TECHNICAL MEMORANDUM

TO: CURT SCHMUTTE AND ROBERT YEADON, DWR
FLOODED ISLAND PROJECT TEAM

FROM: JOHN CAIN, NATURAL HERITAGE INSTITUTE (NHI)

SUBJECT: PUBLIC OUTREACH, SCIENCE ADVISORY GROUP, AND INTEGRATION TEAM PROCESS

DATE: JANUARY 15, 2005

This memorandum provides an overview of the public outreach, Science Advisory Group, and Integration Team Process for the Flooded Islands Feasibility Study.

The purpose of the Flooded Islands Feasibility Study is to evaluate the potential to create ecosystem, water quality, recreational, and other benefits at Lower Sherman Lake, Big Break, and Franks Tract, by modifying remnant levees to inhibit salt trapping and restoring tidal marsh habitat. The three flooded islands are owned by three separate entities each of which has separate management plans for the flooded islands they manage. The California Department of Fish and Game owns the Lower Sherman Island Wildlife Area; the California Department of Parks and Recreation owns Franks Tract; and the East Bay Regional Park District owns Big Break. The public uses each of the flooded islands for a variety of recreational uses including fishing, water skiing, and boating. The science concerning ecosystem management of flooded islands is multidisciplinary and complex. The purpose of the Public Outreach, Science Advisory, and Integration Process is to identify, organize, and integrate all of these disparate issues for the purpose of achieving the objectives of the Flooded Island Feasibility Study and subsequent phases of project implementation.

Public Outreach

The Natural Heritage Institute with the assistance of EDAW is responsible for coordinating public involvement. NHI has organized two meetings with recreational stakeholders of Franks Tract, conducted a coordination meeting with the East Bay Regional Park District and has briefed staff at the Ironhouse Sanitary District, a local agency that owns lands surrounding Big Break on Jersey Island and the mainland. EDAW and NHI staff met with superintendent of the Department of Parks and Recreation Delta Sector regarding their management objectives and concerns for Franks Tract. EDAW along with the DWR has convened a meeting with DFG regarding their management objectives for Sherman Lake. The results of these meetings are described in greater detail below.

<u>Sherman Lake</u>
Representatives from DWR and EDAW met with Armand Gonzales and Sarah Holm of CDFG to discuss the initiation of the upcoming preparation of the Lower Sherman Island Land Wildlife Area Management Plan (LMP) and the Flooded Islands Feasibility Study

and to identify actions of potential mutual interest to DWR and CDFG. The major objectives of the LMP are to guide the management of the areas' multiple competing uses, to identify areas that have important wildlife benefits, and to develop management strategies to protect those resources and otherwise manage public use of Sherman Lake.

DFG indicated that they would be very happy to cooperate with DWR to implement enhancement projects including creating more topographic diversity and beneficially altering salinity gradients by modifying the configuration of Sherman Lake. As an outcome of the meeting, EDAW created a spreadsheet detailing the objectives and scope of the Flooded Islands and LMP projects in order to identify data gaps that could be filled with DWR funding to achieve objectives of both projects. With this joint project scope, EDAW and NHI will continue outreach and coordination with DFG and associated stakeholders at Sherman Lake.

Franks Tract

NHI staff met with a group of marina owners, recreational users of Franks Tract, and a representative from the sport fishing groups to discuss their concerns and objectives for the project. The group identified their key objectives and concerns and produced a map of proposed improvements for Franks Tract, which included designated boating channels, habitat islands, and berms to protect marinas from wind wave erosion. The group agreed to work with the flooded island project team on developing a conceptual plan that would achieve both their objectives and the objectives of the flooded island study. The stakeholders primary concern was their belief that Frank's Tract is filling in with sediment and submerged aquatic vegetation, which is limiting boating and other recreation on Franks Tract.

The stakeholder group agreed to participate in follow up meetings and identified a small group of stakeholders to meet with the flooded island technical team on behalf of the large group. NHI and technical representatives of the study team from Moffat Nichol and EDAW met with the small stakeholder working group and discussed in greater detail their key concerns and related technical issues. The stakeholder group identified four primary objectives for Franks Tract:

1. Maintain navigable boating channels across Franks Tract, preferably at a depth of 12 feet or more to prevent colonization of the channels by submerged aquatic vegetation.
2. Maintenance of large open water areas free of SAV for recreation including boating, fishing, water skiing, and safe mooring.
3. Maintain adequate circulation and flow of water through Franks Tract to maintain fishing conditions, reduce SAV, and prevent noxious odors.
4. Prevent erosion of levees on the south side of Franks Tract to reduce wave damage on the north levee of Bethel Island.

Rick Rhodes, from Moffat & Nichol Engineers discussed feasibility issues of maintaining deep boating ways as well as data regarding the aggradation of Franks Tract from sediment deposition or SAV. In brief, maintaining boating channels will require

continuous maintenance dredging which will be difficult to fund and permit over the long-term. Data from past bathymetric surveys indicates that Frank's Tract is not filling in contrary to the perception of numerous stakeholders and some scientists. The flooded islands' team agreed to address these issues further and reconvene with the stakeholder group. NHI plans to convene a follow-up meeting in mid February.

Big Break

NHI staff met with the Mike Anderson, the assistant general manager of EBRPD, and several of his staff to discuss the objectives of the flooded island study, the EBRPD's objectives for Big Break, opportunities for collaborating to achieve mutual objectives, and a process for soliciting broader public input. EBRPD's management of Big Break is guided by the Big Break Regional Shoreline Land-Use Plan, which manages Big Break as a preserve to protect the ecological values. EBRPD agreed to develop a list of specific objectives that they would like to achieve for Big Break in conjunction with the flooded islands study. NHI is meeting with EBRPD in late January to further discuss these objectives. Once these objectives are further refined, EBRPD and NHI will meet with local marina owners and recreational stakeholders to discuss the project and solicit their recommendations.

NHI staff has also met with Tom Williams, the acting general manager of the Ironhouse Sanitary District (ISD) to discuss their long-term management plan in regard to the water quality and ecosystem restoration objectives of the flooded island study. ISD owns 500 acres on the southern shore of Big Break and 3,800 acres on Jersey Island, which borders the north side of Big Break. Ironhouse currently uses their lands to spread secondary treated wastewater, but is now in the process of developing an upgraded treatment process in accordance with water quality regulations. These changes may free up large areas of ISD's land, and thus ISD is now interested in evaluating ecosystem restoration options for their land. NHI and ISD staff has agreed to discuss how a variety of restoration options could simultaneously benefit ISD and achieve the objectives of the flooded islands study.

Science Advisory Committee

EDAW and NHI staff met with several research scientists whose work focuses on the ecological and hydrodynamic processes of flooded islands in the Delta. EDAW prepared detailed notes of these minutes, which have served as the basis for the draft baseline and conceptual alternative studies.

Lisa Lucas, USGS (food-web dynamics)
Jon Burau, USGS (hydrodynamicist)
Tom Cannon, Wildlands (fish biologist)
Lenny Grimaldo, DWR (fish biologist)
Lars Anderson, UC Davis (invasive aquatic plants)
Chris Enright, DWR (hydrodynamicist)
Mark Marvin-di Pasquale, USGS (mercury methylation)

NHI and EDAW conducted three meetings with Chris Enright to develop a conceptual model matrix based on input from the Science Advisory Team members. The conceptual model matrix guided the draft conceptual alternatives report and will serve as the framework for efficiently re-engaging the science team and organizing their input. NHI will convene a series of meetings with EDAW and the Science Advisory Team members in February and March to get their input on the conceptual alternatives development, the conceptual model matrix, and the adaptive management plan. NHI and EDAW will first meet with the Science team members individually to brief them on project developments and get their input on the matrix. NHI will convene several of the team members for a meeting in late February to refine the alternatives and identify key uncertainties for analysis in subsequent modeling. These meetings will start with a meeting with Chris Enright in late January. Based on the results of these meetings, NHI will prepare an adaptive management plan for subsequent review by the Science Advisory Team in late spring.

Integration Team Process

The Integration Team consists of representatives from DWR and the owners of the three flooded islands: DFG, EBRPD, and DPR. As discussed above, DWR and the project team members have met with the integration team members individually on several occasions. Due to the uniquely different management issues on each flooded island, the integration team has not yet met as an entire group. Now that objectives have been identified for each of the flooded islands, it would be timely for the integration team members to convene to screen conceptual alternatives, identify mutual concerns, and collaboratively plan for subsequent phases of the project.

APPENDIX A

DRAFT
Coordination of Scope of Work Elements
To Achieve Restoration Project Concept Plans
For Lower Sherman Island Wildlife Area
September 20, 2004

Task	Existing Flooded Islands Scope	Existing LMP Scope	Enhanced LMP Scope to Define Restoration Project Concept Plans
Public Outreach	Interviews related to three sites	Two public meetings	Expand to include more focus stakeholder discussions and public process to review restoration alternatives and preferred plans
Agency Coordination	Coordination with property owner agencies	Limited, based on policy-level general approach	Expand to include permitting/approval agencies for restoration projects
Terrestrial Resource Baseline Data	Baseline Report from secondary information, covering 3 sites (less detail on any one site)	Literature search, one day reconnaissance of Lower Sherman Island for field verification of air photo. Also, data gap analysis.	Update air photo and topography? Archaeology site reconnaissance Field survey for invasive plants
Hydrology and Geomorphology Data	Secondary data at a Delta scale	Secondary data at Lower Sherman Island area scale	Updated bathymetry? Detailed site-specific existing data review Geomorphic audit of site data Hydrological site reconnaissance Hydrologic and geomorphic field data collection
Recreation Use	Secondary data on three sites	One-day site visit includes reconnaissance of recreation access. Some interviews include recreation stakeholders.	Field inventory of recreation access points and facilities, including on-water assessment Survey of recreation users (hunters, anglers, wind sports, boaters)

Task	Existing Flooded Islands Scope	Existing LMP Scope	Enhanced LMP Scope to Define Restoration Project Concept Plans
Mapping	Delta-wide scale, covering 3 sites, based on existing DWR electronic files	Lower Sherman Island GIS base map, vegetation map, resource map	Concept plan scale base map for restoration project sites, including more detailed site data
Hydrologic Model	RMA modeling of hydrology and salinity, Delta-wide scale	Spreadsheet approach, no original modeling. Use existing model results from flooded islands, other projects	Review RMA model. Develop and calibrate appropriate 2-D model including site-specific sediment/morphological modeling
Planning Process	Study Objectives and Priorities Three 3-site, general alternatives Model and evaluate alternatives General cost estimates Define preferred pilot program	Wildlife Area mission Draft management goals and tasks for elements (biology, public use, facility maintenance, fire/fuel management, monitoring Final management goals and tasks	Restoration opportunities and constraints assessment Concept sketches of 3 restoration alternatives Alternatives evaluation (hydrodynamics, mercury, salinity, DOC, sediment) 20% design-level concept plan of preferred projects, including interpretive/recreation (include easily implemented first phase actions)
Primary planning work product	Feasibility Study of 3 Sites	LMP, policy-oriented with step down actions for restoration projects	LMP with restoration project plans ready for implementation
CEQA	No CEQA needed, exempt as a study	Program-level MND on policy-level plan with several deferred actions with possible future CEQA needed	Expanded MND to cover project-level restoration projects
NEPA	No NEPA needed, no federal action	No NEPA needed, no federal action	NEPA (probably FONSI) can be added, if desired. (Section 404 USACE authorization would be federal action).
Monitoring	Monitoring and Adaptive Management Plan	Mitigation Monitoring Plan for CEQA tied to LMP actions as the monitoring	Mitigation Monitoring Plan for CEQA tied to restoration project implementation, restoration monitoring plan, and adaptive

Task	Existing Flooded Islands Scope	Existing LMP Scope	Enhanced LMP Scope to Define Restoration Project Concept Plans
			management plan
Permitting	No permitting	No permitting, because LMP adoption is the final action	Permitting of restoration projects (or first phase of them)
Design Development and Construction Documents	No design and construction documents	No design and construction documents	Concept plans (about 20% design) ready for design development and construction documents. Design process could be added after planning phase, if desired.
Total Price	$1,200,000 full 3-site study $ 328,000 EDAW	$120,000 total for LMP	$ TBD