

South Bay Science Symposium Summary

Date Held: June 6, 2006 from 9:00am to 5:00pm with a reception from 5:00pm to 7:00pm

Location: Dr. Martin Luther King, Jr. Library, San Jose State University

Hosts: Department of Environmental Studies and the College of Social Sciences,
San Jose State University

Organizers: Lynne Trulio; Steve Ritchie; Mike Connor; Dave Schoellhamer

Purposes:

- To allow researchers currently studying physical and biological factors and processes relevant to South Bay salt pond restoration to present their findings and analyses.
- To bring forward new data, information and analyses that will assist the South Bay Salt Pond Restoration Project in restoration planning and implementation of early actions.

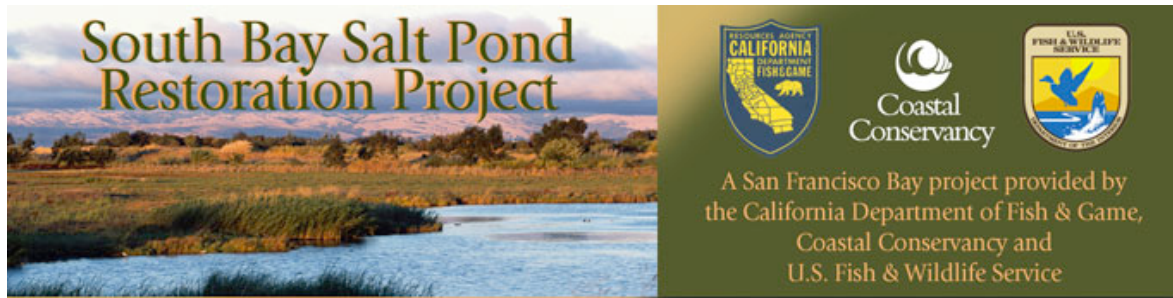
Summary: This symposium was designed to bring forward information and analyses for use by the South Bay Salt Pond Restoration Project managers, scientists, and consultants. At this critical point in the planning process, the environmental documents for the 50-year restoration and the first phase of implementation are being prepared. It was important to present research findings that contained valuable information, potentially useful for the planning documents. Another purpose was to highlight the diversity and depth of research being conducted relevant to the Project, and to connect the community of researchers conducting this work.

We organized the day around four themes--watershed processes, sediment dynamics, water quality and biotics—and 18 speakers presented their research related to these topics (see Program, attached). In addition, 35 others contributed posters for the poster session. All contributors presented their data, interpreted the findings, and discussed the importance of their results for the South Bay Salt Pond Restoration Project. Over 150 people attended the all-day meeting and many stayed for the reception and poster session that followed.

The Symposium successfully displayed a diversity of high quality research occurring in connection with the Project. A number of researchers funded by the Project presented their data, including John Callaway and Mark Stacey (Island Pond research) Cheryl Strong (bird use of the Newark Ponds), Nicole Athearn (water quality in the Project Area), Mike Saiki (fish diversity in the Project Area) and Diana Stralberg (Habitat Conversion Model). Other key talks, especially by Lester McKee (watershed inputs), Jim Cloern (phytoplankton changes in the South Bay), and John Takekawa (mercury in higher trophic levels), provided data and analyses undertaken by other research efforts.

Results: Because the meeting was so valuable to attendees and the PMT, the Project expects to hold science symposia on a regular basis. The next is expected to be in 2008. To leverage the benefits of this first meeting Lynne has:

- Compiled the abstracts of all speakers and poster contributors, which are available on the Project website.
- Initiated a Symposium booklet for publication by the Project in 2007. This booklet will contain 2-3 page summaries by symposium contributors of their presentations for a lay audience. This will be a public document designed to provide information to the public and resource managers on the science of the South Bay.
- Proposed sessions at conferences in 2007 that will highlight current Project research.



South Bay Science Symposium:
South Bay Salt Ponds, Bay and Watershed Research

**Hosted by the Department of Environmental Studies,
College of Social Sciences at San Jose State University**

June 6, 2006

9:00 AM to 5:15 PM—Presentations and Discussion

5:15 PM to 6:30 PM—Reception and Posters

Martin Luther King, Jr. Library, San Jose State University

Rooms 229A/B (meeting) and 255/257 (posters)

****NO FEE and OPEN to the PUBLIC****

PROGRAM

8:45 – 9:00 Coffee and Muffins

9:00 Welcome

- Steve Ritchie, Executive Project Manager, South Bay Salt Pond Restoration Project
- The Vital Role of Science in the South Bay Salt Pond Restoration Project –
Lynne Trulio, Lead Scientist, South Bay Salt Pond Restoration Project

9:30 Session 1: South Bay Watersheds: Inputs of Sediment (45 minutes)

Moderator: Mike Connor, San Francisco Estuary Institute

- Discharge of water and suspended sediments to the South Bay from Coyote Creek and Guadalupe River Watersheds: Water years 2003 – 2005—Lester McKee, SFEI [15 minutes]
- Challenges in estimating sediment supply rates from local watersheds to the South Bay--
Laurel Collins, Watershed Sciences [15 minutes]
- Discussion [15 minutes]

10:15 Break [15 minutes]

10:30 Session 2: Sediment Transport and Dynamics Affecting Restoration (90 minutes)

Moderator: Josh Collins, San Francisco Estuary Institute

- Sediment supply and demand—Dave Schoellhamer, USGS [15 minutes]
- What does the past tells us about whether there will be enough sediment to

- restore South San Francisco Bay salt ponds?—Bruce Jaffe, USGS [15 minutes]
- Coyote Creek and the Island Ponds: Tides, Salinity and Suspended Sediments—Mark Stacey, UC Berkeley [15 minutes]
- Physical processes and tidal marsh evolution: Cooley Landing and Warm Springs Projects—Philip Williams, Philip Williams and Associates [15 minutes]
- Sediment deposition in restoration areas – John Callaway, USF; Tom Parker, SFSU; Lisa Schile, SFSU [15 minutes]
- Discussion [15 minutes]

12:00 Lunch—on your own; view posters [60 minutes]

1:00 Session 3: Water Quality: Productivity and Trace Contaminants (95 minutes)

Moderator: Steve Moore, Nute Engineering

- Water quality in the salt ponds and effects of pond discharges on receiving waters—Nicole Athearn, USGS; John Takekawa, USGS; Tara Schraga, USGS [15 minutes]
- Surprising Trends of Phytoplankton Increase in South San Francisco Bay—Jim Cloern, USGS [25 minutes]
- Hydrodynamics, bathymetry, and clams---first-order regulators of phytoplankton blooms in South San Francisco Bay- Lisa Lucas, USGS [15 minutes]
- South Bay trace contaminants: Recent findings—Jay Davis, SFEI [15 minutes]
- Mercury in birds of the San Francisco Bay-Delta: Trophic pathways, bioaccumulation and ecotoxicological risk to avian reproduction--John Takekawa, USGS [15 minutes]
- Discussion [15 minutes]

2:40 Break [20 minutes]

3:00 Session 4: Biology: Vegetation, Life in the Bay, and Birds (105 minutes)

Moderator: Steve Rottenborn, H.T. Harvey and Associates

- Vegetation mapping and changes along Artesian Slough and beyond—John Bourgeois, H.T. Harvey and Associates [15 minutes]
- South Bay fish communities—Francine Mejia, USGS; Mike Saiki, USGS [15 minutes]
- Nesting bird survivorship and gull predation in the ponds—Josh Ackerman, USGS [15 minutes]
- Waterbird monitoring at the Newark Ponds—Cheryl Strong, SFBBO [15 minutes]
- Waterbird response to trail use around San Francisco Bay—Lynne Trulio, SJSU [15 minutes]
- Predicting avian responses to landscape change in San Francisco Bay: Addressing and reducing multiple levels of uncertainty—Diana Stralberg, PRBO [15 minutes]
- Discussion [15 minutes]

4:45 Summary (30 minutes):

- What have we learned and where are we going: Restoration Project Research Needs—Steve Ritchie [15 minutes]
- Discussion [15 minutes]

5:15 - 6:30 Reception and Poster Session

Science Symposium Details

Directions and Map

Martin Luther King, Jr. Library is located at 150 E. San Fernando St., San Jose, CA 95112, at the corner of 4th Street and San Fernando Street in San Jose. There is a large public Parking Garage directly across San Fernando from King Library, on 4th Street between Santa Clara Street and San Fernando. If you drive to the Symposium, you'll want to park there. When you enter King Library, take the escalader in the center of the first floor to the second floor. Go straight back through the doors. The rooms for the Science Symposium will be to your right.

Driving Directions

From US-101 South toward SAN JOSE:

Take the 1st STREET/BROKAW RD. exit. Cross 1st Street and light rail tracks at the light. Get into the right lane and bear RIGHT onto 4th Street. Continue for 3 to 4 miles into San Jose. After passing Santa Clara St., get into the left lane. The Parking Garage will be on your left before you reach SAN FERNANDO. After parking, cross San Fernando to King Library.

From Hwy. 280 South toward SAN JOSE:

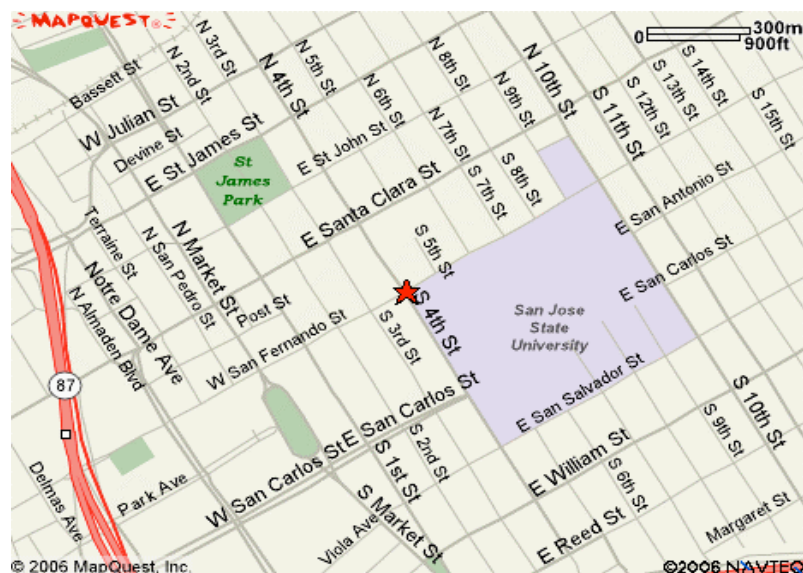
Take the CA-87 N / GUADALUPE PARKWAY exit. Take the SANTA CLARA STREET exit toward DOWNTOWN SAN JOSE. Turn RIGHT onto WEST SANTA CLARA ST. Turn RIGHT onto SOUTH 4TH ST. The Parking Garage will be on your left before you reach SAN FERNANDO. After parking, cross San Fernando to King Library.

From Hwy. 880 South toward SAN JOSE:

Take the NORTH FIRST ST exit- EXIT 4A- toward DOWNTOWN. Turn RIGHT onto N 1ST ST. Turn RIGHT onto EAST ROSEMARY ST. Turn RIGHT onto NORTH 4TH ST. The Parking Garage will be on your left before you reach SAN FERNANDO. After parking, cross San Fernando to King Library.

CalTrain Directions

Take CalTrain to Diridon Station. Exit the front of the station and just walk straight up San Fernando to 4th Street. King Library is about 1 mile (20 minute walk) from the train station.



Food and Refreshments

Coffee and muffins will be served in the morning and there will be a reception at 5:15pm with food and drink after the talks conclude. Symposium attendees are on their own for lunch. Here are just a few of the many places to eat within walking distance of King Library:

King Library Café—first floor of the Library

Pomegrante Café—across San Fernando from the Library

Togo's Subs—4th Street between San Fernando and San Carlos

Grande Pizza—Corner of 4th and San Carlos

Hawg's Seafood—150 S. 2nd Street (between San Fernando and San Carlos)

E&O Trading Company—96 S. 1st Street (at the corner of 1st and San Fernando)

Gordon Bierch—33 E. San Fernando Street (between 1st and 2nd Streets)

House of Siam—150 S. 2nd Street (between San Fernando and San Carlos)

Café at San Jose Museum of Art—110 South Market Street (at the corner of San Fernando)

Accommodations

On-campus housing is available at SJSU. Dorm rooms are \$45/night for single or \$26/night double occupancy. Campus Village—a brand-new and very nice facility—is \$75/night for an SRO (only one queen bed) or \$100/night for a single bedroom (queen + pull-out bed). If you are interested in this convenient housing option, email Lynne Trulio at ltrulio@earthlink.net for the reservation form.

There are many other hotels and motels, especially near the San Jose Airport. Some possibilities are the Homewood Suites at Trimble and 1st Street, the Adlon Hotel on 4th Street, and the historic Hotel DeAnza. These options range from about \$80 to \$109/night. Only the Hotel DeAnza is within walking distance of the San Jose State University campus. The SJSU Symposium organizer (L. Trulio) has no experience with any of these hotels and cannot recommend for or against them.

Thank you to our Science Symposium donors and sponsors:

State Coastal Conservancy

US Fish and Wildlife Service

Santa Clara Valley Water District

PG&E

USGS

San Francisco Estuary Institute

Department of Environmental Studies, the College of Social Sciences, and the Dr. Martin Luther King, Jr. Library staff at San Jose State University