
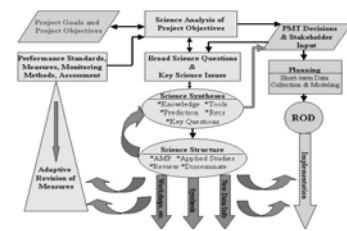


Stakeholder Forum (12-15-04)

South Bay Salt Pond Restoration Project



Science Program Update



Stakeholder Forum Meeting
December 15, 2004

South Bay Salt Pond Restoration Project




Topics Covered in this Talk

- Science Program Development
- Science Syntheses and Products
- Role of the Science Team
- Working Groups
- Moving Forward



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Last time we talked...

- Develop a Science Plan with the content basis and structure to guide the science for the project.
- Develop scientifically-based formulations of the Project Objectives.
- Develop an Adaptive Management Plan.

Components of the Science Program

- **Science advice** to the Project Management Team, Stakeholder Forum and Consultant Team
- A **Science Plan** that describes the Science Program, grounds the Objectives in science and describes the integration of science into decision-making
- A **Science Structure** that implements the Science Program
- An **Adaptive Management Plan** for monitoring restoration progress and conducting targeted experiments
- A **Competitive Proposal Process** for implementing a portion of the Adaptive Management Plan and generating information on Key Uncertainties



Science Plan Elements


- **Science Background** - provides the *content basis* for collecting, synthesizing and disseminating the best available science to support adaptive management
- **Science Structure** - the *process* that generates information to address key uncertainties, implement the Adaptive Management Plan, and integrate data into Project decision-making



Science Background

- **Content basis** for meeting the Project Objectives
- **Science Syntheses**
 - Provides Scientific grounding for Project Objectives
 - Nine Key Issues and Key Questions/Uncertainties
 - Performance Standards and Measures
 - Recommendations for Planning, Design and Beyond
 - Conceptual Models
- **Peer reviewed** by scientists outside the Project

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Science Syntheses

- Scientific basis for Science Program elements
- What do we know, what don't we know and what do we need to know to achieve the Project Objectives
- Products for planning process (short-term)
- Basis to begin Adaptive Management Research and long-term research



Nine Key Science Issues

- 1 Maintain/Improve Ecosystem Function
- 2 Understand Sediment Budget/Dynamics
- 3 Restore Tidal Marsh/Associated Habitats
- 4 Recover Special Status/Indicator Species
- 5 Manage Ponds for Migratory Birds



Nine Key Science Issues

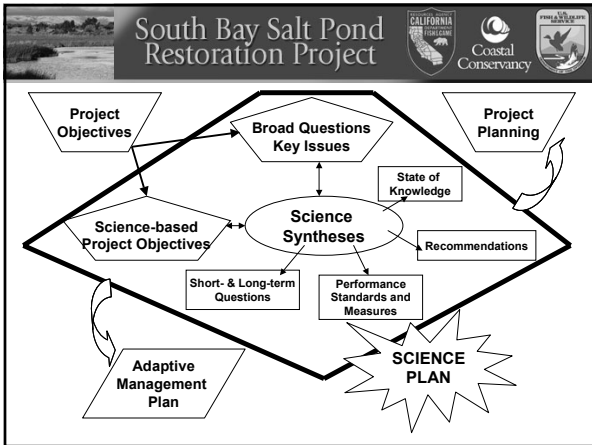
- 6 Effects of Hydrological Modifications
- 7 Pollutant Effects
- 8 Impact of Invasive and Nuisance Species
- 9 Effects of Human-related Activities and Infrastructure

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Science Synthesis Production:

- Drafts written
- Out for Peer Review now
- Revised in January
- Available to the public in February

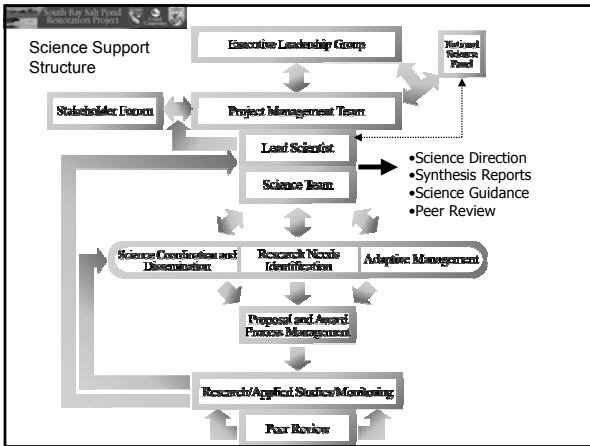


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Science Structure

- Leadership: Science direction for content and process, integrate science and decision-making
- Science Management: Data management, synthesis, dissemination
- Data Generation: Competitive Proposal Process

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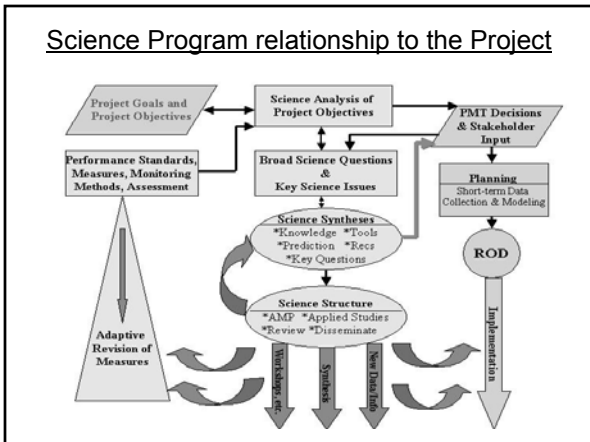


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Adaptive Management Plan

A methodology for acting on the information gained through Monitoring and Applied Studies during planning, Phase 1, and future phases to:

- modify those actions
- revise future phases of actions and applied studies
- revise the assumptions and knowledge base





Roles of the Science Team


- **Science Development and Implementation**
- **Review of Selected Consultant Team Documents**
- **Advisory Role of Individual Science Team Members**



Science Development and Implementation

Develop and implement a long-term science program that will provide adaptive management and scientific information to achieve the Project Objectives

- **Revise Science Syntheses**
- **Develop Adaptive Management Plan**
 - **Design Proposal Process**
- **Provide information for public outreach**




Review of Selected Documents

Review selected documents or sections thereof, as appropriate, following one of two procedures:

- **Science Team-Consultant Team Loop** (equates to peer review by involved Science Team members)
- **Public Comment Procedure** (does not equate to peer review)

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Advisory Role of Individuals

Individuals provide ad hoc advice to the Consultant Team through formal or informal collaboration

- **Consultant Team documents must clearly state who advised**
- **Science Team individuals who advise cannot peer review doc**
- **Does not equate to peer review by the Science Team**


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Working Groups

to investigate uncertainties and identify opportunities to link planning and science

- **Key Science Issues**
 - Sediment Dynamics
 - Birds and Habitats
 - Subtidal habitats & Fish
- **Pilot Project Sites**
 - Pond A8: Dec 16
 - Island Ponds: TBA




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Science Issues Working Groups

- **Sediment Dynamics**
 - Held on Dec 2
 - Draft Summary on Dec 16
- **Birds and Habitats**
 - To be Held on Jan 14 at Mare Island
- **Subtidal habitats & Fish**
 - To be Determined




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Landscape Vision Charette

- **Workshop set by NSP for February 27-28**
- **Brings in other scientific expertise**
- **Develop a landscape vision based on scientific information**
- **Assist in alternatives development process**



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Moving Forward with the Science

- Complete Science Plan
- Develop Adaptive Management Plan
- Continue Conceptual Model Development
- Implement Competitive Proposal Process



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Schedule

- Science Plan development
 - Synthesis reports by 10/15/04
 - Plan complete by 3/15/05
- Adaptive Management Plan development
 - Draft by 5/01/05
 - Revise for ROD
- Proposal process
 - Timing for 2005 to be determined