

**San Francisco Bay Joint Venture  
Restoration Strategy/Technical Committee  
June 19, 2008 10:30 am – 1:00 pm  
State Coastal Conservancy Office - 1330 Broadway  
11<sup>th</sup> floor meeting room**

**In attendance:** Marc Holmes, Chair, (The Bay Institute); John Bradley (US Fish and Wildlife Service); John Brosnan (Sonoma Land Trust); Myla Ablog (Literacy for Environmental Justice); Ken DiVittorio (PG&E); Arthur Feinstein (Citizens' Committee to Complete the Refuge); Moira McEnespy (State Coastal Conservancy); Brad Olson (East Bay Regional Parks District); Michael Perlmutter (Audubon California); Christina Sloop (Laguna de Santa Rosa Foundation); René Spens (Ducks Unlimited); Steve Lawton (City of Hercules); John Takekawa (US Geological Survey); Barbara Salzman (Marin Audubon Society); Maxene Spellman (State Coastal Conservancy); Julian Wood (PRBO Conservation Science); Laurie Suda (US Army Corps of Engineers); Heather White (San Jose State University); Caitlin Robinson (San Francisco Bay Bird Observatory).

**Staff:** Beth Huning, Coordinator; Sandra Scoggin, Assistant Coordinator

**1. Welcome and Introductions**

**2. Update on RAMSAR Nomination process**

Christina Sloop of the Laguna de Santa Rosa Foundation reported that the Foundation has received a small grant from the US National Ramsar Committee. They have hired a recent graduate from Sonoma State to start the process of designating the Laguna as a Ramsar site by reviewing forms and starting a campaign with landowners. There is a new document on the US Ramsar website that clearly lays out the basic nomination requirements and information (see

<http://www.fws.gov/international/ramsar/ramsar.htm>). Mike Perlmutter is determining how Audubon will proceed with San Francisco Bay.

There are three applications currently in different stages of preparation in California. It might make sense to work collaboratively on them.

*Action: Mike will pursue assistance from the Ramsar small grant program and the JV project assistance program for funding to lead the effort for the San Francisco Bay. He will coordinate with Christina on the process.*

**3. San Francisco Bay Beach Sand Nourishment**

Mike Perlmutter provided background and a summary of the June 4 meeting hosted by Audubon and Peter Baye to determine habitat potential and issues surrounding beach nourishment and restoration by re-appropriation of dredge materials. This is one of the habitat goals addressed in the JV Implementation Strategy, and as of yet, we have not measured significant progress as the focus has been wetland habitats. The Bay Conservation and Development Commission has been looking into the potential for beach nourishment and restoration in mediating effects of climate change. They are putting together a workshop in the fall. They are looking at potential pilot projects in San Leandro and existing models of success, such as Piers 98 and 34. USGS is modeling and looking at sand mining. Maps are available that show historic vs. current extent of beach habitat in the bay.

Notes from the meeting will be distributed when they are available.

*Action: Contact Mike at [mperlmutter@audubon.org](mailto:mperlmutter@audubon.org) if you would like to receive meeting notes or maps.*

#### **4. Update on Invasive Spartina Project (ISP)**

Maxene Spellman reported that the ISP is embarking on the 2008 treatment season. Copies of the monitoring report will be on the website soon at <http://www.spartina.org/>. In summary, about 75% of sites have been effectively treated. Many sites have less than an acre left, and they are hopeful that the eradication deadline will be met. She reminded project managers to please read and abide by the guidelines outlined in the best management practices document to help meet the goals [http://www.sfbayjv.org/pdfs/BMPs\\_for\\_RestorationSpartina\\_posted110607.pdf](http://www.sfbayjv.org/pdfs/BMPs_for_RestorationSpartina_posted110607.pdf). Projects that have adjusted their schedules due to spartina concerns include Bair Island and Knapp Track. Planning, trails, etc. can still move forward. As for monitoring, every year partners become more engaged in monitoring their own sites.

USGS is studying how birds move in response to invasive spartina removal. The vegetation structure stays the same through first year after treatment, and the birds stay while the structure is intact. An important note is that the invasive spartina only initially provides good habitat, until it covers the entire mudflat and all other vegetation, which it will do as a climax species. Colma Creek is a big concern. The dominant vegetation is invasive spartina and the population of rails is particularly large. Multiple years are needed to really see how populations respond. They have captured 80 Clapper Rails and have obtained about 10,000 locations from the radio-marked birds. At some sites they are mowing half the site that has not been treated so that the seed spread does not occur, while also trying to provide habitat for the birds to go to as they are eradicating. It appears rails move around the Bay more than originally thought.

#### **5. Announcements and project updates**

Arthur Feinstein: A California Rapid Assessment Method (CRAM) workshop will be held in the fall. The two-day workshop will be oriented to getting volunteers who do work on these projects informed about the process, not trained in the protocols. Second day will be a field day. A three hour section will cover how CRAM pertains to regulations etc. Let Arthur know if you are interested. It is open to everyone.

Jim Levine has proposed to build a casino at Point Molate. This will be a huge disturbance to the shoreline. Watch for more information on this issue.

Barbara Salzman: Restoration has begun at Bahia. 300 acres of tidal marsh are being restored near mouth of Petaluma River. The site has been de-watered, and channels are now being excavated. This phase is expected to be completed by the end of January, 2009. Barbara suggested that the next meeting could be held in the North Bay and could be followed by a field trip to the site. This project is important because surrounding marshes provide habitat to high numbers of Clapper Rails.

John Brosnan: The Sears Point project schedule has been extended by a year. It will start in 2010 with full breach in 2012. SLT will be working with Ducks Unlimited (DU) on the design. DU has taken the lead on a Bay Fund grant for the final design.

Myla Ablog: Literacy for Environmental Justice (LEJ) recently broke ground on a new Eco Center at the former pier 98 site in the Bayview/Hunters Point area. It is a 1500 square foot building that will be a

classroom. It will have living roof, solar panels, and other green building features. It will be completely off the grid other than water. Myla also provided a brief history of the site, which is still owned by the Port of San Francisco but managed by LEJ. Myla also summarized her extensive monitoring experience which will be helpful to other JV partners, particularly those designing volunteer monitoring programs. She will coordinate with Arthur on the CRAM workshop.

Literacy for Environmental Justice has a brand new website: <http://www.lejyouth.org/>

Julian Wood: Julian has recently switched roles within PRBO Conservation Science to take on the position of Tidal Marsh Program Supervisor (part time). PRBO has been monitoring birds in tidal marshes since 1996, mostly in the North Bay, analyzing trends and abundance for multiple species and evaluating restoration. Focal species include Song Sparrow, Common Yellowthroat, Marsh Wren, and rails. Julian was asked and agreed to give a presentation to the committee at an upcoming meeting.

PRBO is working on getting their data online in a way that is easy to query.

Michael Perlmutter: The new ecologist at Richardson Bay is Suzanne Olyarnik. She has done a lot of work on eelgrass.

Audubon has hired part time staff to help with marsh enhancement at Tubbs Island, where they are doing bird monitoring along with the enhancement. The purpose of the project is to reduce the impoundments and raise the value to wildlife.

John Bradley: The South Bay Salt Pond project is working on Biological Assessment/Biological Opinion, due to be released in late September or October.

Cullinan Ranch may have a schedule extension on the EIS/R, at least for EPA comments. The public comment period just closed, and the FWS is preparing responses to comments. The FWS received some very valuable comments, including those of Peter Baye.

The legislation requiring that the FWS and Navy negotiate the transfer of Skaggs Island is moving through Congress, attached to a defense appropriations bill. There will be no Senate companion bill. Mendel is negotiating with the new Navy representative on the transfer, as well as BCDC to secure an extension of the mitigation money targeted for building demolition.

Bair Island – The Corps is not going to have the money they thought they would have for restoration.

South Bay Salt Pond Project – The Corps just learned that they will get some unexpected money from Washington for the South Bay Shoreline Study and flood control. Final bids have been received for the design work on pond SF2 after 4 months of design and \$3 million over-budget on implementation.

Ann Buell: The Draft EIR for the San Francisco Bay Area Water Trail has been published. There will be a public hearing on July 9<sup>th</sup>. *The comment period is open until July 28.* Committee members were invited to review the document and provide comments.

Beth Huning: The National Park Service is working on an update to the General Management Plan for the GGNRA and Muir Woods National Monument. The documents can be viewed here: <http://parkplanning.nps.gov/document.cfm?parkID=303&projectId=15075&documentID=23015>

Alternative 2 has a focus on wildlife and ecosystems and recreation that emphasizes that, while #3 has components from Alternatives 1 and 2. Several meeting participants wanted to note that those who intend to comments should keep in mind the needs of birds and other wildlife including disturbance to nesting areas by people, recreation, and management activities, and consider habitat needs such as native plants, dune restoration, natural processes (flood, fire), etc. Members noted that it is important that the conservation community comment as the majority of the comments the park receives are usually from other interest groups. Those commenting should point out the components of the alternatives that they like as well as those that they do not. PRBO will distribute their comments to the committee when they are completed. *Comments are due on August 1, 2008.*

DU hosted a preliminary meeting of North Bay managers as a trial run for a process for the JV seasonal wetlands goals updates. They have compiled a list of challenges to restoring seasonal wetlands and will share that as well as other recommendations with the seasonal wetlands steering committee who will then make recommendations and plans for the regional meetings.

The National Fish and Wildlife Foundation is reorganizing their funding program into national Keystone Initiatives. They will no longer be making many grants but will be concentrating their funding into programs and geographic locations. The Keystone initiatives include birds, wildlife and landscape scale habitats, marine/coastal life and habitats, and freshwater fish and habitats. They will be selecting where to work geographically in each of these initiative areas, based upon where their funding can show measurable results for populations that they target. The SFBJV coordinated a meeting with members of the JV Technical committee and site visits for Dan Petit, the Birds Keystone Initiative Coordinator, last month to discuss potential San Francisco Bay initiatives, including a bay-wide initiative and possible species initiatives including diving ducks (scoters and scaup) and Snowy Plovers.

The JV is working on a white paper entitled "Recommendations for Partners of the San Francisco Bay Joint Venture Regarding Wetland Restoration and Projected Impacts from Climate Change. *Those with expertise are invited to be part of the committee developing the white paper and recommendations. Please contact the JV to participate.*

## **6. Public Access and Impacts on Wildlife -Presentations and discussion**

John Takekawa of the US Geological Survey presented a summary of work done by the SF Bay USGS office as well as by Jules Evens, and Kevin Lafferty on "Waterbirds and Human Disturbance in Urban Areas." The following represents a summary of key points based on a variety of studies using motorized and non-motorized watercraft.

Please see the full presentation(s) on the JV website for associated tables and charts and further detail on our tools page at [http://www.sfbayjv.org/tools.php#public\\_access\\_impacts](http://www.sfbayjv.org/tools.php#public_access_impacts) .

### **Waterfowl abundance on SFB**

- ☐ Mid-winter aerial surveys from 1970-1991 averaged 425,000 waterfowl present in mid-Feb.
- ☐ Mid-winter waterfowl surveys 1992-2007 (exclusive of 1996) averaged 182,818 birds present in mid-Jan.
- ☐ Numbers of waterfowl decreased 25% from the 1950s until 1990 (Takekawa et al. 2000).
- ☐ Waterfowl continue their downward trend from 300,000 in the late 1980s (Accurso 1992) to 184,160 (SE±65,670) from 1992-2007.

Key findings included these generalizations about human disturbance of waterbirds:

- ▣ Size correlation: larger birds are less tolerant of human disturbance than smaller ones (Rodgers and Schwikert 2003, Fernandez-Juricic et al. 2002)
- ▣ Larger flocks flush at greater distances than smaller flocks or individuals.
- ▣ Flight distance correlated positively with flock size and species diversity. Flight distances are longer for species that used open water for foraging than for resting (Mori et al. 2003, ARA 2008)
- ▣ To compensate for increased disturbance, birds may increase food intake or relocate to less profitable areas to feed.

Factors affecting response include:

- ▣ Size of area available: the larger the habitat patch, the shorter the distance of flight response, the lower the disturbance.
- ▣ Proximity of refuge.
- ▣ The “shyness” of the species (scaup versus Ring-billed Gull)
- ▣ Size of the species (a Black Rail allows closer approach than a heron)
- ▣ Season: periods of high-energy costs exact more “expensive” responses.
- ▣ Flight distances are longer for waterfowl that used an area for foraging than for resting (Mori et al. 2001)

Waterbirds susceptible to disturbance by watercraft include:

- ▣ Solitary nesting birds
- ▣ Colonial nesting birds
- ▣ Flocking shorebirds
- ▣ Rafting waterbirds

Buffer Zones

- ▣ Species buffer zones based on observed flush distances (mean plus one SD, after Rodgers and Schwikert 2003)
- ▣ Add 40 m to buffer to minimize agnostic responses and to account for mixed species (Thompson and Thompson 1985, Gutzwiller et al. 1998).
- ▣ Buffer zones should be based on the species most sensitive to disturbance (scaup)
- ▣ “One size fits all” approach for management: The research seems to generalize that a buffer zone of 250 meters from areas of high-use by rafting waterbirds can be used as a guideline for minimizing the impacts of non-motorized watercraft on rafting waterbirds.

John Takekawa also presented Kevin Lafferty’s study of Snowy Plovers on a University of California Natural Reserve System beach in Southern California. Lafferty’s work has provided insights and an excellent beach habitat management model. The study looked at types of disturbance, disturbance rates and public awareness of the target species before and after implementation of management actions. The reserve managers implemented a combination of a trail closure, a rope fence beach exclusion zone and an active docent program. The program was hugely successful with the plovers going from virtually no nesting activity between 1970-2000 to 48 nests fledging 43 chicks by 2006. Please see the summary presentation and further work of Kevin Lafferty’s at <http://www.werc.usgs.gov/chis/lafferty.asp>

Heather White of San Jose State University presented preliminary results of her Masters research under Dr. Lynne Trulio on “Wintering Duck Response to Trail Use at Former San Francisco Bay Salt Ponds.

She assessed three parameters:

- Abundance
- Diversity
- Percentage of Birds Foraging

She looked at bird distribution and distance from the levee with distance interval bands of 40 meters and looked at before trail disturbance and compared to after disturbance.

Thirty trials were completed during the months of Dec. 2006, Jan-Mar. 2007, and Oct.-Dec. 2007. The majority of ducks present in the trials were diving ducks. Preliminary results indicate that birds were significantly less numerous after trail use compared to before at a distance of up to 120m from the levee on which the trail use occurred. Beyond 120m, bird numbers pre- and post-trail use differed little.

This information is the result of a small amount of preliminary data analysis. She will be conducting additional data analysis this summer, with a goal of thesis completion by mid-October. Heather will plan to present full results to the San Francisco Bay Joint Venture once completed.

More details on these preliminary results are at [http://www.sfbayjv.org/tools.php#public\\_access\\_impacts](http://www.sfbayjv.org/tools.php#public_access_impacts).

Arthur Feinstein brought up the issue of habituation and how this reflects on trails. There was general agreement that some of the species would habituate. But if some trails are used infrequently, there will not be habituation, and birds will flush. The best option may be more concentrated access in specific areas, allowing for habituation rather than spread out constant disturbance.

The committee discussed and agreed that this is a good time to initiate a white paper on public access impacts on wildlife. It was also suggested that it is important to address all the various impacts in the bay (exotic species, for example), not just public access and to also develop a white paper on impacts and broader management recommendations.

*Action: JV Staff will explore the feasibility of a white paper on impacts and management recommendations and recommend that the JV provide project support to a partner to complete the assessment.*

**7. The SFBJV Restoration/Technical Committee meeting was adjourned.**