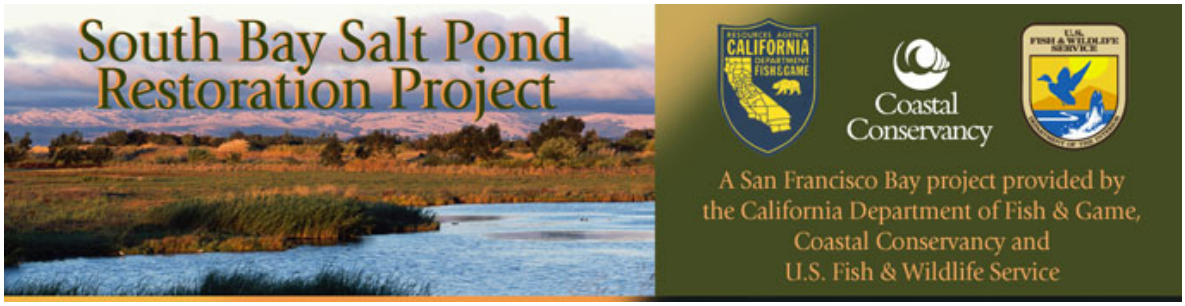

Science Team Meetings—Agendas for 2006

January 17, 2006

March 13, 2006

May 22, 2006

June 13, 2006
(Special Science Team-PMT Meeting)

SOUTH BAY SALT POND RESTORATION PROJECT SCIENCE TEAM MEMBERS

Lynne Trulio, Lead Scientist	**San Jose State University**
John Callaway	**University of San Francisco**
Joshua Collins	**San Francisco Estuary Institute**
Edward Gross	**Environmental Consultant**
Bruce Herbold	**US Environmental Protection Agency**
Michael Josselyn	**WRA, Inc.**
Frederic Nichols	**US Geological Survey (ret.)**
David Schoellhamer	**US Geological Survey**
Cheryl Strong	**San Francisco Bay Bird Observatory**
Lois Takahashi	**UCLA**
John Takekawa	**US Geological Survey**
Dilip Trivedi	**Moffat and Nichol**
Nils Warnock	**PRBO Conservation Science**

South Bay Salt Pond Restoration Project: SCIENCE TEAM MEETING

January 17, 2006 from 12:00 to 4:00pm

BCDC Conference Room, 50 California Ave., 26th Floor

AGENDA

12:00 - 12:30 **Agenda Review & Summary of Project and Science Program Activities**

- Island Ponds Applied Studies Proposals selected
- AMP development integrating ST and CT work to continue through June 2006
- Social Science Workshop being planned
- Up-date from Steve Ritchie on recent Project activities and expected work in 2006

12:30 – 2:15 **Working Session on Phase 1 Actions**

Attachments: Rational for Phase 1 Actions; Phase 1 Actions Figure; Summary of Phase 1 Applied Studies; Managed Ponds Concepts and Hypotheses (for E12-13 and A16); Pond E12-13 design; Pond A16 Design; ST Comments on Phase 1 from Dec 12 2005 (on page 2 of the Meeting Agenda)

Goal: The purpose of this session is to develop specific feedback and recommendations from the ST on the Phase 1 Actions and Applied Studies to be provided in a memo to the PMT.

- Summary from Steve Ritchie (15 minutes): Summary of rationale for Phase 1 actions.
- Summary from Lynne Trulio (10 minutes): Brief recap of the key uncertainties and related hypotheses identified by the ST and CT and how the Phase 1 actions address some of those (based on Draft AMP, Appendix 3).
- Summary from Ron Duke (10 minutes): Summary of pond reconfiguration experiments suggested for Phase 1 at Ponds E12 and 13 and A16 and the key uncertainties and hypotheses being addressed.
- Discussion:
  - Do the Phase 1 actions adequately address the Project Objectives? Would you recommend others?
  - Are the Phase 1 Applied Studies the best ones to address key Project uncertainties? What others would you recommend?
  - Is the design of the two large-scale pond manipulations appropriate for providing quantitative data that can be used to support or refute the hypotheses being tested?

2:15 – 2:30 **Break**

2:30 – 3:30 **Working Session--Continued**

3:00 – 4:00 **Meeting Wrap-up**

- Comments on the form and content of our report to the PMT based on today's meeting
- Next ST Meeting: Monday, April 17, 2006

Science Team Comments on Phase 1 Experimental Proposals for Reconfiguring the E12-13 Ponds and A16 Ponds (recorded by Trulio and Fox)

E12-13 Proposal: Reconfigure ponds to develop a manageable system that supports high, medium, and low salinity ponds for pond dependent species.

- Hypotheses being tested need to be clearly stated and the number of manipulations must be few enough that the effects can be separated statistically.
- Rough bay water volumes, residence time and salinity calculations are needed to determine if the varying salinity regime is even feasible at this location.
- Should test whether or not high salinity ponds will create more foraging by comparing foraging rates with various salinities.
- Should compare the effects of perhaps two water depths for each salinity level on foraging. We must be able to statistically separate salinity and depth.
- But, keeping depth constant is difficult when trying to get different salinities because that involves evaporation, which reduces depth. So, is it possible to control depth?
- Need to determine if we can meet water quality standards in a system like this and produce acceptable discharge since this is essentially a salt-producing system.
- Could also test island use in ponds of differing salinities.

A16 Proposal: Reconfigure pond, dividing it into cells and adding numerous islands, to increase densities of foraging and breeding birds.

- Hypotheses being tested need to be clearly stated and the number of manipulations must be few enough that the effects can be separated statistically.
- The primary goal is to test the potential for islands to increase density of breeding birds, but this can also increase foraging.
- This study provides a great opportunity to test a number of questions in addition to potential success of increasing density of breeding birds.
- Other issues that might be tested include gull predation, vegetation control, dissolved oxygen levels – potentially due to high levels of fecal material--whether or not there are too many islands in the test, and public access impacts.
- Could test the effects of different densities of islands and/or distances of islands from each other and/or levees on parameters such as breeding success.
- Could test the effectiveness of different management regimes in keeping vegetation off islands. In addition, could test whether some vegetation is beneficial to chick survival.
- Should test whether different depths/water movement regimes affect water quality and ability of pond to meet RWQCB requirements.

South Bay Salt Pond Restoration Project: SCIENCE TEAM MEETING

March 13, 2006 from 12:00 to 4:00pm

BCDC McAteer-Petris Conference Room, 50 California Ave., 26th Floor

AGENDA

12:00 - 12:45 **Agenda Review & Summary of Project and Science Program Activities**

- Experiments in Phase 1 Actions under revision
- Science Symposium Planned for June 6, 2006
- Social Science Workshop being planned for April
- Science Team Schedule for 2006 (attachment to follow)
- Up-date from Steve Ritchie on recent Project activities

12:45 – 2:15 **Working Session on Applied Studies Integration Document**

Attachment: Applied Studies Integration Document

Goal: The purpose of this session is to get feedback and recommendations from the ST on the key uncertainties and the high priority hypotheses for testing with respect to the uncertainties.

- Summary from Lynne Trulio (15 minutes): Brief recap of the key uncertainties and related hypotheses identified by the ST, and the process for integrating Consultant Team applied studies ideas. Highlights of the integrated document and uses of the document.
- Discussion:
  - Are these the correct key uncertainties and high priority hypotheses?
  - Are the management actions in response to data collected appropriate? What other actions should be taken?

2:15 – 2:30 **Break**

2:30 – 3:30 **Working Session—Continued**

- Discussion:
  - What is the time line for collecting enough data to address the hypotheses and provide substantial information on key uncertainties? How does this information affect management actions?
  - How do we prioritize which hypotheses are most important to test now or in Phase 1 and which are not as important?

3:30 – 4:00 **Meeting Wrap-up**

- Summary of revisions needed to the Applied Studies Integration document
- Next ST Meeting: Monday, May 22, 2006;
  Topic: Draft Monitoring and Restoration Targets Document

South Bay Salt Pond Restoration Project: SCIENCE TEAM MEETING

May 22, 2006 from 12:00 to 4:00pm

State Coastal Conservancy, 1330 Broadway, Oakland, 4th Floor Conference Room

AGENDA

12:00 - 12:30 **Agenda Review & Summary of Project and Science Program Activities**

- Science Symposium Planned for June 6, 2006
- Science Team Schedule for 2006 (page 2)
- Scheduling a meeting with the PMT in June or July
- Up-date from Steve Ritchie on recent Project activities

12:30–1:45 **Review of Revised Applied Studies Integration Document**

Attachment: *Applied Studies Integration Document (May 17 2006)*

- Goal: To get your comments on this revised document, which consolidates the comments you provided at the March Science Team meeting. If possible, to get consensus that these are indeed the top Applied Studies hypotheses as we see them now.
- Summary from Lynne Trulio (10 minutes): Brief recap of how this document has been revised and how it will be used in the AMP and EIR/S process.
- Discussion:
  - Have we captured the most critical hypotheses that need to be tested to move along the adaptive management staircase?
  - When and how, in general, should each hypothesis be tested?
  - Should we have a separate, focused meeting on reviewing the Applied Studies planned for Phase 1 to be sure the appropriate hypotheses are being tested?

1:45 – 2:00 **Break**

2:00 – 3:15 **Introduction to the Restoration Targets and Monitoring Table**

Attachment: *Preliminary Restoration Targets and Monitoring Table*

- Goal: To introduce the philosophy behind this Table as well as its elements and uses in the AMP and EIR/S process. To develop enough understanding of this Table so that you can provide input via email.
- Summary from Lynne and Steve on the development and features of the table.
- Discussion:
  - What input should the Science Team provide on developing this table?
  - Does the table give all the restoration targets that are essential for moving along the adaptive management staircase?
  - How can we develop management triggers for taking action?
  - How should we proceed with respect to contributing to this table's development?

3:15 – 3:45 **Science Team's Role Now and into the Future**

Attachment: *Science Team Update (May 17, 2006)*

- Goal: To get any further comments on the update and hear your thoughts on the appropriate role of the Science Team as the Project moves from planning into implementation.

3:45-4:00 **Meeting Wrap-up**

- Summary of revisions needed to the Applied Studies Integration document
- ST Meeting to Review Phase 1 Applied Studies—June 13th
- Next ST Meeting: Monday, July 17

  Topic: Draft Monitoring and Restoration Targets Document

Schedule of Science Team and Related Activities in 2006
(Updated May 17, 2006)

In 2006, the Project is focused on developing the EIR/S and AMP for the overall restoration project and Phase 1, and the associated Record of Decision. The overall goal for the Science Team in 2006 is to support that effort by ensuring that existing data are made available to the Project and by providing comment and direction on work going into the EIR/S process.

Objectives of 2006 Science Team Activities:

- Ensure existing data are available to the PMT and Consultant Team for EIR/S and AMP.
- Integrate work of the Science Team and Consultant Team as needed for the EIR/S and AMP.
- Provide advice to the PMT on specific products and tasks, as required.

Science Team Activities and General Timeframes for work:

- Review and provide comments on Phase 1 actions (Dec 2005-July 2006)
- Review and provide comments on modeling associated with landscape-scale predictions and with Phase 1 actions (Feb-Nov)
- Work with PMT and USGS to interpret monitoring data collected for the Project (Dec 2005- July 2006)
- Host a South Bay Science Symposium to highlight data and analyses useful in the EIR/S process (June)
- Integrate the key uncertainties and hypotheses for Applied Studies developed by the Science Team and Consultant Team (Jan-May)
- Develop plan for monitoring based on restoration targets and management triggers (Feb-Aug)
- Provide comments on revised institutional structure for AMP (July-Sept)
- Finalize AMP (Aug-Nov)

Expected Science Team Meetings in 2006 with Primary Focus and Meeting Product:

January 17:	Phase 1 comments; report produced
March 13:	Review Applied Studies Integration document; draft document
May 22:	Review Preliminary Monitoring and Restoration Targets Plan; initial comments
	Applied Studies Integration document; final comments
July:	Review Revised Monitoring and Restoration Targets Plan; draft document
September:	Review Final Monitoring and Restoration Targets Plan; draft document
	Review Revised Draft AMP; comments
November:	Review next revision of Draft AMP; finalize document for EIR/S and ROD

Other Relevant Meetings:

March 14:	Meeting with John Takekawa's USGS group to discuss monitoring results and analysis
April 18:	Social Science Workshop
May 2:	PMT's Institutional Retreat to discuss long-term institutional structure
June 6:	South Bay Salt Pond Science Symposium
June 13:	Working session to review all Phase 1 Applied Studies
Aug:	Fish Workshop 2: Focus on Trophic Dynamics
Sept:	Pond Ecology Workshop 2
Sept:	Peer Review of Landscape Scale Geomorphic Assessment
Oct-Nov?:	NSP Meeting

South Bay Salt Pond Restoration Project

Special Meeting: Joint SCIENCE TEAM-PMT MEETING

June 13th, from 9am to 2pm,

Don Edwards National Wildlife Refuge

Meeting Purpose: To review the proposed Phase 1 Applied Studies and to meet with the PMT.

9am to 12noon--Phase 1 Applied Studies Review and Discussion

During this working session we will:

* Review proposed Phase 1 AS experiments and determine if this is the correct set of experiments for Phase 1 (materials attached: Phase 1 Applied Studies and Restoration Techniques Table; revised Applied Studies List).
* Review the Restoration Techniques to understand their purpose and relationship to information development for the Project (summary to be sent tomorrow).
* Review and comment on the large-scale experiments at A16-SF2-E10/11 and E12/13

12:00 to 1pm--Lunch with the PMT

1pm to 2pm--Discussion with the PMT

Topics: Phase 1 Applied Studies and the Science Team role in the Project