San Francisco Bay Area Wetlands Restoration Program
Design Review Group

Meeting Summary
September 15, 2003

Attendees:
Bob Batha (San Francisco Bay Conservation and Development Commission)
Peter Baye (Independent Biologist)
Andree Breaux (San Francisco Bay Regional Water Quality Control Board)
Elise Brewster (Brewster Design Arts)
John Brosnan (Wetlands Restoration Program)
Don Danmeier (Philip Williams Associates)
Laura Hanson (Independent Biologist)
Amy Hutzel (California State Coastal Conservancy)
Rachel Kamman (Kamman Hydrology and Engineering)
Shelby Lathrop (Shaw Environmental)
Phil Lebednik (LFR Levine-Fricke)
Michelle Levenson (San Francisco Bay Conservation and Development Commission)
Karl Malamud-Roam (Contra Costa Mosquito and Vector Control District)
Mike Monroe (U.S. Environmental Protection Agency)
Steven Osborn (City of San Jose)
Barbara Ransom (Cargill)
Diana Sokolove (CH2M Hill)
Louisa Squires (Santa Clara Valley Water District)
Eric Tattersall (California Department of Fish and Game)
Jennifer Vick (National Park Service)
Carl Wilcox (California Department of Fish and Game)
Larry Wyckoff (California Department of Fish and Game)

1. Introductions/Review Agenda

Mike Monroe chaired the meeting and opened the discussion with a review of the agenda and a roundtable of introductions. He asked the group if there were any announcements. Bob Batha said BCDC has received the permit applications from the California Department of Fish and Game and the U.S. Fish and Wildlife Service for the Initial Stewardship Plan for lowering salinities in the South Bay Salt Ponds. This issue will likely go before the BCDC commissioners in about a month.

2. DRG Internal Business

a. Review of revised DRG project outline and checklist. John Brosnan presented the revised project summary outline and checklist and thanked DRG members for providing comments. John said all of the changes were modifications to the draft and that no significant new sections were added to the document. He asked if DRG members had comments. Phil Lebednik suggested adopting the document as an interim measure and stated formatting the document into a checklist form would be helpful to both project proponents and Design Review Team members. He added that "landscape" needed to be addressed, as in how the proposed project

fits into the landscape and the project's functionality and how the project functions coordinate with surrounding land uses. Rachel suggested adding, under geography, how the proposed project might impact surrounding land uses. John said he would incorporate these suggestions and circulate the document, via email, along with the draft meeting summary; he asked the group to submit comments within two weeks. He stated he would then ask the DRG to adopt the document at its next meeting.

b. Review of revised DRG ground rules statement. John presented the revised Ground Rules statement and noted he'd separated the document's guidance into general operating principles, guidance for project proponents, and guidance for Design Review Team members. He noted the only point dropped from the list was that "Design Review Team members will not comment on agency criteria for projects". Peter Baye noted this was appropriate to delete, since the DRG has no authority to change regulatory criteria. He added the objective point of view of the DRG made it a good option to retain. Phil agreed with the point. Bob noted this could make it harder for agencies to apply certain criteria that might come under some criticism, yet acknowledged various agency policies have been at cross purposes in the past. Phil felt such critique could be beneficial to some agencies; he felt agencies might welcome objective options on what are intended to be objective policies. John then reviewed the changes input into the Ground Rules statement and collected feedback. A few DRG members suggested revising the clause that recommends project proponents make a "good faith" effort to provide whole and accurate information and also to clarify what a Design Review Team member is defined as (particularly as relates to regulatory agency staff and their participation). John said he would incorporate these suggestions and circulate the document, via email, along with the draft meeting summary; he asked the group to submit comments within two weeks. He stated he would then ask the DRG to adopt the document at its next meeting.

c. Discussion of achieving consensus on DRG feedback. The meeting was somewhat behind schedule and John suggested postponing this item until the next meeting. He briefly stated there has been some concern about the lack of consensus in DRG feedback, particularly as relates to responses to project proponent's Desired Feedback. John stated a suggestion had come from Josh Collins, who could not be at the meeting. **John will summarize the suggestion and circulate it before the next DRG meeting.**

d. Discussion of reviewing projects outside of the WRP's geographic scope. John noted that twice over the past year a project proponent had requested DRG review but was turned down, as the project was located in the coastal zone, outside of the WRP's geographic scope. However, John and Mike Monroe have brainstormed on options that could be elected to respond to these project proponents, including: (1) stating the DRG will not review these projects because of their location, (2) stating the DRG would review them, yet not pay its reviewers to perform the review, and (3) stating the DRG would review the project as it does normally, only in the event that no other projects are seeking DRG review at the time. John noted selection of either option (2) or (3) would have to be cleared with the Coordinating Committee. Bob suggested the additional option of asking interested proponents to pay for the review. Rachel suggested taking a cost estimate of a DRG review to management when seeking their input. Jennifer Vick, one proponent who's sought DRG review for the Redwood Creek project (Muir Beach, NPS), said the National Park Service is seeking to use the peer review services of an existing forum such as the DRG.

3. DRG PROJECT PRESENTATION: Napa Plant Site Restoration

Following an introduction of Design Review Team members, Carl Wilcox began the presentation. The Napa Plant Site project is located along the east side of the Napa River in Napa County, just southwest of the Napa County Airport and west of the city of American Canyon, and at the end of Green Island Road. The site consists primarily of former salt crystallizer ponds, used by Cargill for salt production. The site was purchased by the state as a part of the South Bay Salt Ponds restoration effort. This site's restoration shares the same mission with the restoration of the south bay ponds - to prepare a scientifically sound and publicly supportable restoration and public access plan that can begin to be implemented within five years.

Overall, the site encompasses approximately 1,400 acres of mostly evaporator ponds and crystallizer ponds. Cargill is currently removing the remaining salts from the ponds and the process may take up to 8-10 years, although progress is proceeding well at this time. Through the salt harvesting process, Cargill will maintain a base layer of 6"-12" of salt in the ponds. Some ponds will likely become available for restoration within 3 years. The project site's ponds were all used for the production of sea salt and there are no bittern ponds within the site's 1,400 acres. Remediation of residual soil salinities is not expected to be necessary. Since the mid-1990s, or roughly the end of active salt production, the sites have undergone an annual ponding and drying cycle. The B ponds - B1, B2, and B3 - are located along the east side of the site and served as concentrator ponds; elevations range from 3 feet NGVD and down. The northern ponds - 9 and 10 - served as the concentrator ponds and are now at elevations of about 1-0 feet NGVD and 2-1 feet NBVD, respectively. A portion of Pond 1 contains excess dredge material on the site. The plant site itself is about 20 acres in size and is elevated above the tides. The remaining nine ponds served as crystallizers. **Carl said this restoration could be planned and managed like the south bay salt ponds, yet he is seeking some idea of what the restoration is going to/should looks like and how much of the salty areas might be retained.**

The project site is nearly surrounded by other wetland restoration projects and preserves, including Fagan Slough, which has several hundred acres of tidal marsh adjacent to a full transition zone. The Napa Flood Control project is adjacent to the contiguous Ponds 9 and 10 and the Port of Oakland project site is located to the south. The Napa Marsh restoration project is located across the river - on its west banks - and all of its ponds are former salt production facilities, as well. Some of its ponds are already open to tidal influence; the EIR/EIS for this project is in its final stage and near completion. Larry Wyckoff pointed out the Napa Marsh ponds are planned to be approximately 50% tidal marsh and 50% managed tidal ponds. Wildlife use of the Napa Plant site's ponds has been limited since the cessation of salt production, with bird use quite minimal. Given the quantity of existing wildlife habitat around the proposed project site, the Napa County Airport has already expressed concerns about potential increases in bird strikes that could be associated with the restoration of the former plant site.

Carl then presented the six guiding principles for the restoration plan and the seven long-term restoration objectives. Some constraints include the need to preserve the rail line north of the project site and not disturb the residences along the west side of the Napa River, across from the site, and the large industrial parcel of the former plant site and the adjacent barge canal. One

notable opportunity is the project's proximity to the American Canyon wastewater treatment facility, which may offer some of its treated water to the restoration (such discharges would only be available during the winter). There is a pattern of flow from the north to south, as water was pumped into Ponds 9 and 10, which then flowed south to the plant. Although eliminated from most ponds, some remnant historical channels remain in Ponds 9 and 10; all other ponds are essentially flattened and totally compacted. There is the potential for some gypsum precipitates in some of the ponds. The draft EIR for the project should be released in 2005 and the final in winter of 2006, along with permit applications in fall of 2006. The first phase of construction is expected in spring 2007.

Carl then presented the desired feedback from the group. Carl noted there is little vegetation in the ponds as the salinities are generally above 150 ppt. Phil Lebednik asked about remediating the salinities and Carl said they'd leach out over time. Rachel Kamman inquired about CDFG's desired mix of habitat types at the site; Carl stated it would optimal to restore tidal action throughout the site and maximize the edge opportunities, although he noted that pond management is an option. Phil felt this project was different, as it possessed a broader regional context. **Phil suggested incorporating the landscape's habitat mixes into the project goals, with an emphasis on "back engineering" of previous restoration projects in the area to estimate restoration success and timing for the Napa Plant site;** he added that the project might take the opportunity to incorporate habitat types that may be underrepresented in the region**.** Peter Baye felt that although crystallizer ponds have been restored to tidal marsh, it might not be the most efficient thing to do in this case given the site topography, elevations and compacted soil. **Peter noted the area does not have a great deal of shallow panne habitat and these sites are already panne surfaces; he noted this could be viable potamogeton habitat. He felt this project presents a good opportunity for these habitats and they could be easily achieved, stating it would not be a natural place for them but yet a convenient place.** Peter emphasized the potential for native grasslands, vernal pools and seasonal wetlands on the site. **Karl Malamud-Roam questioned whether the elevations were opportunities or constraints and stated that question could be answered with criteria setting and consistency with the stated goals. Phil suggested exploring at the potential for salt marsh harvest mouse habitat at the site. He added that if rapid return on restoration is sought, restoring Ponds 9 and 10 would be a good place to start. Rachel suggested taking advantage of the freshwater opportunities available at the site. Peter noted poor salt marsh harvest mouse habitat could function as great cordylanthus habitat.**

Elise Brewster pointed out that the residual salinities on the site will affect how easily the historical conditions will be achieved. She suggested comparing the site's northern and southern upland edges; she also suggested beginning restoration with Ponds 9 and 10. She noted a public access point at Green Island could be very powerful in getting across the message of the landscape and it's alteration. Karl noted that abandoned parking lots (with excessive soil compaction) produce some of the best cordylanthus habitat. **Karl also suggested using photogrammetry using three existing sites (the airport, Green Island, and the railroad bridge) and three new benchmark sites. He also suggested using the modeling data and efforts that went into the Napa Flood Control and Napa-Sonoma Marsh projects, as opposed to new, independent hydrodynamic modeling.** Karl posted the question - how well can likely boundary conditions be characterized? **Phil, referring to the airport's concerns about bird strikes, suggested minimizing extensive bird habitat in Ponds 9 and 10 and emphasizing open water to the south.** He also asked what the criteria were for minimizing management of

the site, post construction? Carl stated the criteria are to maintain the necessary levees while minimizing the flood control structures. **Phil suggested using the retained levees for public access.**

Rachel stated photogrammetry using internal levee reference points was essential. She suggested balancing the amounts of cut and fill while maximizing use of broad, upland transition zones. She suggested tidal monitoring at a reference site. She pointed out the need to determine in which direction the crystallizer ponds would drain. **She also said this site will need to make use of ground proofing for vegetation control, which is critical at sites where elevations are at or about marsh plain height. She advocated use of a simple, one-dimensional model to plan placement of tidal channels and felt that, for this project, it would be a good design tool to use as soon as possible.** Rachel noted a levee breach into the leeside would assist in keeping the breach deep, which could assist with fish habitat (and potentially help to maintain the pannes [NOTE TO RACHEL - Did I get this right?]). Rachel also noted the channel construction would be the largest cost of the project. Phil asked about hydrologic phasing to reduce salinities, and Rachel felt this could sacrifice tidal prism. **She suggested water could be initially managed to reinforce the anticipated drainage network.**

Peter felt the backs of Ponds 9 and 10 could serve as brackish back marsh panne habitat and noted a choice would not have to be made between salt ponds and tidal marsh with such a gradual transition. He considered this approach as maximizing use of what's there in the present and taking advantage of potential channel constraints. **Karl suggested comparing the levee elevations relative to tidal datums and suggested leaving the majority of the levees at their current heights.** He noted there are several natural phasing options from north to south, with various phases possible. **Rachel suggested the use of a series of photographs to track how water moves on the site over the year to evaluate each basin and see where the ponding and drying occurs.** She then asked about planned coring methodology for the outboard marsh and adjacent reference sites. **As for the tidal channel networks, Rachel suggested low-grade topography and allowing the mid-order channels to form on their own.** She also felt there was enough elevation and dredged material on the site that there would be no need to import more and **suggested the fill be placed on the upland transition boundaries. She also suggested that, for public access, to use peninsular access - such as the railroad bed - opposed to circular levee trails.** Peter noted the potential for debris mounds along the south edge of the site (at the Napa River's edge) due to the long wind fetch there. Carl pointed out the edge is heavily rip-rapped; Peter noted sediment accretion in rip-rap cracks can provide good habitat for Mason's lilaeopsis. **Rachel suggested some of the interior levees could be smeared.** Phil asked whether any metals sampling had been completed and Carl said no, nor had coring or any kind been done. Larry mentioned mosquito control and Carl said the intention is to avoid ponding areas with substantial edges in order to prevent mosquito production. Peter noted that hypersaline environments of over 90 ppt salinity would dramatically cut down mosquito development. He added that lesthenia could be a dominant plant species on the uplands.

4. Meeting summary and next meeting date

Mike Monroe wrapped up the discussion and said John would provide the draft Letter of Review to the team the following week. John will also coordinate the next meeting, expected sometime in approximately six weeks. The meeting was adjourned.