarifies that this testing for the storm drains areas within 200 feet includes coordination and consulting with the DMMO relative to evaluation and placement of these materials. Materials placed are on the crown and back slope of the levee would not affect waters and are exempt from Corps Jurisdiction.

# **RWQCB-17**

All of the available water quality data from the Suisun Marsh channels previously have been described and evaluated in the documents listed. The regulatory framework has provided water quality objectives for the Marsh based on these available data. The major variable measured is salinity (EC), and salinity is dominated by Delta outflow, as fully described in Section 5.2. There are no routine monitoring stations for many of the water quality parameters of interest. For example, the temperature and DO data from 2006 and 2007 were used because they were based on the only available survey in the marsh channels. The suspended sediment data from Honker Bay and Mallard Island from 1996–1997 were available, and the DWR data from Nurse Slough from 2004–2006 were the only measurements from the marsh channels. All available data were used for the EIS/EIR evaluations of these water quality parameters.

## RWQCB-18

The EIS/EIR analysis focuses primarily on various impacts that might result from the new and increased-frequency managed wetland activities and restoration of tidal wetlands. (Also see Master Response 2: Definition of the CEQA and NEPA Baseline for This EIS/EIR.) Improvements in water quality are anticipated but cannot be quantified because the exact location of the restoration is not known. There are only limited pH data from the marsh channels. The pH of water in the marsh channels is not likely to change substantially from any managed wetlands drainage or in the restored tidal wetlands. Nutrient concentrations are measured monthly in Suisun Bay, but nutrient concentrations are not expected to change substantially as a result of the SMP because the sources

of nutrients are relatively small compared to the average nutrient concentrations in Suisun Bay and channels.

# **RWQCB-19**

The regulatory setting section was modified to include a statement that there is an EPA-approved TMDL in place for mercury in the Bay.

# **RWQCB-20**

Text revised per comment.

# **RWQCB-21**

Text revised per comment.

# **RWQCB-22**

This sentence accurately summarized the discussion and data analysis provided in the referenced monitoring report. No change is needed.

# **RWQCB-23**

This section has been modified to more accurately summarize the discussion of Hg and MeHg objectives in the referenced documents based on the information provided in the comment.

Specifically, the text was changed from 0.5 mg/kg to 0.3 mg/kg and the reference to a 4-day average was deleted.

# **RWQCB-24**

The Suisun Marsh salinity objectives have been established by the SWRCB under the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Decision -1641 to ensure salinity objectives and Delta outflow criteria are adequate for protection of Suisun Marsh fish and wildlife beneficial uses, narrative salinity objectives of the brackish tidal marshes of the Suisun Bay, and provide water of sufficient quality to managed wetlands to achieve soil water salinities capable of supporting the plants characteristic of a brackish marsh. This was described in the discussion of salinity significance criteria and footnote on page 5.2-21.

# **RWQCB-25**

Text revised per comment.

# **RWQCB-26**

Citation revised.

# RWQCB-27

October 2003 added to reference.

#### **RWQCB-28**

See Master Response 1: Project-Specific Analysis.

# **RWQCB-29**

Text revised per comment.

# **RWQCB-30**

The paragraph on 10-28 describing the 303(d) listing for nickel was removed. Reference to the State Board 2020 Integrated Report was added.

# **RWQCB-31**

These requirements will be addressed in the application process for 401 Water Quality Certification.

# 14.2.4.5 SC—Solano County, Department of Resources Management, Bill Emlen, Director of Resources Management, December 29, 2010

Comment Letter SC



# SOLANO COUNTY Department of Resource Management

675 Texas Street, Suite 5500 Fairfield, CA 94533 www.solanocounty.com

Telephone No: (707) 784-6062 Fax: (707) 784-4805 William F. Emlen, Director Clifford Covey, Asst Director

December 29, 2010

Ms. Becky Victorine Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825

Dear Ms. Victorine:

Thank you for the opportunity to provide comments on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan (SMP) Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). The document notes that the plan is a comprehensive 30-year plan designed to address the various conflicts regarding use of Marsh resources, with a focus on achieving an acceptable multi-shareholder approach to the restoration of tidal wetlands and their long term management.

The Draft EIS/EIR describes and analyzes three alternative 30-year plans, each having different tidal wetland restoration targets: Alternative A (Proposed Plan) – 5,000-7,000 acres tidal wetland restoration, Alternative B-2,000-4,000 acres tidal wetland restoration, and Alternative C-7,000-9,000 acres tidal wetland restoration. The project document is not specific as to the actual parcels to be subject to the restoration activities as this has yet to be determined.

As the local agency with base level permit and land use authority within the boundaries of the project area, Solano County has great interest in the plans, scope and impacts. Accordingly, Solano County's comments and concerns on the plan and draft EIR / ES are provided below.

# Summary of County Comments on Draft SMP's Environmental Documents / Key Issues

The SMP has many laudable goals and has been in development for nearly ten years. Solano County has been and is supportive of these efforts with some reservations, and have complimentary policies in the 2008 General Plan. Implementation of this project will take several decades and will involve a complex intertwining of state, federal and local agencies. A fundamental concern of the County is that local impacts are fully understood, and when appropriate, mitigated. The County also has a concern that adequate funding be provided for full and complete plan implementation, including mitigation of local economic impacts and an adequate endowment to ensure comprehensive long term management of the Marsh areas and the new tidal wetlands proposed under this plan.

SC-1

Building & Safety David Cliche Building Official Planning Services Mike Yankovich Program Manager Environmental Health Terry Schmidtbauer Program Manager

Administrative Services Suganthi Krishnan Senior Staff Analyst Public Works-Engineering Paul Wiese Engincering Mannger Public Works-Operations Rick O'Neill Operations Manager Overall, the EIS/EIR seems to underweight or not fully address the full breadth of local impacts. While this project will clearly have potential benefits and has a desired outcome of improved environmental quality, that does not absolve the project proponents from fully assessing the range of impacts, including those affecting Solano County and the Resource and Reclamation Districts in the Suisun Marsh area. The reality is that some of the impacts could have negative consequences for the County; both short and long term. A key issue for the county is the level of analysis in the EIS/EIR relative to the type of impacts that will affect the County (particularly in the Land and Water Use, Social Issues and Economics chapter). Our initial assessment of the EIS/EIR was that the scope of impacts in these areas was too limited, and that the "significance criteria" bar was set too, resulting in few, if any, meaningful mitigation measures. We respectfully request that the EIS/EIR take a harder look at local impacts as referenced above and described in greater detail below, and that the documents be amended accordingly.

SC-3

Outlined below are the County's key issue areas relative to the SMP followed by section specific comments on the draft EIS/EIR.

## Fiscal impacts of Land Conversions

A key component of the SMP is acquisition of private lands for conversion to publicly managed tidal wetlands. The plan commits to acquisitions from willing sellers only. There will be fiscal impacts to the County will occur regardless of how the land is acquired. The draft EIS/EIR determines this impact will be insignificant and no mitigation is specified. There is a reference to in lieu fee payments for lost property tax revenue under the Fish and Game Code.

The County does not agree with the conclusion that the impact is insignificant. We believe there is the possibility of cumulative effects, particularly when the SMP is juxtaposed with other Delta projects planned in Solano County that would also involve conversion of thousands of acres of revenue generating private held and managed lands to publicly held and operated land uses. Further, the reference to the Fish and Game in lieu fee offset to property tax loss does not provide the assurance that it would actually occur because it is not a specific mitigation measure and subject to appropriation. The fact that adequate funds may not be available to pay an in-lieu of tax fee is a concern. And finally, the EIS/EIR only references the Fish and Game Code as a potential offset for property tax loss. What if the land is under federal ownership or some other state agency? From the County's perspective, the EIS/EIR needs to acknowledge the cumulative impacts of lost property taxes, private management and oversight, and identify and commit to a clear set of "in lieu of" sources and adequate oversight and long term management to ensure the impacts are mitigated. It would be advisable to establish mitigation funds outside of the State's General Fund and make these funds unavailable for other uses.

SC-4

# Economic Impacts to Solano County

The County believes the draft EIS/EIR could provide greater depth in its assessment of local economic impacts. The current draft focuses primarily on the potential economic benefits of temporary construction activities associated with Marsh restoration efforts and the potential recreational benefits. While these potential benefits are acknowledged, they need to be evaluated against potential negative economic impacts such as reduced agricultural production, increased service costs associated with law enforcement servicing isolated public lands and waterways, and potential unintended consequences such as constraints on farming private lands when adjacent to Marsh areas or restraints on private hunting with the marsh area. It is implied in the EIS/EIR that the restoration activities will have net positive impacts but, there is no quantitative assessment to measure and compare the full range of impacts, either positive or negative. The overall analysis is empirical in nature, and lacks data or other substantive facts to support the conclusions.

SC-5

Page 2 of 9

#### Public Safety Impacts

The County wants to ensure that public safety impacts of fire, law enforcement, illegal dumping and access via boats or vehicles are all identified and addressed in ways that do not create additional operational, management, liability or funding issues. Public safety issues include impacts over time to existing maintained roads with loss of funding and loss of private landowners. To maintain safety, these roads will need funding for ongoing operations and maintenance.

The EIS/EIR on pages 7.3.10 and 7.3.11 focus on increases in emergency response times and concludes that impacts are less than significant. What is not evaluated are the consequences of extensive restoration of wetlands and the potential costs and challenges of providing fire and law enforcement services to these areas. Will federal and state agencies be providing such services? Or is the expectation that the county sheriff and fire districts will provide these services. The county already incurs costs for rescues in waterway areas and for retrieval of abandoned boats. We can only expect such activities to increase with the proposed project. The worst case scenario involves the expectation that the county would provide these services with no offset for the loss of property tax revenues. The current lack of identified impacts or mitigation in this category is a county concern. We request that the EIS/EIR further consider these impacts and provide for specific mitigation.

# Impacts Related to Conversion of Farming and Grazing Lands

The EIS/EIR does not address these impacts. The County believes the cumulative impacts are potentially significant, particularly when considered in relation to the Bay Delta Conservation Plan and two existing Biological Opinions on Fish in the Delta with targeted acreages for ideal habitat all targeting Solano and the Yolo Bypass. Will there be mitigation of loss of farmland or managed wetlands? The County General Plan has adopted language on this and has established mitigation at a 1.5 to 1 ratio, with funding provided to the County to purchase agriculture easements on farmland (elsewhere in the County). This is the specific language found in Solano County's General Plan regarding agricultural mitigation ratios:

"AG.I-1: Create and adopt a farmland conversion mitigation program and ordinance. Require compensation for loss of agricultural land. Establish appropriate mitigation ratios for the program or utilize a graduated mitigation mechanism. The mitigation ratio shall be a minimum of 1.5:1 (1.5 acres of farmland protected through mitigation of each acre of farmland converted). The program shall not present regulatory barriers to agritourism, agricultural services, and agricultural processing in regions and within land use designations where such uses are permitted and encouraged. The program shall also establish mitigation within the same agricultural region as the proposed development project, or within the Agricultural Reserve Overlay district, as a preferred strategy. The program shall incorporate a fee option, and shall provide an exemption for farmworker housing. Mitigation lands shall be of similar agricultural quality to the lands being converted."

A further concern is the possible restriction on farming / grazing that may result as rare or endangered species re-populate established habitat areas. This would result in far broader restrictions on private land use than is currently evaluated. The County is also concerned about the loss of a critical mass of land to support farming and farming infrastructure without clear mitigation identified.

# Management of Tidal Wetlands

The project involves the creation of 7000 acres of tidal wetlands. Will an endowment be established to ensure long term maintenance? The county is concerned that failure to establish

Page 3 of 9

SC-6

SC-7

SC-8

long term funding for maintenance project initiation could result in unintended consequences with potential negative impacts on the County.

SC-9 cont'd

Solano County is also concerned with channel maintenance of the Marsh. This is important because water flows through it and out to the river. Without proper ongoing channel maintenance the County will have flooding issues elsewhere.

SC-10

# Land Use and Permits

Regarding permitting, we believe the document could be clearer on the county's local regulatory authority within the boundaries of the SMP. Currently, and we presume even under the plan, the county will be responsible for review and issuance of ministerial permits throughout the Marsh. The County is also responsible for certain land use permits in secondary management areas (upland). Our request is that the documents provide clear delineation of the County's roles and responsibilities.

SC-11

Related to the County's permitting authority and our understanding that this authority would not be completely usurped by the Plan, an argument can be made that the County should be listed as the "Responsible Agency" under CEQA. Table 1-2 on page 1-7 does not list the county as a "Responsible Agency." We ask that the lead agencies further evaluate the CEQA definition to determine if the County should be listed as such in the EIS/EIR document.

SC-12

A final land use comment relates to plan implementation. We understand the intent is to purchase land to implement the tidal wetland plan from willing sellers only. The County supports this approach but does feel it will pose challenges in the coalescing of a coherent tidal wetland restoration plan while masking the integrity of existing/remaining privately held levees, land and access roads. Will there be any type of concept plan that would guide acquisition activities? If so, the County would like to be a participant in plan formulation to address such factors as buffers between habitat areas and properties where active grazing and farming activities are taking place and overall plan concepts that minimize potential impacts on County services.

# **Chapter Specific Comments**

#### **Environmental Commitments**

Hazardous Materials Management Plan

On page 2-54, second paragraph, the document states the contractors will not use any hazardous materials in excess of reportable quantities of Title 40 CFR Part 355 unless approved by the Office of Emergency Services. The reporting of Hazardous Materials in excess of reportable quantities of Title 40 CFR Part 355 is required annually to Solano County Environmental Health Services Division as the Certified Unified Program Agency (CUPA).

SC-13

On Page 2-54, third paragraph, the project proponents will prepare a risk management plan (RMP). The RMP will be submitted to the Environmental Protection Agency (EPA) and will reflect the comments of the Solano County CUPA. A risk management plan addresses acutely hazardous materials such as chlorine gas, ammonia gas, hydrogen chloride, flammable gases. This document is required to be submitted to both US EPA and Solano County Environmental Health Services Division as the CUPA.

SC-14

On pages 2-64, please add the following bullet under Biological Monitoring to address the potential for introduction of weeds and invertebrates through the re-vegetation pathway:

SC-15

Plants for re-vegetation must be accompanied by a California Nursery Stock Certificate.

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#### **Water Quality**

#### Suspended Sediments and Contaminants

Page 5.2-15, paragraph 3 shows that suspended sediments bind metals and other potentially toxic chemicals. The modeling indicated that the proposed changes can increase the potential for failure on the banks of affected levees or scouring in some channels. (Numerical Modeling in Support of Suisun March PEIR/EIS, Section 6 – Discussion/Summary/Conclusions pages 128-129). This can increase turbidity and suspended sediment through siltation and release of chemical constituents trapped in sediment including other metals along with mercury, pesticides/herbicides and hydrocarbons among other toxic pollutants. The Plan discussed that potential chemical contamination includes elevated levels of mercury (Sec 5.2-2, paragraph 1, and Sec 5.2-16-17) but water quality impacts from other toxics including other heavy metals, pesticides/herbicides, and hydrocarbons were not identified.

SC-16

In Section 5.2-21 the Plan discusses how salinity objectives are intended to protect the water quality for managed wetland habitat as well as the salinity at Delta drinking water intakes and agricultural diversions. However, on page 5.32, potential impacts to water supply for domestic and irrigation purposes are stated as a less than significant threat, with no mitigation required, GW-6 – Potential for altered salinity in shallow Suisun Marsh groundwater.

Shallow water supply wells that are used for domestic, small water systems, and irrigation purposes exist in both the Primary and the Secondary Marsh area. The wells typically are constructed in shallow water bearing zones and serve less than five residential connections and fewer than 25 persons per day for a 60-day period. Therefore, with the exception of the community well serving the township of Collinsville, all of the water wells are individually owned and are not subject to any ongoing regulatory testing, or testing programs. In order to demonstrate potability, a property owner proposing the use of a domestic well as the water supply shall provide a water sample, prior to the issuance of the building permit which meets bacteriological standards for drinking water. Privately owned wells are not required to verify compliance with National Drinking Water Standards. The National Drinking Water Standards include over 100 chemicals which are regulated and have allowable limits established.

The increased salinity gradient could impact water supply sources for domestic and agricultural purposes. Individual wells for communities, residences (domestic) and agricultural supply exist or are proposed near the areas where salinity concentrations increase could be at risk for salt water intrusion: Reference: Numerical Modeling in Support of Suisun March PEIR/EIS - Sec 5.6.1, pg 81 Martinez to Collinsville – The results of the EC modeling indicated that with breaches between Honker and Grizzly Bays results in increased electrical conductivity (EC) throughout the year at Collinsville and Chipps. Depending on the restoration scenario, the proposed work can cause the salinity gradient to vary but generally increase particularly if the salinity gates are not in operation.

SC-17

# Potential Mitigation

Operation of additional salinity gates may be needed to protect areas that rely on fresh surface water or shallow groundwater sources (Collinsville, Rio Vista, Birds Landing, etc.).

Monitoring and sampling may be needed for water supply wells in areas where the salinity gradient has increased. Alternative water supplies or sources may be needed if shallow water supply wells and sources are impacted with saltwater intrusion that exceeds acceptable standards for drinking water or agricultural purposes.

In Section 5.3-9-10 the Plan indicates that groundwater supplies municipal, agricultural, and rural residential uses in Solano County. However, groundwater use has not been accurately quantified. Existing data suggest that the Suisun-Fairfield basin is not a significant source of

SC-18

Page 5 of 9

supply due to low yield and poor water quality (Section 5.3-10 paragraph 1). In addition, the Plan indicates that many land owners have wells, but none are known to provide potable supply (Section 5.3-10 paragraph 2).

Several small communities and individual land owners in the area and surrounding the Marsh utilize groundwater as their only supply for drinking water including Collinsville, and Birds Landing. Assessor's parcel 0046-190-060 is located in the Primary Marsh and has a domestic drinking water well serving four residences with addresses which includes 3091 Grizzly Island Road. The Rush Ranch property at 3521 Grizzly Island Road, APN 0046-140-070, is also served by an on-site water well.

#### Mitigation

A water well survey should be conducted in the areas where the surface water and shallow groundwater may be affected by the proposed plan. Mitigation measures should be taken for any well that may be threatened by the proposed changes in water quality including; providing treatment for existing wells, providing other sources of potable water, replacing or and abandoning shallow wells that may be conduits for migration into deeper zones, or other methods to protect potable water sources.

SC-18 cont'd

Sampling may be warranted in areas where levee failures, scouring and siltation may occur to evaluate the potential for release of chemical constituents (including priority pollutant metals, legacy pesticides, and herbicides) that are trapped in the sediment. Total Maximum Daily Load (TMDL) are proposed to be developed for mercury for the plan. TMDL may be needed for other constituents of concern that may be released to minimize water quality impact should be evaluated if there is a potential for release of constituents above acceptable water quality standards.

# Porter-Cologne Water Quality Act of 1969

The text on page 10-24 states "In 1967, the Porter-Cologne Water Quality Act..." The text should read "In 1969, the Porter-Cologne Water Quality Act..."

SC-19

## Transportation and Navigation

Section 5.6 of the document addresses impacts to transportation within the project boundaries for all 3 alternatives. Implementing the project will require the transportation of heavy equipment and materials for levee repair and improvement over existing County roads. There is a potential for damage to some of the roads that may not be substantial enough to bear these loads and the report identifies the risk of damage. The Draft EIR indicates that the project will have less than significant risk for all impacts to transportation for any single component of the project. The Draft EIR does not consider the cumulative effects for all of the possible components.

Public Works Engineering is concerned with the impact the project will have on the existing public road system in the area. The existing road sections vary in their ability to carry heavy loads, and although any one project within the plan may have low potential for damage, the cumulative effect of several projects increases the risk. Under Environmental Commitments, Chapter 2 lists the steps to be taken to reduce the risk of damage to County roads through the implementation of a Memorandum of Understanding with Solano County should damage be discovered.

SC-20

The restoration project shall be responsible for the cost of maintaining, repairing, paving and reconstructing the County roads during construction. The applicant will be responsible for any damage to the roads incurred as a result of the project. The applicant shall repair damage to roads as a result of the project construction to the current County Road Improvement

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Standards, except that repairs to damaged paved sections may be made with 5 inches of asphalt concrete at the discretion of the County, while repairs to damaged gravel sections of road shall replace the preexisting depth of aggregate base but be not less than 12 inches in depth. Repairs to the paved roads shall include but are not limited to overlays and full depth reconstruction to the satisfaction of the County of Solano, as solely determined by Public Works Engineering. A secured agreement with the County of Solano will need to be entered into prior to any construction activity for the project.

SC-20 cont'd

The restoration project shall apply for, secure and abide by the conditions of an encroachment permit for any and all work within the County right-of-way, which may further define and qualify the road repair requirements described above.

The restoration project shall apply for, secure and abide by the conditions of a grading permit for any and all work within the project limits, or construction associated with the restoration project.

This response addresses concerns of Public Works Engineering for roads, mapping and grading at this time. Stanley J. Schram, County Surveyor, should be contacted at (707) 784-6069 to address any transportation related issues.

#### Land and Water Use

Figure 7.1-1 Land Use Diagram is not the adopted Land Use Diagram.

SC-21

Page 7.1-4 California Land Conservation Act of 1965. Comment: The last sentence that says "The contract is automatically renewed each year for 1 additional year unless it is cancelled." should read "...unless the contract is non-renewed or cancelled."

SC-22

Page 7.2-2 indicates that there are no significant impacts on socioeconomics relative to property tax revenues. The County believes valuations utilized to determine property tax reduction was low and failed to factor in personal property values. Also, if parcels are taken over by the State, some of the existing parcels are businesses that would have to relocate, and this relocation could take place outside this County and further reduce County revenues.

SC-23

#### Visual/Aesthetic Resources

Page 7.6-13 Scenic Roadways Element. Interstate 680 is also considered a scenic roadway in Solano County's General Plan Figure RS-5.

SC-24

## Public Health and Environmental Hazards

# Construction Worker Safety

On page 7.8-9, the second paragraph includes California Environmental Protection Agency (CalEPA) under this section. Cal EPA does not have responsibility for worker safety but instead is responsible for environmental health and safety issues regarding the Unified Program that addresses hazardous material and hazardous waste programs described on page 7.8-11.

SC-25

On page 7.8-9, the third paragraph describes Solano County Environmental Health Services Division as the CUPA that is responsible for state and federal regulations. Solano County Environmental Health Services Division as the CUPA is responsible for federal and state regulations regarding hazardous materials and hazardous waste management, not worker safety as described on page 7.8-11.

Page 7 of 9

#### Hazardous Materials

This plan states that hazardous materials are raw or unused materials that are part of a process or manufacturing step. The California Health and Safety Code Chapter 6.95 also includes hazardous waste as part of this definition and requires hazardous wastes to be included in chemical inventories and addressed in emergency response plans submitted to the CUPA.

SC-26

# Exposure to Release of Hazardous Materials during Construction

On page 7.8-16, in paragraph three the document states that reportable quantities will not be used unless approved in advanced by the OES and compliance reporting will be conducted and a risk management plan submitted. This document should actually state that hazardous materials/ hazardous wastes present in quantities equal to or in excess of 55 gallons of liquids, 200 cubic feet of gases, and 500 pounds of solids triggers the Hazardous Materials Business Plan that consists of a chemical inventory, emergency response plan, and site diagram submitted to Solano County Environmental Health Services Division as the CUPA.

SC-27

# Increased Human and Environmental Exposure to Natural Gas and Petroleum

On page 7.8-17 and 7.8-18, discusses natural gas and petroleum distribution pipelines but does not address the small natural gas gathering lines that convey natural gas from the natural gas fields to support facilities such as compressor and dehydrator stations. These lines are often unmarked. The mitigation for this issue should state that before any work is done in the vicinity of natural gas field areas, utility finding equipment such as ground penetrating radar will be used to identify any buried lines to prevent hitting and releasing hydrocarbons and gas.

SC-28

## Impacts and Mitigation Measures

In reference to impacts and mitigation, the document says that the SMP components would be implemented in a way that helps mitigate impacts before or as they occur. This should include the following sentence "Implementation will be planned to carefully monitor and mitigate the intended and unintended consequences of restoration activities."

SC-29

# Mitigation measures must include:

- Buffers incorporated into the project that are sufficient to avoid the need for additional restrictions on public agency and private activities on surrounding lands
- Measures to protect ongoing wetland restoration projects including the Montezuma Wetlands project.

SC-30

SC-31

In closing, the SMP should be consistent with the County General Plan policies and not result in any direct or indirect adverse environmental, economic or social impacts to the County. Any inconsistencies between the proposed project and the General Plan must be fully discussed and

Again, thank you for this opportunity to provide comments. If you have questions regarding this submission, please contact Kathy Barnes-Jones at <a href="mailto:krbarnes-jones@solanocounty.com">krbarnes-jones@solanocounty.com</a> or at 707-784-7914.

Sincerely,

analyzed.

Bill Emlen, Director of Resources Management

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Solano County Board of Supervisors
Birgitta Corsello, Assistant County Administrator
Bill Emlen, Director of Resources Management
Jim Allan, Agricultural Commissioner/Sealer of Weights and Measures
Jan Vick, Mayor of Rio Vista
David Okita, General Manager, Solano County Water Agency
Mike Hardesty, General Manager, Reclamation District 2068
Steve Chappell, Executive Director, Suisun Resource Conservation District
Cliff Covey, Assistant Director, Resource Management
Kathy Barnes-Jones, Senior Staff Analyst

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# **Responses to Comment Letter SC**

#### SC-1

The SMP EIS/EIR considers both regional and local impacts in our analysis.

#### SC-2

Please see response to Comment SC-4. The analysis concluded that the socioeconomic impacts were less than significant because of the relatively small change in employment, income, and property tax revenues.

# SC-3

Significance criteria set forth in the EIS/EIR were based on the State CEQA Guidelines Appendix G Checklist, precedence from other Delta and restoration projects, and professional judgment. These thresholds are appropriate and applicable to the SMP.

#### SC-4

As described in Section 7.2 of the Draft EIS/EIR, acquiring lands from willing sellers may adversely affect the amount of property tax revenue collected by Solano County as land is transferred from private to public ownership. The estimated property tax revenue generated in Solano County in 2006 was \$408 million. The loss of property tax revenue generated from the maximum of 7,000 acres of tidal restoration to be implemented incrementally over the next 30 years is estimated to total \$31,100, or approximately 0.008% of the total property annual tax revenue generated in the county in 2006.

Although implementing the SMP may result in a decrease in the property tax revenues generated in Solano County by eventually removing these lands from the tax roll, the estimated loss in property tax revenue is a very small portion of the overall property tax revenues generated in Solano County.

The potential in-lieu of property tax payments by DFG was included to indicate that the loss in property tax revenue could be offset. Because the loss in property tax revenues is expected to be small, the impact assessment did not attempt to address all the changes in economic activities attributable to the restoration of wetlands, including identification of potential property tax compensation programs. The impact analysis also did not attempt to assess all the beneficial economic effects of the wetland restoration program, such as changes in recreation-related expenditures in the local economy and increases in sales tax revenues.

Cumulative impacts of the SMP alternatives are addressed in Chapter 9 of the Draft EIS/EIR. This chapter includes an exhaustive list of restoration projects in the Bay-Delta area. A review of this list indicates that approximately 680 acres are planned for wetland restoration and enhancement. The combined loss of property tax revenue from the combined acreage of the proposed project and other projects is not expected to result in a substantial reduction in Solano County property tax revenues.

# SC-5

See response to SC-4.

The lands purchased for restoration would be primarily from lands dedicated to waterfowl hunting clubs. Few agricultural lands are located in the project study area. These agricultural lands currently

are used for grazing and are at an elevation that would not make them suitable for tidal restoration. The consistency of wetland restoration actions with existing land uses is addressed in Chapter 7 of the EIS/EIR. The restoration action is consistent with Solano County General Plan and Solano County Policies and regulations governing the Suisun Marsh because the area would remain wetlands and open space.

The impact on public utilities and public services is evaluated in Section 7.3 of the EIS/EIR. The change in land use from recreational waterfowl hunting to wetland restoration and enhancement is not expected to increase the demand for these services.

#### SC-6

While the SMP would provide increased opportunities for water-based recreation, the increased need for emergency response throughout the Marsh is not expected to change substantially because the overall level of Marsh use would remain similar. As described in Section 7.4, the type of recreation uses would change, but the magnitude of use would be similar. Additionally, restored areas no longer would support private duck clubs and likely would eliminate levee roads as a result of breaching, thus reducing the County's obligations for road maintenance.

#### SC-7

Grazing in the Suisun Marsh occurs in upland habitat areas that are located above the tidal inundation zone on approximately 16,534 acres on the periphery of the primary zone of the Marsh (Table 6.2-2). The vast majority of these uplands would not be affected by the SMP and could continue to be grazed. While some upland grazing areas have the potential to be converted to tidal wetland, the amount of conversion would be minor and not likely to occur, except incidentally if it occurs on the fringes of restoration (in upland perimeter of Marsh). While there are uplands in the interior of the Marsh ("diked managed wetlands and uplands," Table 6.2-2; included in the "managed wetlands," Figure 6-2.1), much of that acreage is infrastructure, i.e., interior levees, and is below the tidal inundation zone. Although this area would be affected by tidal restoration, this area is not used currently for grazing, and is predominately above the mean high tide elevations, and therefore there would be no effect on grazing as a result of inundation of these areas. As such, this impact is not considered significant and does not contribute considerably to cumulative impacts; mitigation of this potential effect is not necessary.

# SC-8

Table 2-3 outlines the types of considerations that will be made prior to purchasing a property from a willing seller for restoration purposes. These considerations include those related to adjacent land uses. The SMP would result in very minimal effects on agriculture and/or grazing lands, which are located on the periphery of the Marsh. Conversion of these areas would be limited to upland transitions for properties acquired for restoration. As shown in Table 2-4, the restoration would be spread throughout the Marsh and would not be concentrated in the upper fringes, further reducing the potential for effects on adjacent grazing lands.

# SC-9

See Master Response 1: Project-Specific Analysis.

As described in the Master Response 1: Project-Specific Analysis, the exact locations and project proponents are not identified at this time. As such, there is no way to secure long-term maintenance

funding at this time. However, for purposes of compliance with CESA and ESA, which would be expected as part of any restoration action under the SMP, long-term funding sources would be identified to ensure that maintenance is incorporated into the restoration plan. Overall, it will depend on the specific landowner and/or project proponent for each restoration action.

# SC-10

The SMP includes a dredging program to provide materials for levee maintenance adjacent to the dredging locations. An ancillary benefit of this program is the maintenance of channel capacity, where dredging has occurred. Additionally, the increase in area subject to tidal inundation in the Marsh would increase the Marsh's overall water volume capacity.

# SC-11

The County's roles and responsibilities will vary depending on the location of the restoration and the type of activities it entails. Where applicable, the EIS/EIR describes coordination with the County to minimize impacts. Additionally, Table 2-1 now lists the County as a responsible agency per the County's request.

#### SC-12

Table 2-3 outlines the types of considerations that will be made prior to purchasing a property from a willing seller for restoration purposes. These considerations include those related to adjacent land uses. Grazing in the Suisun Marsh occurs in upland habitat areas that are located above the tidal inundation zone on approximately 16,534 acres on the periphery of the managed wetlands (Table 6.2-2). The vast majority of these uplands would not be affected by the SMP and could continue to be grazed. The SMP would result in very minimal effects on agriculture and/or grazing lands, which are located on the periphery of the Marsh. Conversion of these areas would be limited to upland transitions for properties acquired for restoration. As shown in Table 2-4, the restoration would be spread throughout the Marsh and would not be concentrated in the upper fringes, further reducing the potential for effects on adjacent grazing lands.

# SC-13

Text revised per comment.

#### **SC-14**

Text revised per comment.

#### SC-15

Plants for revegetation will come primarily from natural recruitment. Plants imported to the restoration areas will come from local stock, and to the extent possible, local nurseries. Only native plants will be used for restoration efforts.

# SC-16

Water quality impacts from toxics adsorbed to suspended sediment were not identified because there is no information on established relationships between increased suspended sediments and biological effects from heavy metals (including Hg), pesticides, or toxins. The adsorbed and dissolved concentrations of these chemicals generally are controlled by the regional sediment

chemistry (i.e., partitioning) and would not likely be changed by localized re-suspension of materials during construction or scouring near the breach sites.

# SC-17 and 18

The modeling results for the SMP indicate minor changes in the salinity gradient of surface waters related to the restoration activities. Additionally, Chapter 2 and Sections 5.1 and 5.2 commit to selecting breach sizes and locations that minimize salinity and other hydrodynamic impacts. The SMP also includes a commitment to conduct project-specific modeling for each proposed restoration site (see Master Response 1: Project-Specific Analysis), which would help specific project proponents ensure that restoration does not result in impacts greater than what are described in this EIS/EIR. The SMP also assumes continued operation of the SMSCG to meet salinity standards currently in place. Because changes in surface water salinities would be within the current range of salinities, no standards would be exceeded, and the change resulting from the SMP would be minimal, no additional mitigation beyond what is included in this EIS/EIR is required.

The text on page 5.3-10 has been revised to indicate that there are some areas in the Marsh dependent on groundwater for their potable water supplies. However, because surface water salinities would not be substantially changed, no changes in groundwater salinities are expected to occur. Site-specific modeling would be conducted for individual restoration areas, and if warranted, groundwater modeling could be included in the modeling effort.

# **SC-19**

Text revised per comment.

#### **SC-20**

Page 9-14 includes a section on cumulative impacts on transportation and navigation. This section also was revised to describe the SMPs spatially and temporally spread out changes in traffic and navigation. The environmental commitments in Chapter 2 have been revised to include some of the suggested edits in this comment.

## **SC-21**

Figure 7.1-1 was revised using Land Use diagram from Solano County website.

# SC-22

Text revised per comment.

# **SC-23**

Please see response to Comment SC-4. The methods used to assess changes in property tax revenue are described in Section 7.2. The assessment was based on assessed property values provided by the Solano County Assessor's Office. The analysis focuses on change in employment and property tax revenues. The analysis did not attempt to speculate on the response of individual business owners to the goals of the restoration program. However, restored areas would be open to the public, and recreational activities are expected to be maintained in the Marsh.

#### **SC-24**

Revised text to include 680 as a scenic roadway under the Solano County General Plan.

## SC-25

Moved description of CUPA and CalEPA administration to state regulations section.

#### SC-26

Revised definition of hazardous materials to include hazardous wastes.

#### **SC-27**

This statement has been added to Impact HAZ-2.

#### **SC-28**

Impact Haz-2 states that "Digging could affect gas pipelines occurring below the ground level. If pipelines were damaged during digging, release of natural gas or other materials could expose construction workers and the environment to hazardous materials. The plan will be designed to avoid impacting existing pipelines and other facilities." The identification of all pipelines located on a property prior to ground-disturbing activities has been added to the Environmental Commitments section of Chapter 2 for restoration activities to clarify the avoidance described in Impact HAZ-2.

# SC-29

The following text has been added to Page 2-44: "...and implementation will be planned to carefully monitor and mitigate the effects of SMP activities."

# **SC-30**

Land uses in the Marsh would continue to be consistent with the land use designations of the Solano County General Plan and the Suisun Marsh Preservation Act. The SMP would occur in only the primary zone of the Marsh, and land uses in the secondary zone are required to be consistent with primary zone uses, which would not change under the SMP.

## SC-31

The SMP is not expected to have any effects on the MWP, which is outside the SMP planning area. No additional mitigation measures are required.

# 14.2.5 Non-Governmental Organizations

# 14.2.5.1 CWA—California Waterfowl Association, Gregory S. Yarris, Vice President, Policy and Communications, December 28, 2010



December 28, 2010

Ms. Becky Victorine, Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825 Submitted via email to rvictorine@usbr.gov

Subject: Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIR/EIS

To Whom it Concerns:

On behalf of the California Waterfowl Association (CWA), I am pleased to provide comments concerning the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIR/EIS (hereafter, "Draft EIR/EIS"). CWA is a charitable 501 (c)(3) organization dedicated to conserving California's waterfowl, wetlands, and outdoor heritage. We represent the interests of over 20,000 members statewide, and our waterfowl and wetlands programs are implemented throughout the state.

CWA has been involved in the Suisun Marsh (hereafter, "Marsh") since our inception in 1945, and our staff and members were instrumental in securing its long-term protection while advocating for the Suisun Marsh Preservation Act of 1977. We continue to work to protect and enhance the Marsh, working closely with the Department of Fish and Game (DFG), Suisun Resource Conservation District (SRCD), and the many private landowners who have a vested interest in the Marsh's resources. We are active in wetland management and enhancement on both private lands and state-owned wildlife area lands. In addition, we conduct waterfowl research and monitoring in cooperation with the staff and students of the University of California at Davis (UCD) and the U.S. Geological Survey Western Ecological Research Center. Our cooperative research on nesting waterfowl ecology at the Grizzly Island Wildlife Area (WA) has been ongoing since 1985, and is one of the longest running studies in North America (Mclandress et al. 1996, Journal of Wildlife Management). In addition, we partner with DFG to conduct annual waterfowl banding and breeding population surveys in the Marsh, providing critical data for population management and determining annual waterfowl hunting regulations for California.

The Suisun Marsh is unique because it is important as both a wintering and breeding area for waterfowl and other birds and wildlife. As such, our conservation efforts include not only wetland enhancement, but also restoration of upland areas critical for locally-nesting ducks. According to cooperative surveys conducted in 2009, almost 200,000 ducks and

4630 Northgate Blvd., Suite 150, Sacramento, CA 95834 916.648.1406 • www.calwaterfowl.org geese were present in the Marsh last winter. And over 25,000 ducks were observed during the most recent breeding season surveys (2010). Most of the breeding ducks were mallards, and nest surveys indicate the Grizzly Island WA remains one of the most productive nesting areas in North America for this ecologically and economically important species.

Because of the importance of the Suisun Marsh to waterfowl and other waterbirds, and their reliance on managed wetlands year-round, our comments will focus on the project's proposed conversion of 5000-7000 acres of managed wetlands to tidal wetlands. In our opinion, the implications of this conversion for migrating, wintering and breeding birds have not been adequately addressed. The proposed project will eliminate 5000-7000 acres of managed wetlands, by converting them to tidal wetlands. The Draft EIR/EIS has determined that this is not significant, because the value of managed wetlands will be more than offset by improved management of remaining managed wetlands and the new tidal wetlands. We disagree with this assessment, and question the analysis that was used to come to this decision.

Throughout the document, the general underlining theme is that the conversion of tidal wetlands as a result of diking has resulted in a loss of habitat for many species, including those now listed as threatened or endangered. While this is undoubtedly true, some of the diked lands, specifically managed wetlands, are required for maintaining populations of other important species (including some threatened and endangered). While tidal wetlands in California have been lost at an alarming rate, it does not exceed the losses of seasonal wetlands (freshwater and brackish). Currently, the managed wetlands in Suisun Marsh provide a critical fragment of the original seasonal wetlands available for wildlife in the Central Valley. These managed wetlands were preserved by foreword-thinking conservationists and considerable time and expense have been sacrificed to maintain and manage them. The outcome of any wetland restoration program (included that which is proposed) should be consistent with current state and federal policies, and should result in a net increase in wetland habitat, not sacrificing one wetland type for another.

The conclusion that losing 5000-7000 acres of managed wetland (Impact VEG-3) will not have a significant impact, and does not require mitigation, is premature and not supported by the analysis. Potential impacts include direct loss of foraging habitat, and indirect loss of foraging and breeding habitat if salinities in channels or wetlands increase greater than predicted.

Direct loss of foraging habitat will result from the conversion of up to 7000 acres of managed wetlands to tidal wetlands in the preferred alternative. Managed wetlands provide the preferred habitat for waterfowl, because managers can manipulate water levels throughout the year and create ideal conditions for maximizing seed production of preferred plants. The Central Valley Joint Venture (CVJV), a collective of conservation organizations and government agencies advocating for the conservation of migratory birds and their habitats, has identified the Suisun Marsh as critical to the Pacific Flyway. The CVJV Implementation Plan (Plan), which was prepared by avian experts, is based on the energetic requirements of waterfowl in the Central Valley (including the Delta and

Suisun Marsh). The Plan evaluated the impacts of converting 5000 acres of managed wetlands to tidal wetlands in the Suisun Marsh. The analysis determined such actions could result in the depletion of food supplies for desired wintering waterfowl populations by early February. Currently, managed wetlands provide sufficient food supplies for the entire winter.

It is possible that improving management on existing managed wetlands can partially compensate for lost benefits, as suggested in the Draft EIR/EIS, but this conclusion is largely speculative because no data are provided in support. Without knowing what wetlands provide in their existing conditions, and under what management scenarios, it is impossible to predict if annual incremental increases are even possible through improved management. In general, brackish managed wetlands are considered to provide less food value than their freshwater counterparts (see CVJV Implementation Plan), and the opportunity to increase their productivity may also be less due to constraints of an estuarine environment and unpredictability of water quality each year.

There may also be indirect negative impacts to the value of waterfowl habitat from the proposed project. Increasing tidal flows to channels that connect the bay to restored tidal wetland could impact quality of water used to flood and irrigate existing managed wetlands. The cumulative impact of increasingly saline water, and eventually soils, could result in decreased seed production and reduced waterfowl carrying capacity. This is not adequately addressed the Draft EIR/EIS. Increased salinity in Marsh channels (Impact WQ-1) and influence of changes to salinity of water used for managed wetlands (Impact WO-2), were deemed less then significant because models predicted changes in salinity which were less than 10%. This analysis relies on two assumptions; 1) Increases in channel and wetland salinities of less than 10% will not negatively impact food production; 2) The models used to make the predictions are appropriate and valid. It is critical that if the restoration activities outlined in the preferred alternative proceed, that data is collected to verify the above assumptions. Models are useful planning tools, but also must be validated. As such, a monitoring and evaluation plan must be developed and provided in the final EIR/EIS. This should also describe potential remediation should water salinity increase or productivity of affected wetlands deteriorate due to salinity changes.

In addition to impacts on wintering waterfowl habitat, the preferred alternative could also have impacts on breeding waterfowl, which are not addressed in the Draft EIR/EIS. As previously mentioned, the Suisun Marsh is one of the most important duck nesting areas in the Pacific Flyway. The primary reason is the combination of upland nesting areas and managed wetlands, required habitat elements for dabbling duck species and many non-waterfowl species. The conversion of managed wetlands to tidal wetlands can impact breeding ducks in several ways. The most critical is the direct impact on duckling survival. Young ducklings do not have well-developed nasal glands to excrete salts, and saline conditions can kill ducklings either directly, or by retarding their growth making them more susceptible to predators or other mortality factors. The preferred alternative could result in duck broods using tidal wetlands with higher salinity (a possible result of VEG-3), or increased salinity of managed wetlands used by broods (a possible outcome

of WQ-1). The impacts on breeding waterfowl have not been adequately addressed in the Draft EIR/EIS.

In conclusion, the Draft EIR/EIS does not adequately address the potential impacts of converting managed wetlands to tidal wetlands, especially in regard to wintering and breeding waterfowl and other migratory and resident birds. While improving the infrastructure and management of existing managed wetlands is a desirable goal in Suisun Marsh, there is no scientific evidence presented that indicates this activity would compensate for the lost value of converting 5000-7000 acres to tidal marsh. The document ignores the goals and objectives for the Suisun Marsh as outlined in of CVJV Implementation Plan, a plan which is based on sound science and endorsed by organizations and agencies whose goals are to conserve migratory bird habitat. The conversion of functioning managed wetlands to tidal wetlands without compensating for lost habitat values is a misconceived idea, possibly setting a precedent that could negate previous habitat conservation and restoration efforts.

Thank you for the opportunity to comment. Please feel free to contact me if you have any questions regarding our concerns.

Sincerely,

Gregory S. Yarris

Vice President, Policy and Communications

# **Responses to Comment Letter CWA**

# CWA-1 through CWA 4-b

See Master Response 6: Significance of Wetland Conversion.

# CWA-5

See Master Response 5: Inclusion of an Adaptive Management Plan, Master Response 6: Significance of Wetland Conversion, and Master Response 1: Project-Specific Analysis.

# CWA-6

See Master Response 6: Significance of Wetland Conversion.

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WESTERN REGIONAL OFFICE 3074 Gold Canal Drive Rancho Cordova, CA 95670-6116 (916) 852-2000 Fax (916) 852-2200

# 14.2.5.2 DU—Ducks Unlimited, Mark Biddlecomb, Director, Western Region, December 23, 2010

#### Comment Letter DU



December 22, 2010

United States Department of the Interior Bureau of Reclamation Mid-Pacific Region 2800 Cottage Way, MP-700 Sacramento, CA 95825 Attention: Rebecca Victoreen

U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, CA 85825 Attention: Cay Goude

California Department of Fish and Game 7329 Silverado Trail Napa, CA 94558 Attention: Scott Wilson ALCE VED

Subject: Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIS/EIR

To Whom It May Concern:

Below, please find comments prepared by Ducks Unlimited on the on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Draft EIR/EIS document (hereafter, "Draft EIR/EIS"). Ducks Unlimited has been an active stakeholder in the Suisun Marsh for over 25 years. Ducks Unlimited's seasonal wetland conservation activities in the Marsh are undertaken with a specific focus on the Marsh while keeping the larger vision in sight about how to provide for the needs of migrating and wintering waterfowl and other migratory birds in the Pacific Flyway through providing the highest quality wetland habitat possible.

Our conservation program in the Marsh is targeted to improve both wintering and breeding habitat conditions for waterfowl and other wetland dependent wildlife species. To do this, our specific conservation activities focus on providing both private and public wetland managers the most effective and efficient wetland management possible to achieve optimal habitat conditions. Our activities are part of a coordinated effort to provide for the annual life cycle needs of Pacific Flyway migratory waterfowl and other water birds throughout California, in which the Suisun Marsh plays a key role.

LEADER IN WETLANDS CONSERVATION

#### **General Comments:**

Historically, the Suisun Marsh was composed of large tracts of salt, brackish and freshwater marshes, and grasslands, encompassing approximately 287 km² from Benicia east to Collinsville (Dedrick 1989). A gradient of tidal influence, salinities, micro-elevations, and marsh vegetation existed from Suisun Bay inland to the surrounding hills (Heitmeyer et al. 1989). The balance between saline and freshwater conditions was delicate and fluctuated seasonally, resulting in plant species typical of both salt and freshwater wetlands. Although extensive attempts were made to farm the lands, high soil and water salinities precluded most crop production and most of the lands were maintained as freshwater wetlands and specifically managed duck clubs.

Urbanization of the San Francisco Bay eliminated a similar array of wetlands along the estuary margin. Offsetting this lost habitat, seasonal wetlands in Suisun Marsh were managed for moist-soil plants by the duck clubs, extremely valuable to waterfowl and other wetland water birds. Private landowners invested millions of dollars in protection, restoration, and management of these habitats. Today the Suisun Marsh provides critical habitat to Central Valley/SF Bay migratory bird wintering populations. Among the species that currently rely on managed, seasonal brackish/freshwater wetlands in the Suisun Marsh (hereafter, "managed wetlands") are northern pintail, American wigeon, canvasback, and lesser scaup, all avian species that currently require special management out of concern for their population status.

Tidal restorations in Suisun Marsh as proposed in the Suisun Marsh Plan and analyzed by the Draft EIR/EIS will reduce foraging opportunities and further decrease vital resources for these waterfowl and other avian species. Currently, managed wetlands compensate for natural wetlands lost in the San Francisco Bay region that will never be replaced, as the zone has been forever converted to housing and other urban infrastructure. Any purposeful conversion of managed wetlands to tidal systems must consider what amount of the former would provide sufficient mitigation. It is highly unlikely that improved management of existing managed wetlands will be sufficient to replace the loss of functions and waterfowl food resources that come about due to tidal conversion. Protection of remaining managed wetlands through annual levee maintenance is helpful, but inadequate.

DU-1

By contrast, the Draft EIR/EIS finds that the impact of converting 5-7,000 acres of managed wetlands to tidal marsh is insignificant. In our view, this contention is inaccurate, and certainly unsupported. The environmental documents provide no basis for the finding of "no significance": there is no research reported, no literature cited, nor is there any explanation as to why there would be no significant impacts associated with habitat conversion of this magnitude. From an economic standpoint, conversion of 5-7,000 acres of existing managed wetlands represents an enormous opportunity cost in the investment value of conservation dollars.

Land acquisition for replacement acreage would likely cost in excess of \$5000/ac, or more than \$25m-\$35m; restoration could cost up to a similar amount depending on a variety of factors; management costs of such acreage, presently borne by private duck clubs, would be equivalent in cost to

DU-2

management of a similarly sized state wildlife management area or federal wildlife refuge. That cost is significant and source funding is in short supply. Moreover, loss of established functions and values cannot be easily replaced by immature wetlands even if they were to be created.

DU-3

It is also important to recognize that a finding of "no significance" has a precedential adverse impact on future and related activities within the Bay-Delta system. It is almost a certainty that conversion from managed wetland to tidal wetlands will be repeated elsewhere as the ecosystem is "restored" through implementation of the Bay Delta Conservation Plan. If a project of this magnitude is deemed insignificant, additional proposals could be expected to be treated similarly. The total cumulative effect of this precedent would be a major setback for wintering migratory birds and many other guilds of species that utilize managed wetlands.

DU-4

DU-5

The Central Valley Joint Venture Implementation Plan (hereafter, "Implementation Plan"), prepared and updated by experts in avian and wetland ecology, and endorsed by organizations that have been active in promoting wetland conservation and engaged in wetland restoration in the Bay-Delta-Suisun Marsh ecosystem for over 20 years, attributes significant value to the existing habitats of the Suisun.

Approximately 44% of the Pacific Flyway's waterfowl depend on the seasonal wetland complex of the Central Valley-SF Bay Area as these habitats provide the energy necessary to survive the winter season and build body reserves to fuel the spring migration. The Suisun Marsh is one of a limited number of areas that remain available to supply these food supplies. The managed wetlands found presently in the Suisun Marsh provide the full suite of nutritional requirements that these birds need, including both proteins and carbohydrates. Agricultural foods such as rice and corn, while abundant in the Central Valley, supply the necessary carbohydrates to build fat reserves but lack the other essential nutrients. Tidal wetlands, while contributory, do not support many of the plant species found in seasonal wetlands and as such do not support the dietary needs of the wintering waterfowl that presently use the Suisun Marsh.

The Implementation Plan also examined the direct implications of habitat conversion such as proposed by the Draft EIR/EIS. The Implementation Plan indicates that "restoring tidal flow to 5,000 acres of existing habitat could result in food supplies being exhausted by early February" which is the lower end of the range of tidal restoration called for in the Suisun Marsh Plan. No attempt is made in the Draft EIR/EIS to describe that impact, to analyze it, and evaluate its significance, although the Implementation Plan has been an established reference document for wetland conservation in the Central Valley and Suisun Marsh for years.

DU-6

Beyond energy and nutrition, there are other functions and values of seasonal wetlands that will be lost as a direct result of this project. They include nesting habitat for resident waterfowl, shorebirds and other wetland dependent species, and availability as a staging location to Pacific Flyway migrants. Regarding the former, the Suisun Marsh has one of the highest nest success rates in the Lower 48 states. Long-term data demonstrate consistently high nest production rates for waterfowl stemming from the presence of the combination of seasonal wetlands and adjacent uplands located in the Marsh. Providing

fall migration/early winter habitat is an additional function of Suisun Marsh. It is one of the few seasonal wetland areas in central California with reliable water supplies available to early arriving waterfowl. Suisun Marsh wetlands are flooded up long before most of the Central Valley's wetlands or rice fields, where wetland water is dependent on timing of harvest. This provides rare and critical early season habitat for early migrants such as pintail. While water may be present in tidal wetlands, it does not provide suitable the food resources needed by the migrants.

DU-7

The cultural and social values of seasonal wetlands should also be recognized. That includes the significant use of the Suisun Marsh for waterfowl hunting and bird watching by residents of the San Francisco Bay area and beyond. Waterfowl hunting in this location is steeped in tradition, having been practiced in the Suisun Marsh, first by market hunters and then by sportsmen and women, for over 150 years. Clubs have memberships that span many generations and have invested huge sums of money over the years to pursue their sport and improve the habitat. These same supporters of their personal recreation are also avid supporters of wetlands conservation. They represent a sizable and active faction that demand protection of wetlands and demand the government programs designed to preserve, protect and restore wetlands and their ecological function. Further, reducing the acreage of seasonal wetlands reduces the quality of the hunting experience and may lead to declining participation in the activity. Without a demonstrated, assured quid pro quo to improve the function and values of the remaining seasonal wetlands, or the restoration of a similar amount of functionally equivalent wetlands, it is likely that participation in duck hunting and to a lesser extent bird watching will decline faster than it is declining at present in the Suisun Marsh. The result will be loss of an important recreational resource as well as support for long-term protection and management of the Marsh.

DU-9

The Draft EIR/EIS suggests that, because habitat for state and federally listed species and even certain species of waterfowl and shorebirds is improved and therefore their status is improved, the net result of the project is positive. In fact, habitat for some waterfowl and shorebirds is likely improved by providing additional tidal wetlands—although no analysis of this result is proffered. However, it is our strong belief that the welfare of one species, or group of species, dependent on the habitats presently found in the Suisun Marsh should not be traded off for improvement to another. The Plan should recognize these impacts and their significance and lay out a clear path to ensure that the net result of its implementation is positive for all species and groups of species that rely on the Suisun Marsh. Not only that, but the Plan should provide for a periodic assessment in conservation measures and adjustment to them when needed in the section of the Plan that addresses monitoring and adaptive management. The end result of implementation of the Suisun Marsh Plan should be "no net loss" of the functions and values of seasonal wetlands.

DU-10

DU-11

Each sub-watershed or historically significant wetland area within the Central Valley is vital to migratory birds, and must continue to produce a no less than its existing share of the overall nutritional and energy needs, nesting, migratory staging, recreation and other functions and values. The Draft EIR/EIS and Suisun Marsh Plan as presently drafted fails to provide evidence that such an outcome will result, and it is our contention that it will fail with regards to waterfowl and numerous other bird groups.

DU-12

#### Specific Comments:

There is no discussion regarding the potential of beneficial re-use of dredge material for tidal restoration activities to bring restored tidal marsh areas to desired elevation. This concept should be discussed and identified as it can substantially increase the ability of subsided areas to be restored to historic tidal marsh plain elevations.

**DU-13** 

The use of the term "continuing" as opposed to "improving" function and values is common throughout the document and should be modified. For example on page 4-3 the EIR/EIR states: "As a trade-off for implementing this restoration, the remaining managed wetlands/duck clubs would be allowed to continue (emphasis added) managed wetland activities, leading to better habitats for waterfowl, shorebirds, and other species that depend on or rely on managed wetlands." These areas are already "continuing" these activities to sustain the status quo of seasonal wetland functions and values. This term should be changed to "enhancing" or "improving" managed wetland activities beyond those currently employed. "(C)ontinuing" implies maintaining, not offsetting any seasonal wetland losses from any tidal restoration. The whole purpose of the preferred alternative is to at least sustain overall functions and values by improving the quality of managed wetlands to compensate for losses from tidal restoration, not to maintain the status quo on existing seasonal wetlands. This is the fundamental flaw of and the basis for all the deficiencies in this document.

DU-14

Managed Wetland Activity Impacts WTR-3 – The Managed Wetland Activity list does not include the installation of new larger &/or the replacement of existing water inlets and/or outlet pipes, or the potential for additional discharge pumps. Flooding and draining to maintain the 30-day cycle is critical to include as one of the options that will improve seasonal wetland habitat functions and values. The major problem with the quality of the managed wetlands is that many duck clubs cannot meet the 30-day flood and drain requirement. This is due to subsidence on the outer clubs and the issue that these areas cannot drain fast enough as there must be a sufficiently low enough tide to drop below the existing outlet. Further, many areas are also restricted on the current outlet pipe size to drain sufficiently in the particular low tide cycle. The 30-day flood and drain is mentioned as the optimum scenario on page 2-20, yet no wetland management activities are mentioned that will sufficiently achieve that end point. Further, this impact is titled incorrectly. This is not only a water supply issue; it is an improved water management issue. Further, improving the flood and drain capacity can ultimately only be sufficiently achieved throughout the area with additional or larger inlet and/or drain facilities.

DU-15

Flood control and levee stability impacts FC- 18.4 – How will the new interior tidal levees be maintained in the future if there is no nearby channel, or suitable material within a nearby channel, to add new material to the degraded levee? FC-4 suggests that improvements to managed wetlands will decrease flood risk, and page 2-35 suggests that tidal restoration will decrease levee linear-miles. The assumption of decreased levee linear miles is entirely dependent on the selected site(s). Tidal restoration activities on some properties could easily and significantly increase the linear mileage of exterior levees. This assumption should not be made in light of preferred alternatives lack of identifying specific parcels, and the determination of significance should reflect the uncertainty.

DU-16

<u>Sediment Transport Impact ST-1</u> – The significance of this impact is not sufficiently analyzed. Increased scour will depend on the geomorphology and location of the tidal project as well as the geomorphology of the receiving water body. Further, current studies suggest there is a sediment deficiency in the Bay Area, how will tidal restoration efforts in Suisun Marsh affect downstream sediment availability in recent and planned tidal restoration activities in the San Francisco Bay? This is not addressed.

DU-17

Vegetation and Wetlands Impact VEG-3 – How is the loss of 5-7,000 acres of seasonal wetlands not significant regardless of what improvements are made in the quality of the remaining managed areas? This is a 13.4% change in the habitat composition of the Suisun Marsh. Further, the discussion of the impact on page 6.2-27 does not include analysis of the quality of existing managed wetlands to be converted to tidal. There is no analysis of the current state of functions and values within the Suisun Marsh's managed wetlands and no baseline to gauge the extent of loss from converting seasonal wetland to tidal on any property within the marsh. There is no described methodology to quantify and compare any losses and/or gains in functions and values of all wetlands affected by this proposed action. There is no methodology to compare the losses of functions and values of managed wetlands to any gains from tidal wetland restoration. As such, there is no way to justify the current determination of "no significance" of this project's effect on managed wetlands.

**DU-18** 

Wildlife Impacts WLD-11 — This impact assumes that the managed wetland activities will offset any reduction in waterfowl benefits due to the tidal restoration activities by improving the overall quality of the managed wetlands on the remaining 40k+ acres of the Marsh. The proposed wetland management activities are not sufficient to improve the quality of seasonal wetland functions and values on the remaining seasonal wetlands following implementation of the preferred alternative.

Further, the discussion on page 6.3-46 suggests there is no impact on breeding waterfowl during construction; however, the document fails to address the loss of waterfowl breeding habitat due to tidal restoration. Suisun Marsh is one of the most productive waterfowl breeding areas in the lower 48 states. This is due to the relationship of seasonal wetlands and adjacent uplands. The impact from the loss of these habitats through the tidal restoration efforts on breeding waterfowl is not addressed and should be analyzed.

DU-19

The Draft EIR/EIS states that restoration activities "are expected" to offset the loss of habitat. What assurances are there to ensure that losses are actually offset? Long term monitoring will help to identify the state of gain or loss, but no actions are proposed for "adaptive management" if the proposed/listed wetland management activities are insufficient at replacing lost functions and values.

**DU-20** 

Page 2-13 – How was it determined that dabbling and diving ducks would have significant foraging habitat in tidal restoration areas? There is no justification for this assumption. Tidal wetlands are highly variable in water depth, inundation duration, tidal cycle, substrate, and vegetation communities. Few combinations of these tidal wetlands biogeomorphological characteristics are beneficial to waterfowl. How was it determined that any of the proposed tidal wetland activities will be beneficial to waterfowl? What assurances are being made that those combinations will be planned for and/or obtain before and during implementation of tidal wetland restoration efforts?

DU-21

Restoration of Tidal Wetlands page 2 -12 - The first paragraph says nothing about waterfowl benefits. DU-22 Page 2-13 states there are significant foraging opportunities for waterfowl. All of this is dependent of the final marsh biogeomorphological characteristics of the restored site, as was previously stated as being insufficient for stating the value of tidal wetlands for waterfowl in such generalities. Sea Level Rise Page 2-48 - "Managed wetland operation and levee maintenance would be adjusted over time with sea level rise." This statement does not include identification of how a 30-day flood and drain DU-23 cycle of seasonal wetlands will stay constant given their existing flood and drain facilities in light of sea level rise. Low tides will be higher making it even more difficult to drain with existing water management facilities. The document does not address how sea level rise will affect salinities in the Suisun Marsh. Some DU-24 projections show 36-inches of rise by 2100. This document's analysis of sea level rise impacts on marsh functions and values is insufficient. Water Quality Page 5.2-22 - Why did the salinity model use water years 2002 and 2003? These are DU-25 typical years and not the driest/least discharge years. The driest water years should be used to get a fuller understanding of the worst-case salinity impacts on managed wetlands given the potential variable of water years in light of climate change. Flood control and levee stability Page 5.4-3 - The middle paragraph discusses levee failures in the marsh and the consequences of increasing local salinities. A specific example is given in which a levee failure had increased local salinities. Further, the paragraph states that "larger region-wide breaches and flooding the Marsh as (which occurred) in 1998, can have water quality effects in the Delta that can affect SWP and CVP operation." With this logic, why would intentional tidal breaches not differ from the DU-26 above examples and result in increased salinities locally that would affect managed wetlands in the Suisun Marsh as well as the described increases sufficient to affect the state and federal pumping projects? This discrepancy should be clarified and the assumptions of the model should be re-evaluated or corrected. Climate Change Page 5.9-33 - The second full paragraph discusses climate change on tidal restoration, however it does not discuss the effect on managed wetlands, increases in Suisun Marsh salinity levels, or difficulty in achieving the 30-day flood and drain management cycle given sea level rise. Vegetation and Wetlands Page 6.2-12 - The second paragraph discusses beneficial plants to waterfowl, some of which are more salt tolerant and less beneficial than more freshwater dependent species. How will the proposed wetland management activities improve the salinity conditions to allow for more **DU-28** beneficial species to flourish and improve the quality of managed wetlands for waterfowl? The proposed wetland management activities are not sufficient to change plant communities to more productive species, thereby improving the functions and values of managed wetlands to offset any

losses from tidal restoration activities. Achieving the 30-day flood and drain cycle is described as the optimal way to achieve the desired functions and values within the Suisun Marsh by sustaining beneficial wetland plant communities. However, just achieving a 30-day flood and drain cycle alone may not increase the existing functions and values of managed wetlands sufficient to offset any losses of managed wetland due to tidal restoration activities. This is not addressed in the document.

DU-28 cont'd

Wildlife Significance Criteria page 6.3-37 – Why is a permanent loss of upland considered significant, whereas a permanent loss of managed wetland is not considered significant? What is the amount of "substantially reducing the habitat for a wildlife species" that is considered significant? The addition of 7,000 acres of tidal wetlands in the Suisun Marsh is equivalent to ~13% of the total wetland acreage. How is this not a significant change in the landscape? What is the basis of the significance criteria when changing one habitat type to another?

DU-29

<u>Page 7.4-7.</u>—The last paragraph indicates that 7,000 acres of managed wetlands providing hunting opportunities would be purchased and converted to tidal, and that this represents a potential loss of up to 10% of existing managed wetlands. From Page 2-16: "The total amount of existing managed wetlands and uplands that could be affected by tidal restoration and managed wetland activities is 52,112 acres." This represents a 13.4% decline. How is this not a significant change in the landscape? What is the basis of the significance criteria when changing one habitat type to another?

DU-30

Further, this paragraph states: "It is expected however that the newly restored areas and remaining duck clubs would provide *plenty* (emphasis added) of hunting opportunities during most days of the year." What is the definition "plenty?" How was this amount quantified and the differences from the status quo assessed or analyzed? Changes in hunting opportunity should be clearly analyzed and documented. Determining the level of significance cannot be determined without proper analysis. The document does incorporate the potential cumulative impacts of other potential projects, such as the Bay Delta Conservation Plan (BDCP). The BDCP is well documented to have identified the Suisun Marsh as a potential mitigation/restoration area. Failure to incorporate the potential impacts of BDCP implementation on the preferred alternative raises multiple questions.

DU-31

How will the potential implementation of BDCP change the amount of tidal wetland restoration and/or seasonal wetland losses in the Suisun Marsh relative to the preferred alternative? How does the preferred alternative account for the construction of any Delta conveyance facility and the potential for reduced outflows from the Delta into Suisun Marsh?

Specifically, how may BDCP alter that salinity levels within the Suisun Marsh and the potential impacts on managed wetland function and values? What will be the cumulative impact of the implementation of both the preferred alternative and BDCP on Suisun Marsh wetlands? How did the salinity model take into account BDCP?

Thank you for the opportunity to comment on the Suisun Marsh Habitat Management, Preservation, and Restoration Plan and Draft EIR/EIS. Please contact me for any additional information. This project directly affects a vital part of the Pacific Flyway and its conservation is an extremely important issue to Ducks Unlimited. We hope that you will revise the Plan and the EIR/EIS to better reflect the concerns expressed above and we stand ready to assist you in that process.

Best regards,

Mark Biddlecomb Director, Western Region

#### **Responses to Comment Letter DU**

#### DU-1a and DU-1b

See Master Response 6: Significance of Wetland Conversion.

#### DU-2

The SMP provides a framework for restoration in the Marsh. Only a small portion of this restoration is required to offset the ongoing and future impacts of the managed wetland activities, which are mainly from dredging. Previously, 2,500 acres had been acquired and preserved as mitigation for the ongoing impacts from managed wetland activities. The remainder of the restoration would aid in recovery of species or would be implemented as mitigation for other projects and plans. Given the current direction of many plans and policies recently adopted or under development, it is reasonable to assume that there will be parties interested in purchasing and restoring areas of the Marsh. It is not expected that the cost of restoration of the 5,000 to 7,000 acres included in the proposed project would be borne by a single source. Rather, restoration would be implemented throughout the Marsh by different entities to meet their restoration goals. The SMP helps to stabilize the regulatory environment in the Marsh, which will allow operations and maintenance of managed wetlands to continue into the future, and is also expected to improve management of managed wetlands by providing increased funding and additional tools to meet flood and drain cycle objectives. As proposed, the SMP would improve water quality through restoration and improved managed wetland management and also would provide regulatory assurances for water diversions to managed wetlands through the permitting process.

#### DU-3 through DU-7

See Master Response 6: Significance of Wetland Conversion.

#### **DU-8**

Chapter 1 includes a description of the historical cultural and social values of the marsh landscape, including how hunting is an integral component of the marsh culture. As described in Section 7.6, Recreation, bird watching is expected to be enhanced through creation of additional bird habitat and increased public access. This and other non-consumptive uses are recognized as important, and the SMP promotes the further development of these recreational activities in the Marsh.

### DU-9

The SMP is expected to result in a shift in the type of recreation that occurs in the Marsh. Given the projected Bay Area population increase combined with an increase in public access in the Marsh, overall recreation is expected to increase. Duck hunting would remain a primary recreational activity in the Marsh in the remaining 44,000 to 46,000 acres of managed wetlands. In addition, hunting would occur at the tidal marsh sites.

#### **DU-10**

See Master Response 6: Significance of Wetland Conversion.

#### **DU-11**

See Master Response 5: Inclusion of an Adaptive Management Plan.

#### **DU-12**

See Master Response 6: Significance of Wetland Conversion.

#### **DU-13**

The restored tidal areas will be selected and designed to best accommodate vegetation growth, retention of sediments, and sea level rise. This may include grading in the restoration area prior to breaching. However, the SMP dredging program is intended specifically for levee maintenance, and importing materials into the Marsh has proven to be a significant issue. As such, restoration under the SMP does not include beneficial reuse of dredged materials in the restoration areas.

#### **DU-14**

Regarding the example cited on page 4-3, it is important to note that one impetus of the development of the SMP was the need to deal with the regulatory uncertainty as it relates to endangered species and the ongoing managed wetland activities. As such, the analysis in the EIS/EIR assumes that absent a comprehensive plan for the Marsh that balances managed wetland activities with restoration, managed wetland activities would be further constrained. During the development of the SMP and with guidance from the CALFED ROD, the SMP Principal Agencies included a component of the SMP to offset, to the extent possible, impacts on managed wetland functions and values. One such result of this is the dredging program, which was a component of the plan landowners indicated during scoping would substantially improve their ability to manage their properties. Other components of the SMP also help improve management of the managed wetlands through increased funding and regulatory stability to allow the maintenance and operations activities. This increased management would allow landowners to provide better habitat for waterfowl.

#### **DU-15**

The current RGP 3 and future proposed permits will include the following activities: replacement, installation, and maintenance of water control structures. Currently, 50 new exterior water control structures may be installed annually in the Marsh. New drain (only) structures may be installed. No new diversions or enlargement of an existing diversions is permitted unless it has a DFG-approved fish screen installed on it, or USFWS, DFG, and NMFS determine the proposed new diversion would not adversely affect any endangered species. The installation of permanent and portable pumps and pump platforms is a permitted activity. There is currently no regulatory limit on the size of managed wetland drainpipes. There are physical limitations on appropriate size of drain gates based on tide stage in the adjacent channel and desired water elevation in the managed wetlands. New drain (only) gates are permitted, as long as they comply with condition 19 of the RGP 3.

Regulatory limitations exist only when a water control structure is a dual purpose gate (it is used for both drainage and flooding of the managed wetlands). In this circumstance, enlargement of the structure is not permitted, because a diversion cannot be enlarged without the installation of a DFG-approved fish screen.

Most managed wetlands in the Suisun Marsh are not flood limited. The land surface elevations within the managed wetlands are at or below mean sea level. Therefore, applying water is not a difficulty, unless seasonal diversion restrictions are in place to protect sensitive fish populations and the diversion lacks a fish screen.

#### **DU-16**

The restoration approach described in the SMP includes preparing sites prior to breaching, which includes creating wide, gradually sloping levees that are expected to be self-sustaining once vegetation is established on them. The site preparation would allow time for vegetation to be established. This has proven to be successful at Blacklock and other locations in the Marsh. As such, it is not expected that restoration areas would require active levee maintenance. If it is discovered that a particular restoration site does not meet this assumption, the specific project proponent would need to evaluate options to ensure that flood risk to adjacent properties is properly mitigated.

#### **DU-17**

The magnitude of the suspended sediment (SS) transport within Suisun Bay, which can be characterized by an average SS concentration of 100 mg/l and an average outflow of 25,000 cfs, indicates that additional scouring at the entrance or deposition within the restored tidal marsh would not appreciably change the sediment supply in Suisun Bay or San Francisco Bay. This impact would be less than significant.

#### **DU-18 and DU-19**

See Master Response 6: Significance of Wetland Conversion.

#### **DU-20**

See Master Response 5: Inclusion of an Adaptive Management Plan.

#### **DU-21 and DU-22**

See Master Response 6: Significance of Wetland Conversion.

#### **DU-23**

Not all managed wetlands currently are operating on the optimal 30-day flood and drain cycle, and the SMP recognizes that sea level rise as a result of climate change likely will exacerbate the difficulties of draining managed wetlands in some areas of the Marsh. Operations could be adjusted through use of pumps, changes in interior drainage operations, and consolidation of discharges in areas that allow better drainage. The implementation of the SMP and the Revised SMPA PAI Fund would improve flood and drain capabilities of the managed wetlands and would not exacerbate the potential effects of sea level rise.

#### **DU-24**

An analysis of how the Marsh would respond to sea level rise is provided in both Chapter 2 and Section 5.9. Both sections describe how the restoration and managed wetland activities would be adaptively managed in light of changes related to sea level rise. The changes in salinity over the next 30 years are not expected to exceed current fluctuations, nor would the implementation of the SMP result in any substantial change in how the Marsh would need to adjust to salinity changes driven by sea level rise.

#### **DU-25**

Water years 2002 and 2003 were used for the salinity modeling because they were used to calibrate (adjust) the RMA model that was improved with new channel geometry data in 2005. These were recent years with a full set of salinity (EC) data from the Bay, Delta, and Suisun Marsh. Table 5.1-4 indicates that the total Delta outflow for water year 2002 was about 9 million acre-feet (maf) and the total outflow for 2003 was about 14 maf, compared to the long-term average Delta outflow of about 20 maf. Because the outflow was less than 5,000 cfs in both years, these represent the lowest allowable Delta outflow and the highest allowable salinity under the current Delta objectives (D-1641).

#### **DU-26**

The potential impact of tidal wetlands on localized and regional salinity is fully described in Section 5.2 and in the salinity modeling described in Appendix A. As a result of the regional restoration approach described in Chapter 2 and shown in Table 2-4, the localized effects generally will be small relative to the normal salinity gradients within the Marsh channels, because the salinity is controlled by the seasonal changes in Delta outflow. This salinity effect was found to be greatest for breaches to Suisun Bay and was less for breaches to interior channels. As committed to in Chapter 2, these potential salinity effects will be considered with modeling as each available property for tidal restoration is designed. The difference between unplanned and planned breaches relative to salinity impacts is that large-scale restoration with breaches in the southern areas of the Marsh could have substantially greater impacts on Marsh- and Delta-wide salinities compared to carefully selected breach sizes and locations. As such, the deliberate selection of breach sizes and locations is key to ensuring the salinity impacts described in the SMP are not exceeded. This cannot necessarily be achieved through passive breaching.

#### **DU-27**

The SMP would provide mechanisms and funding (through the revised SMPA) to improve management of managed wetlands. These improvements would help managed wetlands accommodate sea level rise to the extent possible. It is important to note that the SMP is a 30-year plan, and while sea level rise is expected to occur over the life of the plan, the plan does not address management beyond that time or the impacts attributable to sea level rise beyond that timeframe. Section 5.9 has been updated to include additional information related to managed wetlands and their response to sea level rise under the SMP as well as impacts of salinity on the Marsh.

#### **DU-28**

See Master Response 5: Inclusion of an Adaptive Management Plan and Master Response 6: Significance of Wetland Conversion.

The SMP recognizes a 30-day flood and drain cycle as the ultimate goal for managed wetlands to optimize their production. While not quantified, the managed wetland activities are expected to help managed wetlands get closer to achieving the 30-day flood and drain goal through providing regulatory certainty, and in some instances funding, to implement required activities. CEQA/NEPA do not require that impacts be fully offset. Rather, NEPA requires that the impacts be disclosed and CEQA requires that impacts are mitigated to a less-than-significant level when feasible. As described in Master Response 5: Adaptive Management Plan, and Master Response 6: Significance of Wetland Conversion, the conversion of managed wetlands to tidal wetlands combined with the

implementation of managed wetland activities is not expected to result in a significant change in waterfowl populations.

# DU-29, DU-30, and DU-31a

See Master Response 6: Significance of Wetland Conversion.

#### **DU-30**

#### **DU-31b**

See Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh.

Additionally, the cumulative chapter (Chapter 9) of this EIS/EIR describes the potential additive effects of the BDCP and the SMP to the extent information is available for the BDCP.

#### DU-31c

See Master Response 4: Relationship to Other Plans Affecting the Delta and Suisun Marsh.

# 14.2.6 Individuals

# 14.2.6.1 GB—George Boero, Morrow Island Land Co. #702, January 17, 2011

Comment Letter GB From: George Boero [gboero@sbcglobal.net] Sent: Monday, January 17, 2011 11:39 AM To: Victorine, Rebecca A Cc: Steve Chappell; Brian Boero Subject: Suisun Marsh Plan Dear Ms Victorine; I am a land owner in the Suisun Marsh. I am concerned about the multiple partners in this plan this living up to doing what they promise. For example, 30 years ago DWR and USBR installed Morrow Island Distribution System to increase water quality. Now they are restricting water delivery and quality with no answer to our GB-1 concern. Yet in a review form "Land of the West Wind" says that the plan will protect and where possible improve water quality for beneficial uses in Suisun Marsh. Multiple agencies, USFW,DWR,DFG,USBR,and SRCD have not gotten the Distribution System to work. My concerns are not only about the Distribution System but also this plan. Sincerely, George Boero Morrow Island Land Co. #702

# **Responses to Comment Letter GB**

#### GB-1

The SMP would help to stabilize the regulatory environment in the Marsh, which would allow operations and maintenance of managed wetlands to continue into the future. It also would provide for mechanisms and funding to improve management activities. As proposed, the SMP would improve water quality through restoration and improved managed wetland management and also would provide regulatory assurances for water diversions to managed wetlands through the permitting process.

# 14.2.6.2 JG—June Guidotti, December 22, 2010

(See Attachment A for attachments received during the comment period.)

BECKY VICTORINE FAX 916-978-5055 FAX: RIC ARDO PINEDA PETE LUCERO FAX 916-9785100 (916-5741478 Mailed Debbie Hultman, yountville Comment Letter JG Suisup Marsh Habitat Management, Preservation, and Restoration Plan Draft Environmental Impact Statement and Draft Environmental Impact Report
PLEASE PRINT Date: 12-22-2010  The second of
Name: JUNE GUIDOTFIS FAMILY & FOR THE PUBLIC
Title (if applicable):
Telephone: (H) 407 429-0893 (cell) 7076319365
Organization/Business (if applicable):
F Mail:
Address: 3703 Scally Road (section 4)
City: Suisun State: California
Zip: 94585
Thank you for your interest in the Suisun Marsh Habitat Management, Preservation, and Restoration Plan. Please provide us with your comments regarding the proposed plan in the space below. We value your comments; please write legibly.  For your convenience, feel free to take this card with you, fill it out at your opportunity, and mail
it to Becky Victorine, Bureau of Reclamation, 2800 Cottage Way, Sacramento, CA 95825.  Comments may also be faxed to Ms. Victorine at 916-978-5055 or e-mailed to ryctorine@usbr.gov. Fox IN THE CHICKEN COOP AGENCYS  STATE, Solano County, FEDERAL, REGIONAL AGENCYS  Send all written comments by close of business Wednesday, December 29, 2010.
ARE IGNORING THE SUISUM MARSH, THE DELTH, FLOOD PLAIN. GIVING PERMITS, MARSH PERMITS, AIR BOARD, WATER BOARD, ETC. JG-1 THAT IS EFFECTING THE FLOOD PLAIN, DELTH, BIRDS FLY WAY FROM THE NORTH PALE — SOUTH POLE. (PLASTIC BASS)
WATER NOT FOR AGRICULTURAL U.S. PLEASE IN FORCE EXEC ORDER 11990 42 FED REY 2691 MAY 24, 1977 JIMMY CAPTER NO. NET LOSS OF WETLAND. EXEC ORDER 11989 MISUSE JG3 OF THE SUISUN MARSH, NO. OFFSHORE VECTCLE. PLEASE REPLACE
THE HISTORICAL MILDEER DE 199E FOR HILL STEAGH. NOT ON MESEN PET EFFECTIVE TO XIE WASTE FROM THE SOLAND GARDAGE COMPANY, TONNESEN PET EFFECTIVE TO XIE WASTE FROM THE DESTRUCTION OF HABITAT AS THE SALTHARVESTES
Please submit your comments to a project representative or fold this form in half, seal with tape, stamp and mail to the Bureau of Reclamation.  Photeet The Sussim Mass, (Swamp over flow 322 Back Photeet The Sussim Mass, (Swamp over flow 322 Back Photeet The Sussim Mass, (Swamp over flow 322 Back Photeet The Sussim Mass, (Swamp over flow 322 Back Pischarge To Full Tidal Action (H.S. 41700 No present half Discharge follulants (AB NO 1717 FAZIO). The lightle HPD to the Reconstruction for the Reconstruction of the Reconstruction of the Political Concern Public Politic Coordinates gualty 1969) pure Guidoth Concern Public

# Responses to Comment Letter JG

Please note Attachment A includes attachments received during the comment period. It does not contain specific comments on the SMP EIS/EIR; therefore, it is included for informational purposes only.

#### JG-1

See Master Response 7: Mitigation and Recovery Accounting.

#### JG-2

See Master Response 6: Significance of Wetland Conversion.

#### JG-3

The amendment to EO 11989 regarding off-road vehicles states "the respective-agency head shall, whenever he determines that the-use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands immediately close such areas or trails to the type of offroad vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence." In the case of the SMP, the USFWS and Reclamation have evaluated all of the potential effects related to managed wetland activities and tidal restoration and all impacts would be mitigated to less than significant impacts on the environment, except some impacts related to cultural resources (Impacts CUL-1, CUL-3, CUL-4, and CUL-8). Impacts CUL-4 and CUL-8 are related to potential effects on unidentified resources, whereas CUL-1 addresses the changes in the Montezuma Slough Historic Landscape from restoration and CUL-3 relates to the impacts of restoration by inundation of known resources. None of the significant impacts are related to managed wetland activities, except CUL-8, which acknowledges the potential for as of yet unidentified resources to be affected. The Principals will consult with the SHPO to address and minimize these potential effects to the extent possible. Impacts of off-road vehicles would not cause considerable adverse effects.

#### JG-4

Bridge replacement and other infrastructure improvements are outside the purview of the SMP. However, should infrastructure need to be replaced, removed, or upgraded to accommodate managed wetland or restoration activities, it would be planned as part of specific projects.

#### JG-5

The landfill operations are outside legal authority of the SMP Agencies and the purview of the SMP. Other land use activities predate the SMP development and should be addressed with the appropriate regulatory and permitting agency.

# 14.2.6.3 RM—Robert T. Marks, November 18, 2010

Subject:	Suisun Marsh Habitat Management, Preservation and Restoration Plan
oubject.	Calcal Maior Habitat Management, Freservation and Nestolation Flat
Sent: Thursday, No To: Victorine, Rebec	orks [rtmarks@eastbayperio.com] vember 18, 2010 9:32 AM xza A orsh Habitat Management, Preservation and Restoration Plan
November 18, 2010	
Dear Ms. Victorine:	
subject, I expect that	e area on Nov. 18, 2010 and unable to attend either of the scheduled meetings discussing the above t my comments will be included in the decision making process and not discarded. I will appreciate the above will indeed occur.
area aware, were it suisun Marsh would replenishing of natur monitoring and repamaintenance, the material fowl and many other	plaud all efforts of habitat preservation which we as land owners and hunters carefully guard. As you not for concerned land owners and sports persons in union with federal and state agencies, the I cease to exist as we know it today. It is through continued improvement of the land mass by ral grasses and feed amenable to water fowl, by maximizing fresh water flows and by consistent levee ir that insures viability of the marsh. Should these activities cease, especially responsible levee arsh would definitely decline to a salty, stale environment which would certainly negatively affect water species that now occupy an environment consisting of fresh water grasses, minimally to non salted e food for support. I would hope that any decisions by the agencies involved will take the above facts
dictates, will not be a maintenance, allowing This cannot be allow responsible and con	mic situation we now face, I have serious concern that funding, in spite of all good intentions and adequate. The easiest avenue to travel would be to curtail funding, which will negatively affect levee ng levees to breech, turning managed wetlands and habitat into a salty non productive tidal marsh, wed to occur as the entire Suisun Marsh owes its success of habitat to managed wetlands by occur all downers and sports persons. I also find the reasoning faulty that converting significant arsh will improve wetland habitat. All this would accomplish would be to increase salinity and
diligence remains or coordination and coo success should not l	years the Suisun Marsh has been carefully managed, wetlands and habitat have been improved and nathe part of land owners to continue in the same manner. This has been accomplished by close operation with state and federal agencies. Any decisions that would detract from this alliance of be considered. It just seems logical that to return a productive, beautiful habitat filled with natural r water fowl, upland game and other local species into a salt water "desert" is not the thing to do.
Most Sincerely Your	s:
Robert T. Marks, DD	OS, FACD, FICD.

# **Responses Comment Letter RM**

### RM-1

See Master Response 7: Mitigation and Recovery Accounting.

#### RM-2

See Master Response 6: Significance of Wetland Conversion.

# 14.2.6.4 RV—Roberto Valdez, December 29, 2010

## Comment Letter RV From: Victorine, Rebecca A gmartinelli@dfg.ca.gov; SChappell@SuisunRCD.org; Grimes, Russell (Russ) W; Pierre, Jennifer, Goude, Cay; Raabe, Andrew; kshulte@water.ca.gov To: Subject: FW: Individual Comments re: DEIS/DEIR for the Suisun Marsh Habitat Management, Preservation, & Date: Monday, January 03, 2011 7:43:30 AM FYI From: Roberto Valdez [roberto58valdez@hotmail.com] Sent: Wednesday, December 29, 2010 5:08 PM To: Victorine, Rebecca A Subject: FW: Individual Comments re: DEIS/DEIR for the Suisun Marsh Habitat Management, Preservation, & Restoration Plan. Please correct: Also, I am not convince that the wetland management activities within the study area will have less than significant adverse impacts on the following species: Thank you very much. From: roberto58valdez@hotmail.com To: rvictorine@usbr.gov Subject: Individual Comments re: DEIS/DEIR for the Suisun Marsh Habitat Management, Preservation, & Restoration Plan. Date: Wed, 29 Dec 2010 16:58:35 -0800 December 29, 2010 **Becky Victorine** Bureau of Reclamation (Mid-Pacific Region) 2800 Cottage Way Sacramento, CA 95825 Subject: Individual Comments re: DEIS/DEIR for the Suisun Marsh Habitat Management, Preservation, and Restoration Plan. Dear Ms. Victorine: I am a long-time Solano resident and stakeholder in the proposed Multi-species Habitat Conservation Plan of Solano County. I am responding to the proposed SHMPRP on account that the Suisun Marsh is considered to be an utmost significant habitat area to many threatened/endangered/special status/species of concern within Solano County, as an integral part of the entire Bay Area Delta. Reviewing this 30-year plan, I am disappointed that it is really a mini-version of the proposed HCP of Solano County which has not been adopted by both local and county government during the past 11 RV-1 years. Worst, it is based on piecemeal conservation efforts such as CALFEDROD which the San Francisco Bay Conservation Development Districts continues to implement with regards to the Suisun Marsh Preservation Plan. Also, I am not convince that the wetland management activities within the study area will not have less than significant adverse impacts on the following species: swainson's hawk, western burrowing owl, tri-colored blackbird, white-tailed kite, loggerhead shrike, Canada goose, California black rail, least tem, western pond turtle, salt marsh harvest mouse, papoose tarplant, Contra Costa Goldfields, delta/longfin smelt, chinook salmon, and steelhead fish. In addition, I am disappointed that the Vallejo Inter-Tribal Council was not contacted with regards to RV-3 the most likely descendant for the Native American sacred CAL-SOL sites within the study area. Thank you very much.

Roberto Valdez, 248 Plantation Way, Vacaville, CA 95687.

Having reviewed the executive summary, biological (Chapter 6) and cultural (Chapter 7) sections,

# **Responses to Comment Letter RV**

#### RV-1

The SMP is designed to meet the objectives of CALFED, portions of the USFWS tidal marsh restoration plan, and recovery of listed species that use the Marsh. While these goals may overlap other plans and policies, the SMP was developed specifically to address land use and management issues in the Marsh. Implementation of the SMP is expected to result in a more stable regulatory environment compared to current conditions.

#### RV-2

The existing management activities are a component of the baseline, and therefore the current level of implementation of these activities is not analyzed as part of the project alternatives. However, the impacts of the proposed increase in magnitude for some of these activities as well as the impacts of new activities (e.g., dredging) have been described in this EIS/EIR. As described in the Wildlife section (6.3) and in the Environmental Commitments section of Chapter 2, many restrictions and minimization measures currently in place would continue to avoid and minimize effects on these species. Additionally, restoration of tidal wetland is expected to improve ecosystem conditions for many native Marsh species, including those listed in the comment.

#### RV-3

Reclamation will seek and consider the views of the Vallejo Inter-Tribal Council during the Section 106 process for the PAI projects (see Mitigation Measure CUL-MM-7). As applicable, the lead state and federal agencies responsible for implementation of non-PAI projects will seek and consider the views of the Vallejo Inter-Tribal Council during implementation of Mitigation Measures CUL-MM-2, CUL-MM-3, CUL-MM-4, and CUL-MM-5).