



South Bay Salt Pond Restoration Project

Restoring the Wild Heart of the South Bay

To: South Bay Salt Pond Restoration Project Team

From: Center for Collaborative Policy

Re: Outcomes from the September 16, 2009 Stakeholder Forum Meeting

Background: The Stakeholder Forum (Forum) met on Wednesday, September 16, 2009 from 2 to 5 p.m. at the San Jose Santa Clara Water Pollution Control Plant in San Jose. The Forum has been convened to provide ongoing input to the South Bay Salt Pond Restoration Project Management Team (PM Team) and its technical consultants on the development of the South Bay Salt Pond restoration, flood management, and public access plan.

Meeting Attendance: Attachment 1 lists meeting participants.

Meeting Materials: In advance of the meeting, Forum members were provided a meeting agenda and the 2008 meeting summary. At the meeting, Forum members received handouts including a Project status report, a list of upcoming meetings and a printout of meeting slides. The PowerPoint presentation slides, which give more details on presentations, and handouts are available on the SBSP Project website (www.southbayrestoration.org).

Substantive Meeting Outcomes:

1. Welcome, Introductions, and Agenda Review

Steve Ritchie, Executive Project Manager, welcomed Forum members and the audience, led introductions and reviewed the agenda. The meeting agenda included:

- Introduction of Laura Valoppi and Cris Benton
- Project funding, including NOAA stimulus funds
- Track our progress: Phase 1 actions and applied studies
- Mercury studies: Implications for short-and long-term restoration
- Snowy plovers in 2009
- South San Francisco Bay Shoreline Study update

Introductions & Announcements

- Laura Valoppi, scientist with the U.S. Geological Survey, has been named the Project's new Lead Scientist

- UC Berkeley architecture Professor Cris Benton, a kite aerial photographer, has provided his photographs for a Colors & Textures poster of the Salt Ponds and was present with a display of photos and the kite apparatus set up.
- Eric Mruz has been named manager of the Don Edwards San Francisco Bay National Wildlife Refuge, replacing Clyde Morris
- Melisa Helton has been named to fill Eric Mruz' former position
- The Refuge will have a public affairs officer, beginning in October.
- Executive Project Manager Steve Ritchie will be leaving to become Assistant General Manager for Water Enterprise with the San Francisco Public Utilities Commission.

2. Project Funding, Including NOAA Stimulus Funds

Steve Ritchie gave an overview of project funding in 2009. The state fiscal crisis and congressional appropriations for the Project in fiscal years 2008 and 2009 have resulted in federal funds providing the largest share of money for the Project, rather than the expected state bond funding. NOAA and stimulus funding dollars are contributing \$7.4 million to the Project. Aside from federal and state funding, additional sources are mitigation/penalty funds and local funds from the Santa Clara Valley Water District and the Alameda County Flood Control District.

Questions/Comments:

Q: Is there an effort to get foundations involved?

A: Foundation money was not disrupted. Foundations have provided \$20 million for acquisition, \$9 million towards the ISP, and \$6 million for long-term planning. Several thousand dollars were left, which has gone into the Applied Studies. The foundations are not in a position to provide more.

3. Track Our Progress: Phase 1 Actions and Applied Studies

Steve Ritchie reviewed the status of Phase 1 restoration and public access project design and construction.

Eden Landing

- Ponds E8A/9/8X: Design is 90% complete.
- Ponds E12/13: Design is 30% complete; this project is not funded, but managers hope to eventually receive state bond funding. There is an unexpected new expense: pumps will need to be purchased, and run about half of the month. After nearby tidal restoration in the original Eden Landing Ecological Reserve, it was observed that water elevation in Mount Eden Creek is one to two feet lower than predicted, so that water will not flow through culverts passively to provide enough water to manage the reconfigured system. The problem is caused by "sills" in the channel, areas not completely excavated or scoured.
- Public Access Features: A consultant has been reengaged to do the design work, which will be reviewed October 27 by the Eden Landing Working Group.

Questions/Comments:

Q: Will pumping be an essential component of the pond system?

A: Yes. But full-time pumping may be reduced if Mount Eden Creek eventually scours out or the sills are adequately excavated in Phase 1 work. We don't really know, but we will be pumping for periods of hours on a daily or weekly basis.

Alviso

- Pond A6: Ducks Unlimited has completed designs. Construction has been held off to allow for three successive years of aggressive control of invasive Spartina. There will be less levee-lowering than originally planned, with the hope that gulls will nest on the levees rather than going elsewhere and displacing other birds.
- Pond A16: Design work was stopped completely with the state budget crisis, and has been restarted. There is a concern about gulls, so the project may not proceed speedily.
- A8, A5 and A7: SCVWD has put the project out to bid. The purpose is to create a connection with Alviso Slough and see what happens with mercury.
- Moffett Bay Trail segment: this is close. Cargill is seeking to give a parcel to NASA that was the site of a Superfund cleanup by the Navy. We are waiting for the federal bureaucracy to accept that. We are hoping that will happen soon.

Questions/Comments:

Q: What's going to happen at A16?

A: Possibilities include shifting the project to A17, or other locations more remote from landfills. There might need to be a minor amendment to the EIR/S.

Ravenswood

- Pond SF2 construction began in March and is expected to be completed by August, 2010.
- New viewing access at Bedwell Bayfront Park will allow a panoramic view including Mount Diablo and Mount Hamilton.
- A Salt Ponds Project sign has been posted in SF2 near the Dumbarton Bridge. The Project will have a similar sign at the Eden Landing end of the Bridge.

Island Ponds

Since the ponds were opened to tidal action in early 2006, sediment has accumulated and there has been incredibly rapid revegetation there.

Upcoming Meetings

Project Lead Facilitator Mary Selkirk announced upcoming working group meetings:

- The Eden Landing Working Group will meet October 27 in Hayward
- The Ravenswood Working Group will meet on a Saturday, November 14 for a tour of the SF2 construction.

Questions/Comments:

Q: Will the Eden Landing 60% designs be on the website before the Working Group meeting?

A: We will try, but there may not be enough time, as the designs will be completed shortly before the meeting.

SBSP Project Science Program Status Report

Project Lead Scientist Laura Valoppi gave an update on the Science Program.

2009 Directed Studies

- Bay Hydrodynamic Model: the goal is to model how water flows through the Bay, from the Delta to the South Bay and out. The study will develop sediment and climate change components.
- Sedimentation at the Island Ponds: The report is under revision and should be posted soon on the website. There was very rapid accumulation of sediment, about 8 inches especially at Pond A21. Typically in the Bay, sedimentation would be 3-4 centimeters. Vegetation growth was also unexpectedly rapid at A21. It is very encouraging.
- Water Quality at Alviso Ponds: the report is expected to be complete in February 2010.
- Mapping and Analysis of Bird Use, Shorebird Census: These reports are expected by the end of 2009 and will be posted on the website.

Request for Proposals Studies

The RFP was put out in October 2008 and the PMT has since made the selections, which are:

- Measuring Habitat Evolution Utilizing Satellite Imagery
- Assessment of Mercury Bioavailability
- Waterbird Nesting and Foraging in Managed Ponds
- Waterbird Response to Trail Use
- Pond, Slough, and Bay Water Quality Interactions
- Baseline Bird Data and Data Needs Assessment
- Effects of Restoration on Fish
- California Gull Displacement Study
- Open Call for Graduate Fellows

Questions/Comments:

Q: Are any studies taking into account the oil spill?

A: The spill is not expected to impact South Bay birds.

Q: Is any data available on bird counts?

A: Not until the final report is produced.

Q: I'm particularly interested in the snowy plover count.

A: Snowy plovers were one of the species that were not counted.

Q: How many species of shorebirds stay here year round?

A: Very few, about a half dozen. There are more than 100 migratory species.

Q: Islands are very difficult to maintain as islands. We've seen in Hayward and Palo Alto that they tend to vegetate and become not effective for shorebirds. Cemented islands off of Albany lasted a few years before cracking. Are you looking at different solutions?

A: Yes. Different species prefer different habitats. We will look at the various outcomes and decide. Part of the second phase of adaptive management will be substrate analysis. It is in the Adaptive Management Plan to look at these issues.

Q: Another researcher has done work for several years on response to trail use -- how is this different?

A: Her work focused on waterfowl. This is an important aspect to study and we want to study it fully.

Q: In regards to the fish study, are you going to look at the nursery of these fish in the South Bay?

A: We are going to look in breached ponds and sloughs adjacent to the ponds.

Comment: I'd like to volunteer to take the researchers out and show them what is in the South Bay.

Response: They have a good idea of what species are there. They need to choose methods to use for the next three years that don't require changing gears, that will allow us to detect changes.

Comment: I have spent 60 years of my life in Alviso and the last two years, I've seen the fish coming back, to about 80% of what belongs here. It was very fast. Do it the right way, or you'll lose them. When you open the ponds, you have to dig to the natural flow of where the slough was before we dug it in. Another thing we haven't looked at is flood runoff in the South Bay. It drops out in the salt marsh area.

Q: Who is the contact at NOAA Fisheries?

A: Natalie C. Manning.

Q: With the exception of the one blood study, will there be blood studies of fish in regards to mercury?

A: This study will join forces with the mercury studies.

Q: Are you looking at game fish?

A: No, smaller fish that birds would eat.

Q: Is there any monitoring of sport fish?

A: There is regional monitoring of sport fish every three years, and one station is in the South Bay.

Comment: It would be helpful to make one area of study where least terns are foraging, to see how their resources are being impacted in regards to fish composition and distribution. There has been an issue with least tern habitat as the ponds are disappearing.

Q: Are you attempting to coordinate on the Pacific flyway – can the Refuge coordinate with the Central Valley office? That's such an important question.

A: We agree – answers are needed to determine if birds are moving, or populations are growing.

Comment: 45 years ago, I would see 50 to 100 birds diving. Now I see about two dozen – they're gone.

Comment: This is one of the high priorities of San Francisco Bay Joint Venture, as soon as we get more funding.

Comment: Diving ducks, which are in decline in the Bay, are going up along the Pacific flyway. USGS is working with PRBO and Joint Venture. There is more to do, but there is a lot of cross coordination.

Q: In regards to the mercury issue, it has come to our attention recently that it may be an issue near the cement plant in Cupertino near Permanente Creek and the Mountain View ponds.

A: Mercury levels in the Mountain View ponds have been fairly low.

Q: I can think of neat synergies – is there one spot where all proposals are publicly available?

A: On the project website science page.

Q: What is the geographical range of studies?

A: Most stay south of Dumbarton Bridge, except for the Eden Landing studies. There is a lot of research work going on in the area, which gives us more information.

4. Mercury Studies: Implications for Short- and Long-Term Restoration

Letitia Grenier of the San Francisco Estuary Institute and Josh Ackerman of USGS presented on mercury studies. Both mercury presentations presented data indicating that methylmercury may be worse in areas where high salinity has led to high phytoplankton populations, which provide the fuel for the microbes that produce methylmercury.

Grenier discussed the South Baylands Mercury Project, which is assessing mercury and studying whether restoration of Pond A8 to tidal marsh would worsen the mercury problem. Results indicate that restoring Pond A8 would likely lessen the mercury problem within the pond, but could possibly lead to a spike in mercury as Alviso Slough is scoured. The study recommends continued monitoring and sediment and water studies.

Questions/Comments:

Q: How will you monitor restoration work?

A: We will look at A6 closer to Alviso Slough, and look at methylmercury results after restoration. It's reversible, so if necessary, the levee can be rebuilt.

Q: It seems like the key issue is the level of salinity. Are there any plans to dredge out the high spots?

A: They are doing that elsewhere. If it is tidal, there will be a lot of scour. We are a decade away from answering those questions.

Q: How can I see the report?

A: The presentation will be on the website. The USGS report is still under review and will be ready in 60 days.

Josh Ackerman discussed how management for bird habitat at Pond A12 successfully created a significant amount of additional waterbird nesting habitat, but also elevated production of methylmercury and resulted in bioaccumulation in waterbird eggs.

Questions/Comments:

Q: Is there a peak level that species can tolerate?

A: Forster's terns, the most sensitive species, at high or extra high levels of methylmercury, have a 60% risk of impaired reproduction. Methylmercury concentrations in failed to hatch eggs are much higher than randomly selected eggs.

Comment: The 1928 photograph on the wall shows mounds which look artificial and could be dredge spoils. They predate the levee and borrow ditch. These are the islands that appeared in A12 when the Refuge lowered the water levels.

Comment: That was done in 1852. They dredged the channel of Steamboat Slough to Guadalupe Slough.

Q: What was the number of successful hatches?

A: About 30% – a bit lower. We also had some gull intrusion and predation on nests.

5. Snowy Plovers: Results of Our Management

Cheryl Strong, wildlife biologist at the Refuge, reported on the status of listed snowy plovers in 2009, and gave details on a successful experiment in which oyster shells, which have similar coloring to chicks and eggs, were spread on plots to provide camouflage. She also discussed the results of camera monitoring of nests, which captured eight acts of predation by avian predators. Lastly, she discussed efforts by biologist to protect plovers, through fencing and educating construction workers, during construction at Pond SF2. Perils included plovers nesting on a road, or flying over fences to forage in construction areas.

Questions/Comments:

Q: What happens to the shells [laid down in an experiment to assess potential for camouflaging plover eggs and chicks] after restoration?

A: The shells stay there after inundation.

Q: Can you talk about predation management.

A: The Refuge has not done avian predation management, but is developing a predation management protocol to add to the existing mammalian predator management. Eden Landing does both avian and mammal predator management.

Refuge Manager Eric Mruz discussed management actions, including flooding and construction, which may or may not have caused snowy plovers to move.

John Krause of the Department of Fish and Game, manager of Eden Landing, said management requires some forethought to avoid moving plovers to areas where they might cause difficulties. He has used flooding to keep the birds out of certain areas.

Questions/Comments:

Q: Will there be more snowy plover habitat in Alviso and Ravenswood?

A: It will be the same.

Q: Do any construction workers become sensitized to habitat?

A: They become more aware of it; I'm not sure they understand the reason behind it. They worked well with us, even though the habitat issues threw their schedules off.

Q: How easy or difficult is it to control salinity?

A: It's not as easy as you would think. We don't have a lot of water control structures. Lowering the pond water level is somewhat easy, while lowering salinity is harder. Salinity management may be a possibility that needs to be explored.

Comment: Cargill may have some advice.

Response: Cargill gave us a lot of help on the technical aspects of managing the ponds.

Comment: You may need a source of freshwater – this facility [the San Jose Santa Clara Water Pollution Control Plant] could be a source.

6. Shoreline Study Update

Beth Dyer of the Santa Clara Valley Water District discussed the Shoreline Study process, which covers an area including Santa Clara County and a small part of Alameda County. It is a federally authorized study to determine the best use of federal funds for habitat restoration, flood protection and recreation. It is being funded by the Army Corps of Engineers, the State Coastal Conservancy and the Santa Clara Valley Water District. Study partners expect to have 2017 and 2067 floodplain maps by February 2010. A final feasibility report is expected in fall of 2014, and in spring of 2015, the Chief's Report would be produced, which would set down the justifications to the federal government for the recommended expenditures.

As for funding, the nonfederal partners received the fully requested amount this year of \$2.8 million. For fiscal year 2010, \$2.8 million was requested; the House bill would appropriate the full amount, while the Senate bill under consideration would appropriate \$425,000. Achieving the schedule is dependent on receiving the full \$2.8 million, so any additional help is welcome in securing the federal monies.

A series of meetings is in the planning stages to flesh out the possibility of an early implementation, in which nonfederal funding would allow the project to begin before the study is complete. Nonfederal partners would receive credit from the Corps for future project costs.

Questions/Comments:

Comment: This year's appropriation was a Speaker request. There has been a similar Speaker request for 2010, so I'm optimistic.

8. *Wrap Up*

Project Facilitator Mary Selkirk thanked new members of the Stakeholder Forum. The Forum will be meeting annually, now that Project planning has been completed. Other items of note include:

- The Alviso Santa Clara Working Group will be convened once the floodplain maps are done, probably in February.
- The Project has been awarded a CCMP implementation award, which will be presented at the State of the Estuary conference on September 29th.
- Now that the state budget freeze is over, the Project website is being revamped with new features.
- As Phase 1 construction is underway, Project managers will be beginning to think about Phase 2, and will be looking for Stakeholder Forum input.

Attachment 1: September 16, 2009 Meeting Attendance

Name	Organization/Affiliation
Joy Albertson	USFWS
Cris Benton	UC Berkeley
John Bourgeois	H.T. Harvey
Betty Brown	Alviso Water Task Force
Ann Buell	State Coastal Conservancy
Brenda Buxton	State Coastal Conservancy
Darcie Collins	Save The Bay
Jill Demers	San Francisco Bay Bird Observatory
Cynthia Denny	Sierra Club, Loma Prieta Chapter
Christine Epres	Sen. Diane Feinstein's Office
Beth Dyer	SCVWD
Arthur Feinstein	CCCR
Heather Forshey	SCCVCD
Melisa Helton	USFWS
Jennifer Heroux	USFWS
Carin High	CCCR
T. Mark Hightower	NASA Ames Research Center
Beth Huning	San Francisco Bay Joint Venture
Ellen Johnck	Bay Planning Coalition
Ken Johnson	Eden Shores HOA
Ralph Johnson	Alameda County Flood Control
Erin Justice	NASA Ames Research Center DEVELOP
Yoriko Kishimoto	Mayor, City of Palo Alto
Shani Kleinhaus	Santa Clara Valley Audubon
John Krause	DFG
Jane Lavelle	SFPUC
Libby Lucas	California Native Plant Society & CCCR
Rocco Mancinelli	SETI Institute
Eileen McLaughlin	CCCR
Eric Mruz	USFWS
Chindi Peavey	San Mateo County Mosquito Abatement
Leslie Perry	Regional Water Quality Control Board
Bob Power	Santa Clara Valley Audubon
LaRue Ragan	EPA Can Do, Jane Leech MFAC, Raven Works Field Sports Ministry
Mimi Rea	NASA Ames Research Center DEVELOP
Diane Ross-Leech	PG&E
Ana Ruiz	Midpeninsula Regional Open Space District
Rich Santos	Santa Clara Valley Water District
Robert Schlipf	Regional Water Quality Control Board
Cris Schwarz	Rep. Mike Honda's office
Mary Selkirk	Center for Collaborative Policy
Carol Severin	East Bay Regional Park District
Jill Singleton	Cargill
Mendel Stewart	USFWS
Cheryl Strong	USFWS
Kirsten Struve	City of San Jose

Laura Thompson	Bay Trail Project
Noor Tietze	SCCVCD
Laura Valoppi	USGS
David Walling	Sierra Club
Laura Warner	Save The Bay
Nayer Zahiri	SCCVCD