

**San Francisco Bay Area
Wetlands Restoration Program**

**Design Review Group
Meeting Summary
October 28, 2002**

Attendees:

Bob Batha* (San Francisco Bay Conservation and Development Commission)
John Brosnan (Wetlands Restoration Program)
Maya Khosla (Independent Biologist)
Michelle Levenson (San Francisco Bay Conservation and Development Commission)
Roger Levelthal (Far West Restoration Engineering)
Karl Malamud-Roam* (Contra Costa Mosquito and Vector Control District)
Molly Martindale (U.S. Army Corps of Engineers)
Mike Monroe (U.S. Environmental Protection Agency)
Jeff Olberding (Olberding Environmental)
Michelle Orr* (Phillip Williams and Associates)
Stuart Siegel (Wetlands and Water Resources)
Carl Wilcox* (California Department of Fish and Game)
Katy Zaremba* (Invasive Spartina Project/Coastal Conservancy)

* Breuner Marsh Mitigation Bank Project Review Team

1. Introductions and Agenda Review/Announcements

Mike Monroe (U.S. Environmental Protection Agency) chaired the meeting and opened with a brief round of introductions. He welcomed a new member of the Design Review Group, Katy Zaremba, from the Invasive Spartina Project/Coastal Conservancy.

For Announcements, John Brosnan (Wetlands Restoration Program) provided a brief summary of the last Design Review Group (DRG) meeting. He stated that the DRG documents have been finalized and that the Request for Proposals for paid members of the DRG has been posted on the website.

2. Presentation on the Breuner Marsh Mitigation Bank (see Project Summary form for additional details)

Jeff Olberding (Olberding Environmental) presented the Breuner Marsh Mitigation Bank project to the DRG. The project has been underway for the past two years and is entirely privately financed by the property owner. The project as a whole encompasses some development on the site as well as a mix of wetlands habitat creation and restoration. Extensive tidal mudflats exist along the San Pablo Bay shoreline, some that extend 300 to 400 feet from the shore. Habitats to be created include additional tidal mudflats, tidal marsh, tidal channels, shallow bay channels, wetlands and uplands transitional grasslands, seasonal ponds and pans (with periodic inundation by tides), grassland, and riparian habitat. Once all of the credits for the mitigation bank have been sold, the end result will be a permanent conservation easement.

The site is an ideal location for such a project. It is located in the City of Richmond, to the west of Richmond Parkway. This relatively “inaccessible” site makes it very suitable for habitat restoration. The site has long been exposed to disturbance and extensive development has occurred in the past. Presently, there is a great deal of concrete riprap along the shoreline, there is extensive fill of historic wetlands, construction debris (i.e., old tires), remnants of fill piles, and evidence of past grazing (horses and associated structures have been removed from the site). Flood control improvements will be necessary.

There are several opportunities for habitat and species restoration and enhancement. Current remaining habitats are somewhat patchy on site, yet on a larger scale, restoration potential is excellent due to existing habitat to the south (San Pablo Bay Shoreline) and to the north (Giant Marsh). These habitats, when restored, should provide excellent habitat for the endangered Salt Marsh harvest mouse and clapper rail. The vision with the Breuner site is to create wetlands and associated uplands, with a 2% slope over the entire site. Sixty-six (66) acres of wetland habitat will be created at the site. Existing grasslands habitats consist mostly of non-native species. Some 144 acres may contain invasive *Spartina*.

There also will be created recreational values. The site plans will include maximum feasible public access while allowing for the maximum functional habitat values. The site will contribute to the ring around the Bay, the Bay Trail. Plans include a 400-foot boardwalk. There will be an increase in visual and aesthetic appearance of the site while maintaining the existing viewsheds. The site will allow for future educational and long-term research opportunities.

Constraints include dated planning documents, special interest groups, conflicting agency policies (i.e., City of Richmond), CEQA, and restrictions. Design issues include Rheem Creek, concrete removal, tidal channels, island creation (refugia habitat), excavation amounts and costs, and grade establishment. Jeff asked the DRG: *How do we get rid of the concrete? What then replaces the concrete? How can we provide island shorebird breeding/refugia habitat?* Additional constraints include the East Bay Regional Park District’s request for boat launch access on the site (mudflats make that largely infeasible) and the sole site access for construction equipment remains the bridge over Rheem Creek.

Overall design review issues with this project include: the boardwalk, trails, the parking lot, interpretive signage, channel location, panne habitat, vegetation establishment, bridge removal, tidal connections, excavation (disposal), island creation, shoreline restoration (concrete issues), shorebird habitat, and creek design. Management would like to introduce plant species that used to exist on the site although that may not appear there now.

3. Group Discussion Including Review of Needed Data Items.

DRG members pointed out that the Giant Marsh (to the north) maintains one tidal channel drainage, opposed to the two proposed at Breuner. It also picks up stormwater drainage from adjacent residential areas. The question was raised of whether to use property lines as hydraulic boundaries instead of allowing for tidal connectivity between the adjacent property parcels (as suggested by the *Habitat Goals*).

Carl Wilcox (Department of Fish and Game) wanted to know if there were contaminants on the site. Jeff said there was a plume detected from a neighboring industry, but that the plume was not

migrating and that detection levels were only slightly above non-detection limits. Otherwise, there is some petroleum contamination. Jeff then stated that the grading plan uses NGVD and that the natural high marsh elevation is about four feet. The lowest marsh plain grading is to .5 feet below. A suggestion to dredge a channel of -2 feet for 200 feet out in the channel is on the table, but Michelle Orr (Philip Williams and Associates) shared that shorter extensions out into the mudflats have been successful. Success is dependent on mudflat materials, subsidence, and compact fill. Karl Malamud-Roam (Contra Costa Mosquito and Vector Control District) added that it depends on the channel mouth against the volume of the tidal prism. Some channels that extend too short into the mudflats can seal the channel mouth. Stuart Siegel (Wetlands and Water Resources) suggested that due to sediment suspension and sand in the area, sealing of the channel mouth might not pose a great concern. Karl pointed out that Giant Marsh traps creosote logs and this is something to be aware of.

4. Review of the DRG Letter of Review

Mike Monroe then framed the DRG's focus with the Letter of Review. The group felt that the project was consistent with the *Habitat Goals Report*. The group also generally agreed that the proposed habitat mix was appropriate. Carl suggested that the pannes be driven towards higher salinity to provide for more bird habitat by excluding vegetation. He also added that too great a slope on the site may produce excess scour of mudflats and that island creation can be problematic. Jeff sought some input on how to make the islands tie into the existing elevation most effectively. Bob Batha (San Francisco Bay Conservation and Development Commission) suggested a cut closer to the tip of "the chicken" and a deeper channel, which would provide a high tide refuge. Jeff replied that the Parks District requires use of the point for boat access.

Michelle stated that some elevations seemed high to maintain constant pickleweed populations. Bob suggested visiting nearby sites with pickleweed and then undershooting the elevation a bit in this design. Jeff stated that 4.5 is the highest elevation in each channel. Roger Levelthal (Far West Restoration Engineering) stated that the marsh plain is at 2.5 - 3; and that 3 is the mean high water mark.

The question of whether the previous gun club operations could lead to a contaminant issue was raised and the group members agreed that this would not be a problem. The question of the long-term future of the rod and gun club was unknown, but it is suspected that it will be operational for some time.

Katy Zaremba (Invasive Spartina Project/Coastal Conservancy) stated that *Spartina densiflora* has been discovered at Point Pinole and may be more of an issue than the *Spartina alterniflora* populations in the area. She stated that the key approach is monitoring for the plant species.

Mike asked the group what else they felt was needed before an adequate review could occur. Bob asked for detailed grading plans, locations of weirs and hardened structures, and erosion control plans for the shoreline. Jeff then passed around copies of the grading plan. Michelle asked for Operations and Maintenance Plans. Roger suggested a Design Basis Memo, which would offer specific elevations relative to each habitat feature. This memo includes substrate of access roads and seasonal wetlands elevations and allows for a more informed discussion of constructability.

ACTION ITEM: Mike summarized the documents to come from the planning team to assist in the DRG review. These include the 1” contour grading plan, the Design Basis Memo, and the Operations and Maintenance Plan.

5. Wrap-Up/Next Meeting Date and Agenda Items

The next meeting date was set for Monday, December 2nd, from 1 P.M. – 4 P.M. The meeting location will be announced.

The meeting was adjourned.

ACTION ITEMS:

- Jeff Olberding to provide 1” contour grading plan and the Operations and Maintenance Plan from planning team and John to distribute items to DRG.
- Roger Leventhal to provide the Design Basis Memo John to distribute item to DRG.