

## April 2010

Welcome to the twenty-second issue of the quarterly electronic newsletter of the South Bay Salt Pond Restoration Project (SBSP). The restoration process is managed collaboratively by the California State Coastal Conservancy, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. This newsletter provides a brief update on our effort to restore more than 15,000 acres of former commercial salt ponds in the South Bay which were purchased by state and federal agencies in March of 2003. For more detailed information about the Restoration Project (or to unsubscribe from this publication) please visit our web site at www.southbayrestoration.org.

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# 1. Spring is time to visit the restoration project!

As winter storms finally subside in Northern California and May ushers in stunningly clear skies over the South Bay, we encourage you to take advantage of one of the many ways to visit the restoration project. Click on the programs in the table below to reserve your space on one of the upcoming tours and events.

Spring Tours and Programs at the Salt Ponds			
Program (click on the text below for a link to more information)	Date	Time	
Earth Day Clean Up at Ravenswood	Saturday, April 17, 2010	8:30 a.m. – 11:30 a.m.	
Oliver Salt Works Hike: Hayward	Saturday, May 8, 2010	10:00 a.m. to 12:00 a.m.	
Cruisin' Toward Restoration (van tour)	Saturday, May 15, 2010	10:00 a.m. to 12:30 p.m.	
Bike Tour on the Levees	Saturday May 22, 2010	9:30 a.m. to 11:30 a.m.	
Free Audio Tours	Any date	Any time!	



## 2. New Audio Tours Available

The San Francisco Bay Joint Venture has recently posted new audio tours on their website – www.yourwetlands.org for anyone traveling near or around the South Bay Salt Pond Restoration Project. Current *stop, listen and learn locations* include the Don Edwards San Francisco Bay National Wildlife Refuge Visitor Center in Newark, The Environmental Education Center in Alviso, the staging area at Eden Landing and the Hayward Shoreline starting at the nearby

Interpretive Center. While it is possible to listen to the tours sitting at a computer, we recommend you listen to them on location! You can download the tours from the web site onto a CD, iPod or MP3 player. MP3 players are also available for loan at all of the visitor centers. You can also access the tours using any web access cell phone (and a good set of headphones). The tours have been transcribed for the hearing impaired.

The San Francisco Joint Venture web site also on the website is a bimonthly podcast program with a wealth of information about wetland restoration and other related issues including stories by and about the people working to protect these important habitats around the Bay.



# **3. On The Ground: Protecting plovers, restoring marshes and constructing managed ponds.**

The landscape of the South Bay shoreline continues to evolve this year as we implement the first phase of the restoration. Here are just a few of the highlights of what land managers have been working on:

<u>**Protecting Plovers-**</u> In February 46 intrepid volunteers worked with U.S. Fish and Wildlife Service staff to hand-scatter tons of oyster shells at pond SF-2 near the Dumbarton Bridge. They

were part of a larger effort to enhance snowy plover nesting success in the project area. The speckled white shells serve as camouflage for the light-colored eggs and chicks of this threatened species. Because plovers build nests in open graveled areas, their eggs and chicks are vulnerable to predators like gulls, foxes and ravens. Recent monitoring suggests that nests built in these camouflaged areas are far less likely to be predated. Plovers continue to be an important focus for wildlife biologists, and one of our ongoing goals is to find ways to help these birds thrive as we restore more ponds to tidal wetland.



**Pond SF-2** - Work proceeds ahead of schedule at this important set of ponds near the western approach to the Dumbarton Bridge. The white encrusted moonscape of this dry pond is being transformed into a 237 acre managed pond with high quality nesting and shallow water foraging habitat for shorebirds, plovers and ducks. The pond will include 30 nesting islands for birds and a new trail for visitors. If all goes as planned, we expect to open the trail and bring water into the site at a celebratory event this Fall.



Work Continues on Pond A8 Near Alviso-January 2010, the project broke ground at Pond A8 near Alviso. When the work at A8 is completed, this former salt pond (as well as Ponds A5 and A7) will be connected to Alviso Slough (pictured here) and transformed into 1,400 acres of managed pond habitat for a variety of species, including fish, pelicans, cormorants and ducks. Depending on the outcome of contaminant and levee scour monitoring, this area

will eventually become tidal salt marsh, creating habitat for the endangered California clapper rail, the salt marsh harvest mouse, and other marsh species. The project will continue to generate significant construction related employment in the South Bay.



#### Pond A6 Levee to be Breached this Fall -

Although Pond A6 is located a considerable distance from easy public access, it will play a critical role in restoring tidal marsh habitat to the South Bay. This fall contractors are scheduled to make a series of strategic levee breaches at the pond to allow the tide to return to this area and, over time, create approximately 330 acres of new tidal marsh.



# 4. Track our progress

Confused by all the activity at the ponds? Want to know when a trail will open, or learn more about the history of the project? The information is just a click away on the Track Our Progress Page of the project web site. Below is a summary of activities we are working on this year, you can find more detailed table like the one below on the web site.

Construction Activities 2010				
Location	Activity	Start Construction	Status	
Eden Landing Pond Complex	Restore 630 acres of tidal habitat for endangered species. (Ponds E8A/E9/E8X)	Summer 2010	AWARDING CONTRACT BIDS in the Summer of 2010	
Alviso Pond Complex	Create approximately 330 acres of tidal salt marsh & tidal channel habitat that will evolve over time (Pond A6)	Summer 2010	AWARDING CONTRACT BIDS in the Summer of 2010	
	Connect 1400 acres of ponds to the Bay, creating new marsh and shallow water habitats for pelicans, cormorants and ducks. (Ponds A8/A7/A5)	Fall 2009	UNDER CONSTRUCTION. We expect to open these ponds to tidal action in the Fall of 2010.	
	Open 2.2 miles of new Bay Trail between Mountain View's Stevens Creek and Sunnyvale.	Fall 2009	FINALIZING LAND TRANSFER Cargill is working to transfer a portion of the trail area to NASA. We will open the trail once the property transfer is complete.	
Ravenswood Pond Complex	Enhance 240 acres to create a 155-acre pond with 30 nesting islands for nesting and resting shorebirds, and 85 acres of habitat for snowy plovers. (Pond SF-2)	March 2009	UNDER CONSTRUCTION. We expect to complete this project by August 2010.	
	Construct 0.7 miles of trail and build 2 new viewing platforms near the Dumbarton Bridge.	2010	UNDER CONSTRUCTION. Trail will be completed and opened in the fall of 2010.	
	Create an interpretive display in Bedwell Bayfront Park near pond habitat and historic salt marsh areas.	Winter 2009	COMPLETED	



# 5. Science Update: Researchers dig into salt pond science

Science continues to play a critical role as we work to restore habitats in the South Bay. In accordance with the comprehensive Adaptive Management strategy embedded into the final Restoration Plan, we continue to "learn as we go" from a series of applied studies taking place in and around the project area. The results of these studies will help project managers adjust the restoration schedule and management activities to

ensure the best outcome for South Bay flora and fauna. Below are some highlights from applied studies currently underway. You can view a complete list of the Applied Studies on the science page of the project web site. Once there, click on the individual studies to read a summary of each research proposal.

**Mercury:** A collaborative effort between the U.S. Geological Survey and University of California, Davis will evaluate mercury in Pond A8 and the adjacent Alviso Slough before and after the breach of the Pond. This will help answer questions concerning what effect the additional scour of Alviso Slough will have the mercury buried deep in the sediment. It will also help to verify that the increased tidal flow does not result in increased mercury in the food chain.

**Bird Database and Modeling:** The Point Reyes Bird Observatory, San Francisco Bay Bird Observatory, and the U.S. Geological Survey are working together on a joint effort to create a database of existing bird survey data. This study will consolidate all the existing San Francisco Bay avian datasets collected by the collaborators using the California Avian Data Center's database model as a framework. These data will then be reviewed and synthesized to estimate the baseline bird populations and historical trends for selected species. From this and other research, a salt pond bird carrying capacity model will be developed. This database and the modeling efforts will form the basis of the baseline estimates of water birds using the ponds that will be used to evaluate future changes that may arise from salt marsh restoration activities.

**Habitat Mapping and Monitoring:** Dr. Brian Fulfrost of the firm Design, Community and Environment has obtained IKONOS satellite imagery for the entire project area and is "ground-truthing" this information with data collected in the field to map and delineate various habitat types. Researchers will obtain additional satellite imagery over the next two years in order to track how restoration activities affect mud flat development, channel formation, and vegetation growth.

**Benthic Invertebrate Study:** Dr. Jan Thompson of the U.S. Geological Survey is examining the effects of the restoration project on benthic invertebrates and water quality in the South Bay. Changes in the benthic community after restoration could be an indication of water quality changes as many of these organisms are filter feeders and act to influence phytoplankton blooms and thus water quality. Benthic organisms are also prey for a variety of fish and bird species and thus changes in the benthic community might have implications for other species. Dr. Thompson is evaluating potential changes that have occurred in this important community since the restoration efforts started under the Initial Stewardship Plan in 2003 when water flow

was increased in many of the former salt ponds in order to stop the salt making process. Her team has will examine samples collected before and after the 2003 start of restoration.

**Fellowships:** The Project is also funding four fellowships for graduate student researchers. Nicole Athearn of University of California Davis will be developing a model to estimate the abundance of four species of water birds based on pond habitat conditions. Ariel Rowan of San Francisco State University is developing a model of the carrying capacity of mudflats for shorebirds. Cory Overton of University of California, Davis is evaluating California clapper rail population dynamics, survival, and recruitment. And Gavin Archbald of San Francisco State University is monitoring invasive Algerian sea lavender in the project area using remote imagery and ground truthing.



## 6. Faces of the Restoration: Beth Dyer & the Santa Clara Valley Water District

Critical to the success of the South Bay Salt Pond Restoration Project is the ongoing collaboration between federal, state and local agencies. One of those agencies, the Santa Clara Valley Water District has already played a tremendous role helping to transform the salt ponds into tidal habitat. Senior Project Manager Beth Dyer leads the District's participation in the South Bay Salt Pond Restoration while also managing other restoration projects for the

District. We caught up with her after one of the monthly Project Management Team meetings where representatives from each participating agency come together to coordinate details of the restoration.

#### 1. How long have you been at the District and how long have you been in that position?

I joined the District in June 2002 as an Environmental Planner, and was promoted to my current position in May 2005.

#### 3. What did you do before working with the District?

Directly before joining the District, I served as a Resource Planner for the County of Santa Cruz. Over the years, I have assisted with the development of the City of San Jose's Riparian Restoration Action Plan, and planned and managed the implementation of nine salmonid fisheries habitat enhancement projects in Santa Cruz County. I also served as a member of the Santa Cruz County Resource Conservation District Board of Directors.

#### 3. Why is the District interested in the South Bay Salt Pond Restoration?

The District views the South Bay Salt Pond Restoration Project as a means to a vibrant future for the South Bay, including habitat restoration, flood protection, and recreation/public access. The District's mission includes both flood protection and stewardship, which align perfectly with two of the project's purposes.

# 4. The Water District has been actively involved since the start of the planning process, could you describe what aspects of the implementation process you have been involved in?

The District provided detailed design for breaching the Island Ponds, as well as the funding to breach the ponds in 2006. In Pond A21, the one closest to the bay, the District will obtain 66 acres of mitigation credit for impacts to brackish marsh associated with our Stream

Maintenance Program and Lower Guadalupe River Flood Protection Project. We funded restoration of Ponds A19 and A20 as well, which are not mitigation sites, through the Clean Safe Creeks Environmental Enhancement Grant program.

#### 5. What aspect of the restoration has been the most interesting to you up to this point?

That is a tough question, since I would say it's a tie between two aspects of the restoration. First, the people who work on this project are outstanding. We have a very diverse array of parties – including from federal, state and local agencies – involved, and everyone has been simply great! This project is large, complicated and had a very aggressive schedule to finish the planning stage. While this could be overwhelming to many groups, my colleagues on this project are to be commended for their collective "can-do" attitude, which has allowed the project to move through some very tough challenges gracefully.

Second, the resiliency of nature is always fascinating! Two examples that spring to mind are: the influx of shorebirds following the implementation of the Initial Stewardship Program in 2004, when salinities were lowered in many of the ponds; and the fantastic rate at which pickleweed is colonizing the Island Ponds.

#### 6. What are you looking forward to down the road?

I look forward to the day when all phases of the South Bay Salt Pond Restoration Project are complete. It will be a great regional asset and a tremendous accomplishment, although it is still many, many years in the future.

#### 7. What do you worry about?

I try not to worry. Instead, I try to focus on the outcomes I would like to achieve and achieving them. That typically includes anticipating potential challenges and either avoiding them or being prepared to solve them. When worry starts to creep into the process of preparing to meet challenges, I refocus on the desired outcome by recalling this quotation: "Obstacles are those frightful things that you see when you take your eyes off the goal." (Henry Ford) That really helps me keep my eye on the prize.

#### 8. When you are not working for the District what do you do in your free time?

I read, run marathons, and play, teach and perform djembe music. Djembe is a large hand drum from West Africa that has an incredibly dynamic range.

#### 9. Do you have a favorite place to visit near the Bay and why?

The Environmental Education Center at the Refuge in Alviso is one of my favorite places. It's nestled out in the marsh, and is one of San Jose's best-kept secrets. The walkway makes being in the marsh very accessible and, when I'm there, I get the feeling that I could see a Salt Marsh Harvest Mouse or California Clapper Rail at any moment.