



South Bay Salt Pond Restoration Project

Restoring the Wild Heart of the South Bay

To: South Bay Salt Pond Restoration Project Team, Shoreline Study Partners

From: Center for Collaborative Policy

Re: August 17, 2011 Alviso Santa Clara Working Group Meeting Outcomes

Background: The South Bay Salt Pond Restoration Project/South San Francisco Bay Shoreline Study held a meeting of the Alviso Santa Clara County Working Group (Working Group), a subcommittee of both the Project's Stakeholder Forum and the South San Francisco Bay Shoreline Study, on Wednesday, August 17, 2011 from 6:00 to 8:30 p.m. at the San Jose Santa Clara Water Pollution Control Plant in San Jose. The Working Group was convened to provide ongoing input and advice to the South Bay Salt Pond Restoration Project Management Team (PM Team) and the partners of the South San Francisco Bay Shoreline Study (Shoreline Study) on Phase One restoration and public access implementation, as well as flood protection planning.

Meeting Attendance: Attachment 1 lists meeting participants.

Meeting Materials: In advance of the meeting, Working Group members were provided with a meeting agenda. At the meeting, summaries of the prior Alviso and Stakeholder Forum meetings; a printout of the meeting slides; a South Bay Salt Pond Restoration Project brochure; and the Project 2010 Annual Report were available. The presentation is available on the SBSP Project website (www.southbayrestoration.org).

Substantive Meeting Outcomes:

1. Welcome, Self-Introductions and Agenda Review

John Bourgeois, Executive Project Manager, welcomed participants and led a round of self-introductions. He acknowledged the presence of Santa Clara Valley Water District Board Chairperson John Gage and Director Dick Santos, as well as Rosa Santiago from San Jose City Councilmember Kansen Chu's office. In regards to the Shoreline Study effort to be discussed that evening, he acknowledged the substantial contributions of representatives of the City of San Jose, the US Fish and Wildlife Service and the Santa Clara Valley Water District (SCVWD). Mary Selkirk, facilitator with the Center for Collaborative Policy, reviewed the evening's agenda.

2. SBSP Project Update: Progress in Alviso

John Bourgeois provided an update on Phase One progress in Alviso with the aid of PowerPoint slides. He noted that all Alviso Phase One projects are completed except for the restoration and enhancement of Ponds A16-A17.

Island Ponds

Vegetation has continued to grow at the Island Ponds (Ponds A19, 20 and 21), which were restored in 2006.

Pond A8, A5 and A7 Restoration

The 1400-acre ponds were restored to shallow tidal habitat with new marsh. Project managers opened one of the eight gates on June 1.

Pond A6 Restoration

The pond levees were breached in December 2010 as part of a restoration to tidal marsh. Like the Island Ponds, the 330-acre pond has seen rapid sedimentation rates.

Public Access

A key 2.4-mile segment of the Bay Trail near Moffett Field was opened September 2010 and is seeing heavy use.

Pond A16-17 Restoration and Public Access Work

Original plans called for constructing nesting islands on Pond A16. However, during the design phase it was determined that much of the mud in the pond is too soupy to support the development of islands. Under final designs:

- The 30-acre Pond A17 will be restored to tidal marsh
- In the more shallow areas of Pond A16, 16 nesting islands will be constructed
- The Project will install a water control structure to improve water quality
- Because of the marsh restoration, the existing loop trail will remain, but will be shorter
- An overlook platform and fishing pier off Coyote Creek will be constructed

Project managers are mobilizing for construction now. If construction goes smoothly, workers will complete Phase One of the construction by the end of 2012.

Phase Two in Alviso

Project managers have reached preliminary decisions on the second phase of restoration and public access projects. In Alviso, work will include:

- Levee lowering at the Island Ponds to enhance restoration
- Tidal restoration at Ponds A1 and A2W in Mountain View near the Shoreline Amphitheater. Project managers are in talks with the City and SCVWD.

Questions/Comments:

Q: So the loop on the outer ponds will be closed?

A: There will be a loop trail around Pond A16 and a spur trail to Coyote Creek, but the loop will be shorter.

Q: If Pond A8 gates were opened in June, is there any preliminary information on mercury testing?

A: Not yet. Sampling is underway now, and it takes time to process the samples.

3. New Shoreline Study: Focus on Alviso

Maj. David Kaulfers of the U.S. Army Corps of Engineers, with the aid of PowerPoint slides, gave an overview of the revised South San Francisco Bay Shoreline Study with its new focus on the Alviso area.

He said the Shoreline Study is important to the Army Corps, as it is one of the largest investigation projects the Corps is doing on the West Coast. The purpose is to consider whether the federal government has an interest in flood risk management and ecological restoration and can move forward. The study will either determine that there is an interest, or there is not. Alviso was selected in March as the focus because it has the highest potential for the highest rate of return. The goal is to quickly move forward with construction and apply what is learned to the rest of the Shoreline Study.

Under the new timeline, by fall 2013, a Chief's Report will be complete with a determination on whether to move forward. If there is a positive decision, Congress would have to do authorize the project and provide funds before construction could begin.

4. Flood Risk Management Options

Sergio Jimenez of consulting firm HDR, with the aid of PowerPoint slides, presented the potential options for flood risk management projects.

He noted that the area has had a history of flooding and that two projects were undertaken to address fluvial flooding. The Shoreline Study focus is now on inundation from Bay waters. Objectives include reducing the probability and consequences of flooding. While the day's presentation focuses on potential structural elements, the study will also consider non-structural elements, such as changing zoning, raising structures or using flood proofing materials. The community is definitely at risk, because current flood risk management does not address the non-engineered levees in the salt ponds, as well as sea level rise.

Structural elements would join two points, Alviso Slough and Coyote Bypass, to prevent tidal flooding of the Alviso area. This zone has been divided into three alignments:

- Alviso Slough to Artesian Slough
- Artesian Slough to Coyote Bypass
- Artesian Slough

Alignment Options Presented:

Alviso Slough to Artesian Slough

- Alignment 1: Outside New Chicago Marsh and the Environmental Education Center

- Alignment 2: Along the existing railroad spur through New Chicago Marsh and protecting the Environmental Education Center
- Alignment 3: Closer to urbanized areas to maximize restoration potential

Artesian Slough to Coyote Bypass

- Alignment 1: Close to developed areas to maximize restoration potential
- Alignment 2: A more straight line through Pond A18 consistent with the Water Pollution Control Plant Master Plan alignment

Artesian Slough

- Closure Option 1: Tide gate
- Closure Option 2: Levee

Railroad Crossing

- Closure Option 1: Flood gate - would require maintenance and operation costs;
- Closure Option 2: Raised railroad - has the benefit of being passive, but raising railroad, potentially for miles, would be expensive and interrupt railroad service.

Al Gurevich of the Santa Clara Valley Water District, one of the partner agencies in the Shoreline Study, invited meeting participants who have additional ideas on alignments to communicate them to Shoreline Study partners after the meeting.

Questions/Comments:

Q: In the alignment with the levee far from Alviso, what would happen to New Chicago Marsh?

A: It would stay as it is, as marsh.

Q: In the Alviso option with the levee close to urban areas, would it block the view from Alviso to the Environment on Education Center?

A: Depending on the height, it might.

Comment: When I would look out of my home, instead of a nice view, I'd see a pile of dirt. Now, it's beautiful.

Response: We may have to make a tough choice between staying dry and the view. The view may not be that bad – we will prepare a Photoshop image of what it would look like for you to consider. We will need to look at the level of protection in relation to varying estimates of potential sea level rise. Our goal will be to optimize the levee elevation, based on what makes most sense, given the information we have today. We will have to do it based on statistics.

Q: If sea level rise turns out to be higher than estimated, would one alternative be more robust than others?

A: All do the same, with minor differences, as long as we connect the two points. Your question seems to be about whether the design is flexible enough that we could go back and build it up, if necessary. We will definitely be looking at that. The planning horizon

is 50 years, to 2067, but Army Corps guidance in relation to sea level rise directs us to look out 100 years, 50 years beyond that.

Q: Who will work with FEMA in regards to flood insurance?

A: We are working with FEMA now – they are working to complete the sea level rise/inundation map. This project will fill out that map for them. FEMA will need to sign off on the project. Our aim is to have FEMA say that we are no longer in a hazard zone.

Q: On Slide 36, Alignment 2, explain the yellow line.

A: The alignment concept is simply that it would be placed through Pond A18. The exact alignment has not yet been decided.

Q: Will you put a bypass or shortcut through Dixon Landing Road in conjunction with this?

A: No.

Comment: I live on State Street – a bypass would come right through my street, and we have enough traffic already. A bypass would make it easy for people to cut through our neighborhood.

Q: Will the design look at subsurface groundwater levels on the inboard side of the levee in regards to sea level rise?

A: Yes.

Q: In New Chicago Marsh options 1 and 3, in the event of earthquakes or severe storms, would Alviso become a bathtub? That is my concern. Which one would be more protective of Alviso?

A: The planning and design process has to look at internal drainage and whether fluvial flooding would get trapped. The water has to drain out.

A: The only way to get water out of Alviso is to pump it out, which San Jose does. Now and in the first 30 years after this project, there is enough capacity. If there was a major levee break, there would not be enough capacity. A scenario such as that is more likely to happen with the existing levees.

Q: So would the alignment that is further out from Alviso be better?

A: If there is fluvial flooding, it may be.

Comment: I would like this study to look at how various levee alignments would perform in the event of catastrophic fluvial flooding, and which would keep Alviso drier.

Comment: Alviso never flooded from the Bay, always from rivers. In 1965, they told us we had to take out sandbags or flood downtown. In 1968, they took out protection. In 1983, we drowned – the pumps didn't work. They told us that if we didn't get back into our houses within one day, they could take them. Cargill protected us and raised their levees by 8-9 feet. At Pond A8, the only way to discharge is a couple floodgates. It is not clearing out the navigable channel.

Response: That is part of the Pond A8 project, to scour out that channel.

Q: I'm with Alameda County Flood Control. Our concern in regards to sea level rise is whether Santa Clara County can isolate itself from Alameda County flooding, because the water will come in from our side.

A: We are working closely with Ralph Johnson, who represents your flood control district.

Q: We are deeply studying our alternatives, and the perspective is changing. We are dropping the levee option. We need to coordinate, because this is a regional issue.

A: The Shoreline Study chose this segment because it is the one most likely to have federal interest, and that is why we are pursuing this focus. Alameda County made a choice not to partner with the Army Corps.

Facilitator Mary Selkirk told participants they will have additional time to talk about flood risk management issues during the last hour of the meeting.

5. Ecosystem Restoration Concepts

Jeremy Lowe, a consultant from PWA/ESA, reviewed initial concepts for restoration with the aid of PowerPoint slides.

He said a key goal of restoration is to restore the estuarian ecosystem structure that transitions from subtidal areas through mudflats, marsh and upland transition zones to upland areas. Levees tend to be built in the upland transition zones, so these types of habitat are particularly needed, as well as marsh and mudflat areas. Another goal is to build resilience to sea level rise. Marshes provide not only habitat and aesthetic values, but also flood management, as vegetation reduces the height of waves.

The restoration concepts would be phased breaching at historic channels, followed by the lowering of outboard levees. Additional concepts include:

- Moderate fill placed along flood levees to provide upland transition zones and sea level rise resilience;
- Moderate fill placed as islands and deltas;
- Development of a terraced levee, which would provide the benefit of the build up of vegetation to counter sea level rise, and a gradual rise allowing habitat to move up hill with sea changes.
- A terraced levee with brackish marsh fed by treated water to help build vegetation.

6. Tour of Maps & Posters

During this segment, meeting participants were able to view maps and posters and provide input on flood risk management and restoration options by talking with consultants and project managers and providing comments on large Post-it Notes.

Attachment 2 at the end of this summary lists all of the Post-it Note comments.

7. Final Comments & Questions

Meeting participants asked the following additional questions and provided the following comments:

Q: Will the fishing pier planned for Pond A16 be open 24 hours a day? How could it intrude on wildlife, for example, could it provide an opportunity for poachers to cut shark fins at night?

A: It will only be open during daylight hours.

Q: There is an issue with non-native vegetation in the sloughs taking over historic vegetation because of the water salinity. One thought is to build islands for wildlife and let the tides come in, and completely remove the levees.

A: That is exactly the concept that Jeremy is talking about. It would occur in phases, after the large flood control levees are in place.

Comment: The fisheries are dying out and migratory birds have disappeared because there's no food. The salinity is zero.

Response: This is exactly the issue we hope to address.

Q: Why not let all the spillways operate at Pond A8?

A: Because of the mercury, we have to proceed with caution. We will open the gates wider each year. The goal is to have all the gates open.

Comment: Tom is right. There has always been fluvial flooding. We haven't seen 25-year flooding in a long time. The flood in 1983 was a 15-year flood.

Comment: Alviso Slough water is contaminated because it's not getting enough salt water flow to push out the fresh water, it is not being flushed. Pond A6 water is not getting into ponds A5 and A7. In the next two months, with no minus tides, the water will get real nasty. If you had not raised that levee by the launch, it would have flooded out.

Response: We are trying to scour the slough, but it won't happen until we can open more gates. Pond A6 is completely tidal and has no connection to ponds A5 and A7. The intake for ponds A5 and A7 is on Guadalupe and Alviso sloughs.

Q: Are you saying that the bottom of Guadalupe Slough is the same elevation as the town?

A: In some cases. We survey every year.

Q: I thought the marker at the fire station said it was 10 feet below sea level.

A: A few years ago, people were using different benchmarks for elevation, and it caused confusion. We can provide a map where you will be able to pick out elevation with 90% confidence before we start the design. We will make sure you get it.

Q: How will you model this?

A: A lot of the work has been done. We could have modelers out there to show you.

Comment: The history of the work on the river and levees has not been very good. If this is just more of the same, I'm concerned about that.

Response: No, it is not. We can get you the information. It will be peer-reviewed by other modelers. We are not saying that this is the final plan. We invite you to look over our shoulders.

Comment: On Alviso Slough, both sides of the bank are caving in 2-8 feet. We can't turn around. At the yacht club, the last .5 mile is sliding into the channel, so it's a problem for us getting out. It is dangerous now. There is one spot that is 2 feet deep in low tide.

Response: We will be seeing a lot of changes happening with more water coming in and out of Pond A8.

Q: Will there be public review for Phase 2? I'm trying to understand how the planning is separated out.

A: Phase 2 is not the Shoreline Study. You will be able to review the Shoreline Study, as there will be scoping and public comment under CEQA/NEPA. Phase 2 only includes projects that do not require additional flood protection elements. Also, there will be an additional opportunity for public input at the October 20 Stakeholder Forum meeting. There will likely be another meeting like this in early spring, because the planning team has to select an alternative before next summer.

Q: If there is tension between competing needs, which document looks at trade-offs to the ecosystem?

A: The South Bay Salt Ponds adaptive management process will be looking at mercury, migratory shorebirds and other ecosystem issues. The Phase 2 projects will not yet get us to the 50/50 alternative of 50% wetlands and 50% managed ponds. Adaptive management and research results will help to inform the Shoreline Study ecosystem restoration options. There will be an analysis in the EIS for both.

Q: Will the adaptive management elements be available for public comment in both?

A: The elements should be the same in both.

Q: Mercury is still coming downstream. Is that our issue?

A: The Project needs to make sure that its actions are not contributing to the problem. We do not want to make the Bay worse.

Q: When was mercury first tested in this channel?

A: About 2005, mercury was tested in buried sediments in Alviso Slough. Most ponds have had mercury analyses of their sediments, but that's not always a good indicator of the amount of mercury in birds and fish. Now, mercury is being tested in sediments, fish and bird eggs in Alviso Slough, Artesian Slough, Pond A8 and Pond A16. Pond A8 had the highest biota levels. We are trying to see how opening it up affects those levels. Testing occurs in several locations in a pond.

Q: When was the first time fish were tested?

A: In the South Baylands Study in 2007.

Q: Do the researchers go back to the same spot?

A: Yes.

Q: Can mercury come out of an artesian well?

A: I suppose it could, if that was a source.

Q: Is the mercury in Pond A12 from a well or channel?

A: The general consensus is that it has come downstream from the mines.

A: The mercury study is a good example of the results of negotiations between the Alviso Water Task Force, Fish and Wildlife Service and others to bring water into Pond A8.

8. Wrap Up and Next Steps

John Bourgeois thanked meeting participants for the great turnout and feedback. The input will be taken into account as next steps proceed. This is not the last chance for input. Those interested in providing additional input can contact him at 408-312-8859 or jbourgeois@scc.ca.gov, or Caleb Conn at the Army Corps of Engineers at 415-503-6849 or Caleb.B.Conn@usace.army.mil.

**Attachment 1:
Alviso Santa Clara WG August 17, 2011 Meeting Attendance**

Donna Ball	HT Harvey & Associates
Rechelle Blank	SCVWD
Scott Bodensteiner	Weston Solutions
Arriana Brand	USGS
Betty Brown	
Len Cardoza	Weston Solutions
Evelyn Cormier	Ohlone Audubon/CCCR
Ron Duke	HT Harvey & Associates
Chris Elias	SCVWD
Jim Foran	SCCOSA
Don Gage	SCVWD
James Gorham	CH2M Hill
Sue Graham	League of Women Voters
Bob Gross	
Lonnie Gross	
Al Gurevich	SCVWD
Carin High	CCCR
Selma Herrera	
Amy Hutzell	State Coastal Conservancy
Jeff Janssen	City of San Jose Mayor's Office
Shani Kleinhaus	SCVAS
Matt Krupp	City of San Jose
Tom Laine	Alviso
Rene Langis	CH2M Hill
Libby Lucas	CNPS
Sheila Ngo	City of San Jose Council District 4
John Marchant	City of Mountain View
Eileen McLaughlin	CCCR
Stacy Moskal	USGS
Jane Moss	Docent
Trish Mulvey	Clean South Bay
Andrew Otsuka	Alameda County Flood Control
Craig Parada	SPYC; Alviso resident
Butch Paredes	Cargill
Christopher Richard	Oakland Museum of California
Rohin Saleh	Alameda County Flood Control
Rosa Santiago	City of San Jose Council District 4
Vern Santos	Alviso Water Task Force

Rich Santos	SCVWD
Jenifer Santos-Kendall	
H. Shellhammer	
Pat Showalter	SCVWD
Jim Sweet	
Charles Taylor	Alviso
Linc To	HDR
George Trevino	Alviso Water Task Force
Kirk Willard	Lockheed Martin
Sarah Young	SCVWD

**Attachment 2:
Working Group Input via Post-It Notes on Shoreline Study Flood Risk Management
and Habitat Restoration**

Flood Risk Management

- Consider moving the levee back from Alviso to the railroad spur or further, leaving a buffer of bare land. Selma Herrera
- Levee alignment suggestion: For the levee concept inward of New Chicago Marsh (nearest Alviso) cut across WPCP lands along PG&E right-of-way so that wetlands on that property next to Artesian Slough (to the east) are included with Pond A18 for restoration. Eileen McLaughlin
- Is it possible to put a massive flood control structure at the Dumbarton Bridge or even the Golden Gate to control sea levels of the Bay?
- Look at criteria used in Palo Alto basin study. Need to consider changing direction of impact in regards to wind/storm forces. Consider ideas that Alameda County is looking at in regards to a landmass levee. Libby Lucas (via Ariel Ambruster)
- Alignment 3 (Alviso to Artesian Slough) is very bad from a view perspective. Alviso residents would hate that option. Alignment 1 is the best.
- Study needed. When sea level rises, suburban groundwater levels are likely to rise inboard of levees to some degree. If inboard subsurface water levels rise, there will be a resulting increase in volume of storm water runoff and severity of fluvial flooding. As climate change predicts more frequent extreme storm events, more serious fluvial flooding conditions may well occur. The USACE has a small study of this issue in Virginia. A study of Alviso-area potential for these hazards is needed with this project to allow the community to be informed and able to provide good comment for project use. Eileen McLaughlin

Habitat Restoration

- Suggestion: WPCP levee alignment at Coyote Creek. This is an opportunity to redesign the levee near Coyote Creek to expand floodplain. There is an SCVWD SMHM mitigation that will be inundated and therefore mitigation actions must be taken. While doing so, some WPCP lands near the creek were set aside in the master plan for flexible use for possible restoration. The Study should consider the overall area near Coyote Creek and WPCP lands for possible expansion of floodplain. Eileen McLaughlin
- Consider the interaction of the study area with the surrounding environment such as the Coyote Creek Flood Control Channel and residual inland wetlands. J Foran
- Please consider recreation. Keep the 9-mile loop trail around A9-A15!

- I am a large supporter of the terraced levee with brackish marsh. This is great for the freshwater use. Not sure about island ponds. George Trevino
- Ecosystem Restoration A9-A15. Consider using levee as the boundary instead of building a new levee across pond system (54). Existing levee provides an established base which is stable. It has been used in other projects within the Bay Area (Napa/Eden Landing). Also consider using sections of levees as a base for islands, they will also hold up longer due to the established base (also used in Napa Plant restoration). Good idea breaching sections of cross levee where traditional finger sloughs are located. This has been utilized within other restoration projects within the South Bay Salt Pond Restoration Project. Butch Paredes
- I believe Tom is right and that riverine flooding is what needs to be assessed in protecting Alviso -- Bay flooding of less concern -- however salt water intrusion factor needs study as well -- Think Guadalupe and Coyote capacity is not what latest storm flow intensity requires. Think a flood basin buffer inboard of Coe Levee is needed -- Please consider such an alternative in designing your ecosystem restoration and revegetation -- and endangered species habitat must be viable in continuity i.e. don't destroy present mitigation wetlands until alternative marsh is in place.