

# Science Team Meetings—Agendas for 2005

January 18, 2005

March 21, 2005

May 9, 2005

July 11, 2005

September 12, 2005

December 12, 2005

# 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
<b>Edward Gross</b>	<b>Environmental Consultant</b>
Bruce Herbold	<b>US Environmental Protection Agency</b>
Michael Josselyn	WRA, Inc.
Jessica Lacy	US Geological Survey
Frederic Nichols	US Geological Survey (ret.)
Mark Marvin-DiPasquale	US Geological Survey
David Schoellhamer	US Geological Survey
Cheryl Strong	San Francisco Bay Bird Observatory
John Takekawa	US Geological Survey
Dilip Trivedi	Moffat and Nichol
Nils Warnock	PRBO Conservation Science

January 18, 2005 from 12:00 to 4:00pm State Building at 1515 Clay Street, Room 9

# **AGENDA**

12:00 - 12:10	Agenda Review and Questions
12:10 – 1:00	<ul> <li>Science Team Charter and Team Composition</li> <li>READ: Science Team Charter (Attachment 1 [2 pages], attached to the agenda)</li> <li>READ: NSP Final Report from October 2004 (email attachment)</li> <li>Discussion on Science Team and Team member roles</li> <li>Discussion on Science Team composition for 2005</li> </ul>
1:00 – 1:45	<ul> <li>Science Synthesis and Science Plan Completion</li> <li>READ: Science Team Schedule (Attachment 2 [1 page])</li> <li>SCAN: Science Plan elements</li> <li>Discussion on comments from reviewers, Timeline, etc.</li> <li>Uses of the Science Synthesis information in the Science Plan</li> </ul>
1:45 - 2:00	Break
2:00 – 2:30	<ul> <li>Moving Forward on the AMP and Conceptual Models</li> <li>SCAN: Draft AMP outline (email attachment)</li> <li>Developing Subcommittees for producing both products</li> <li>Thoughts on the AMP structure, content, etc. based on your knowledge</li> </ul>
2:30 – 3:30	<ul> <li>Initial Discussion on Research Needs in 2005 and Beyond</li> <li>READ: Short- and Longer-term Science Needs (Attachment 3 [3 pages])</li> <li>READ: Key Questions in Draft Science Plan</li> <li>Begin developing a list of most critical research questions for which data should be collected, or begin to be collected, in 2005. We will base this list on your Science Syntheses, Workshop information, interactions with the Consultants, current research you are doing either for the Project or apart from it, and other relevant information.</li> <li>Consider which questions should be addressed through experiments and through monitoring or baseline data collection.</li> <li>Consider what conditions would be necessary for pilot project locations to test critical questions or collect monitoring data.</li> </ul>
3:30 - 3:45	<ul> <li>Workshop and Charette Schedule</li> <li>Comments on Sediment and Pond A8 Workshops</li> <li>Questions about the Charette</li> <li>Ideas for other Workshops</li> </ul>

# 3:45 – 4:00 <u>Wrap-up</u>

- Set date for next meeting: March 14, 2005 from 12-4pm?
- Topics for Next Meeting

March 21, 2005 from 12:00 to 4:30pm State Building at 1515 Clay Street, Room 15

#### **AGENDA**

#### 12:00 - 12:15 Agenda Review and Questions

#### 12:15 – 12:30 Project Schedule (see attachment)

• Review schedule of meetings that involve the Science Team.

# 12:30 – 1:30 <u>Science Synthesis Summaries</u> (9 Summaries)

- Lead author for each Synthesis gives a 10-minute summary of the synthesis.
- Each summary should report the most important points in each section, list any excluded topics that the authors believed were covered in other Syntheses, and note any topics where authors expect overlap with other Syntheses.

#### 1:30 – 1:45 **Break**

# 2:00 – 2:30 <u>Summaries Continued</u>

# 2:30 – 3:20 <u>Discussion of Synthesis Integration</u>

- Determine areas of overlap among Syntheses and gaps that need to be addressed.
- Determine standard terms for habitat types and other aspects of the physical system.
- Discuss how to better reference Syntheses to each other, how integrate the Syntheses for public presentation and, potentially, how to develop a coauthored article.

#### 3:20 - 3:30 **Break**

#### 3:30 – 4:00 Discuss Proposal Solicitation Process

- Summary of the issue from Lynne (In two sentences: The PMT is receiving more and more proposals with no way to evaluate their value for potential funding by the Project (or other sources). They need the Science Team to develop a process for dealing with unsolicited proposals and for directing potential researchers toward studies of value to the Project.
- Begin to determine a process for proposal evaluation by the Science Team.
- Discuss potential sources of funding that are external to the Project.

#### 4:00 – 4:15 Burning Issue: Evaluation of Monitoring and Recommendations to the PMT

- Summary of the issue from Lynne (In one sentence: The PMT and Land Managers are collecting baseline data for the Project and monitoring data for the ISP *and* want to begin collecting data on the ponds still held by Cargill, but they need technical advice on what to monitor and how to design an efficient monitoring plan.)
- Discuss how, most efficiently, to evaluate current data collection and develop recommendations for the PMT. Lynne recommends a 2-hour meeting of interested Science Team members with Clyde, Carl and PMT members on the issue.

#### 4:15-4:30 Wrap-up

- Workshop Schedule
- Set date for next meeting: May ?? from 12-4pm
- Topics for Next Meeting

May 9, 2005 from 12:00 to 4:00pm; State Building at 1515 Clay Street, Room 10

#### **AGENDA**

## 12:00 - 12:30 Agenda Review & Update on Alternatives Evaluation Process (see attached agenda)

## 12:30 – 1:30 Science Basis for the Project Objectives

- <u>Summary from Lynne</u> (15 minutes): The purposes of this document are to provide a "synthesis of the science syntheses", to list in quantitative terms the conditions needed to achieve the Project Objectives, and to show conflicts that may exist. The document will be used: 1) in the AMP as a basis for restoration targets and monitoring parameters and 2) as information to the Consultant Team, PMT and Stakeholders in the alternatives evaluation process beginning this month.
- Discussion Outcomes (45 minutes):
  - o Evaluate the overall approach of the document;
  - o Point out information from the Syntheses missing from the document;
  - o Point out incorrect data;
  - o Add to the quantitative information that can be used to set restoration targets;
  - o Consider how this document should be used in the AMP.

#### 1:30 – 1:45 **Break**

# 1:45-3:00 **Draft Adaptive Management Plan (AMP)**

- <u>Summary from Lynne</u> (15 minutes): The AMP will become a part of the Record of Decision. It will guide the collection of monitoring and research information and the use of that information in management decisions to meet the Project Objectives. The science section uses simple models, the Science Syntheses and other relevant information to develop specific hypotheses for testing. It lists quantitative restoration targets, monitoring parameters and applied studies for the entire Project and Phase 1. A draft of the AMP will be sent to the NSP on approximately June 1 for discussion at the June 13-14 NSP meeting.
- <u>Discussion Outcomes</u> (1 hour):
  - o Evaluate the overall approach of the document;
  - o Evaluate the conceptual models and hypotheses that guide data collection;
  - o Review the restoration targets for accuracy and completeness;
  - o List other effective monitoring parameters that measure structure and function at a number of spatial scales;
  - o Consider how the document should change.

## 3:00-4:00 Baseline Data Collection and Monitoring in 2005-2006

- <u>Summary from Lynne and John T.</u> (15 minutes): The USGS has been monitoring baseline conditions for the Project for two years and compliance for ISP management over the last year. The PMT has asked the Science Team to provide input on how monitoring should change to better serve the Project's current needs and prepare for Adaptive Management.
- <u>Discussion Outcomes (45 minutes):</u>
  - o Develop rationale for parameter selection;
  - O Suggest streamlined sampling strategies that are still amenable to statistical analysis;
  - o List parameters that should be measured/monitored in the coming year;
  - o Suggest appropriate methods to monitor these parameters.

#### 4:00 Adjourn (Next ST Meeting: July 11 or August 1?)

July 11, 2005 from 12:00 to 4:00pm; State Building at 1515 Clay Street, Room 10

#### **AGENDA**

12:00 - 12:30 **Agenda Review & Update on Project Progress/Decisions by the PMT:** Tidal datum issue and moving forward on LSGA, changes to the Project schedule, contract with USGS for 2005-2006 data collection, PWA scope for Third Phase of work

#### 12:30 - 12:45 Summary of Science Team Meetings—Recent and Future (see Agenda page 2)

- Recent: NSP Meeting, Modelers Meeting, Fish Workshop, Bird Workshop 2, Sediment Workshop 3, Bird Studies Field Trip, Gull Issue Meeting, WQ monitoring meetings
- Future Meetings
  - o Pond Ecology and Management Workshop—August 17, 2005
  - o Trophic Levels Workshop—mid-September?
  - o California Gull and Other Invasive Birds Workshop—mid-October

#### **12:45 - 1:15 Draft AMP Review**

- <u>Summary from Lynne</u> (30 minutes): Condensed version of the presentations Lynne made to the NSP, including the Panel members' primary comments about the Draft AMP.
- Presentation Outcomes:
  - o Provide an overview of the document;
  - o Present the Science Team with comments made by the NSP.

#### 1:15 - 1:30 **Break**

#### 1:30 - 3:30 **Draft AMP Discussion**

- Discussion Outcomes (1 hour 45 minutes):
  - o Evaluate the overall approach of the document—How can it be improved, shortened, made clearer, etc.?
  - O Discuss the Rationale and Vision sections (Chapter 1)—Does this section clearly set the stage for Adaptive Management in this Project?
  - O Comment on the Scientific Background (Chapter 2)—Does this section provide information essential to understanding restoration targets, monitoring parameters, and applied studies?
  - o Review the restoration targets—Are they accurate and complete? How should they be developed further?
  - o Review the monitoring parameters—How many should there be and how can we select the most effective monitoring parameters to measure structure and function at a number of spatial scales?
  - o Recommend changes to the Applied Studies section, including the Applied Studies Program and the Studies themselves (Appendices 2 and 3)

#### **3:30 - 4:00 Meeting Wrap-up**

- o Next steps in revising the AMP for the November 7-8 NSP Meeting
- o Next steps for the Science Team—refining and implementing ISP studies, developing AMP monitoring and studies for the Island Ponds, Pond Ecology Synthesis
- o Next ST Meeting: Monday, September 12?

#### **South Bay Salt Pond Restoration Project:**

#### Chronology of Important Science-Related Meetings—May to November 2005

#### Recent Meetings

- May 11—Science Team Meeting focused on Scientific Basis of the Project Objectives and Draft AMP
- May 20—Fish and their Habitats Workshop (Synopsis is posted on the website)
- May 23—Bird Workshop 2: Modeling to predict bird response to habitat change
- **June 6—Water Quality Data Collection Meeting** with City of San Jose personnel (Dan Bruinsma and colleagues), Lynne Trulio and Steve Ritchie
- June 13 and 14—NSP Meeting focused on ISP issues and Draft AMP
- June 27—Sediment Workshop 3: Watershed Inputs to South Bay Sediment Loads
- **June 27—Modelers' Meeting** to discuss Science Team concerns about the LSGA developed by PWA. Attended by Ed Gross, Jessie Lacy, Mark Stacey, Dave Schoellhamer, Michelle Orr, Kris May, Phil Williams, Lynne Trulio, Steve Ritchie, Amy Hutzel, Brenda Buxton.
- **July 8—Water Quality Data Collection Meeting** with Tara Schraga and Jessie Burton from Jim Cloern's lab at USGS, Lynne Trulio and Steve Ritchie
- **July 8—California Gull Invasive Species Issue**. Attended by Clyde Morris, Joy Albertson, Joelle Buffa, John, Cheryl Strong, Aidona Kakouros, Nanette Seto, Josh Ackerman, Lynne Trulio, Steve Ritchie, Brenda Buxton

#### **Future Meetings**

- **July 12—Water Quality Data Collection Meeting** with Tara Schraga and Jessie Burton from Jim Cloern's lab at USGS and Lynne Trulio
- July 13—Stakeholder Forum Meeting, with significant focus on the Draft AMP
- August 17—Pond Ecology and Management Workshop
- Mid-September—Trophic Levels Workshop
- Mid-October—Bird Workshop 3: California Gulls and other Invasive Bird Species
- November 7 and 8—NSP Meeting focusing on the revised AMP

September 12, 2005 from 12:00 to 4:00pm; State Building at 1515 Clay Street, Room 11

#### **AGENDA**

# 12:00 - 12:20 Agenda Review & Update on Project Progress/Decisions by the PMT from the Executive Project Manager:

Moving forward on LSGA, Pond A8/South Bay Mercury Study, Shoreline Study Progress, Phase 1 criteria and actions (see email of August 1 and two attachments).

#### 12:20 - 12:45 Summary of Science Program Activities from the Lead Scientist

• <u>Workshops:</u> Pond Ecology and Management Workshop—held August 17, 2005

Invasive Birds Workshop—to be held November 18, 2005 Trophic Levels Workshop—date TBA (likely in December)

Other meetings (see pages 2 and 3)

• Others: Work from Jim Cloern's Lab (see pages 4 and 5--email from Jim Cloern)

Summarizing South Bay Fish Data

Social Scientist RFP is out (see pages 6-9)

Work on Eden Landing/Island Ponds and "Big Model" RFPs

Consultant Team Meeting on EIR/EIS

Review of Project monitoring and studies (see email attachment)

#### 12:45 - 1:45 **Draft AMP Discussion**

• <u>Summary from Lynne</u> (10 minutes): Summary of comments received to date (see page 10) and results of Stakeholder Forum meeting on September 8 where we discussed four scenarios in which Project Objectives are not being met (see Project website for materials for that meeting)

#### • Discussion Items:

- o Receive more input from Science Team on AMP development
- Specifically, provide input on developing decision trees for remedial action and contingency measures

#### 1:45 – 2:00 **Break**

#### 2:00 – 2:45 **Modeling direction for the Project**

- <u>Summary from Ed and Lynne</u> on meetings and memos involving ST modelers and their responses to CT current and proposed modeling (see email of Sept 2 and attachments)
- <u>Discussion Items</u>: ST expectations for PMT and CT response to comments and how all comments and responses should be conveyed to the NSP and public.

## 2:45 – 3:45 RFPs for Island Pond/Eden Landing AM Studies and the "Big Model"

- <u>Summary of Progress</u> from Lynne
- <u>Discussion Items</u>:
  - o What types of studies could be addressed in the RFP
  - o Dealing with ST conflict of interest issues

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

- Next steps in revising the AMP for the NSP Meeting (Nov 7-8?)
- Next ST Meeting: TBA based on NSP Meeting

#### **South Bay Salt Pond Restoration Project:**

#### Chronology of Important Science-Related Meetings—May to December 2005

#### Recent Meetings

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- July 13—Stakeholder Forum Meeting, with significant focus on the Draft AMP
- **August 17—Pond Ecology and Management Workshop**
- August 31—Pond A8 Meeting to discuss Proposed Mercury Study
- **September 1—Role of Adaptive Management in EIR/EIS Preferred Alternative** with Michelle Orr, Dave Blau, Ron Duke, Phil Williams, Kris May, Steve Ritchie and LT
- **September 1—Big Model Proposal Meeting** with Ed Gross, Jessie Lacy, Dave Schoellhamer, Mark Stacey, Nils Warnock (and others from PRBO), Jeff Koseff, Steve Ritchie and LT to discuss responding to NOAA RFP.
- **September 2—Eden Landing AM Studies Meeting** with Ralph Johnson, Laurel Collins, Carl Wilcox, John Krause, Brenda Buxton and LT
- **September 8—Stakeholder Forum on AMP Scenarios**

December 12, 2005 from 12:00 to 4:00pm; State Building at 1515 Clay Street, Room 15

#### **AGENDA**

#### 12:00 - 12:30 Agenda Review & Summary of Science Program Activities

- Invasive Birds Workshop held November 18, 2005
- Large-scale modeling proposal submitted to NOAA by Stacey, et al.
- NSP meeting held November 7-8, 2005
- Island Ponds Applied Studies Call for Proposals—Issued November 22, 2005
- AMP development to continue through June 2006
- Lois Takahashi, UCLA, joins the Science Team—October 2005

# 12:30 – 1:15 Alternatives Development Process/Incorporating Science Team Work

- Attachments: Final Alternatives Memo; Alternatives Summary; Phase 1 Actions Map
- <u>Summary from Steve Ritchie (20 minutes):</u> Summary of the Alternatives being finalized for the EIR/EIS and the use of adaptive management. Summary of proposed Phase 1 actions. Summary of project timeline.
- Discussion Items:
  - o Receive input from Science Team on use of science in the programmatic-level alternatives and use of the AMP

#### 1:15 – 2:15 Applied Studies Experiments Proposed for Phase 1—Working Session

- Attachments: Summary of Phase 1 Applied Studies; E12-13 graphic; A16 graphic
- <u>Summary from Ron Duke</u> (15 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.
- <u>Discussion Items</u>:
  - o Do these experimental manipulations address key, high priority uncertainties or should others be addressed?
  - o Is the design appropriate for providing quantitative data that can be used to support or refute the hypotheses being tested?

#### 2:15 – 2:30 **Break**

#### 2:30 - 3:00 **NSP Issues**

- Attachment: Directed Studies Request for Proposals: Island Pond Applied Studies
- <u>Summary from Lynne, Steve, and others who attended the NSP Meeting:</u> Summary of the key points raised at the meeting including comments on the AMP, the Science Program overall, the Island Pond process and the next NSP meeting.
- Discussion Items:
  - Review of the Island Pond Applied Studies process and thoughts on how to get ahead of future RFP processes
  - o What the benefits/drawbacks of the NSP? What should their role be and is it being achieved?

- 3:00 3:45 Comments on the Project's Mission to Achieve a Scientifically-Sound Plan/ Discussion of Science Program Activities in 2006
  - Discussion Items:
    - o Is the Project meeting this stated mission? If not, what level of scientific grounding are we achieving?
    - o What key activities should the Science Program undertake in 2006 to best support the Project?
- **3:45 4:00 Meeting Wrap-up** 
  - Next ST Meeting: Monday, February 13, 2006

# **South Bay Salt Pond Restoration Project:**

**Chronology of Important Science-Related Meetings**—May to December 2005

# **Recent Meetings**

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- September 1—Role of Adaptive Management in EIR/EIS Preferred Alternative with

Michelle Orr, Dave Blau, Ron Duke, Phil Williams, Kris May, Steve Ritchie and LT

**September 1—Big Model Proposal Meeting** with Ed Gross, Jessie Lacy, Dave Schoellhamer, Mark Stacey, Nils Warnock (and others from PRBO), Jeff Koseff, Steve Ritchie and LT to discuss responding to NOAA RFP.

**September 2—Eden Landing AM Studies Meeting** with Ralph Johnson, Laurel Collins, Carl Wilcox, John Krause, Brenda Buxton and LT

September 8—Stakeholder Forum on AMP Scenarios

September 15—Island Ponds Field Visit

September 22 and 28—Field Visits to consider Public Access Opportunities (Eden Landing and Alviso Ponds)

October 18 (evening)—Public Access Opportunities Design Workshop

November 7 and 8—NSP Meeting focusing on the revised AMP

November 18—Bird Workshop 3: California Gulls and other Invasive Bird Species

November 29—Review of Project Alternatives by Regulatory Group and Science Team

**December 8—AMP Development meeting** with Steve Ritchie, Lynne Trulio, Michelle Orr, Ron Duke, Phil Williams