

SUMMARY OF SBSP RESTORATION PROJECT'S ADAPTIVE MANAGEMENT PROGRAM

The [South Bay Salt Pond Restoration Project](#) is one of the largest restoration efforts in the United States. Although much is known about the project area (such as salt marsh ecology, public access and wildlife interactions, public outdoor recreation demands, and flooding potential) significant uncertainties remain with a project of this geographic and temporal scale. Project managers have concluded that the best way to tackle these uncertainties is to carefully implement the project in phases and learn from the results. How this will be done is described in the [Adaptive Management Plan](#). The Adaptive Management Plan was developed under the leadership of Dr. Lynne Trulio of San Jose State University with input from consultants, agency staff and other experts. The process for integrating new information is listed in the Adaptive Management Summary Table (page 114 of the [Plan](#)), which shows the Project's integrated approach to understanding how the South Bay ecosystem responds to management changes. US Geological Survey's biologist Laura Valoppi serves as the project's Lead Scientist and oversees implementation of the Adaptive Management Plan in coordination with other members of the [Project Management Team](#), which includes the Lead Scientist as well as representatives from the Santa Clara Valley Water District, US FWS, CA DFW, Center for Collaborative Policy, Coastal Conservancy and others (Figure 1).

To implement the Adaptive Management Plan, the Lead Scientist and the PMT members have selected and funded a series of [Applied Studies](#) and ongoing monitoring projects to generate information about the project's impacts. This information is used by the Project Management Team to make decisions about current management of the project area and future restoration actions in order to meet project objectives and avoid harmful impacts to the environment.

Not only is adaptive management essential to keeping the project on track towards its objectives, it is the primary tool identified in the EIS/R for avoiding significant impacts to the environment. Without adaptive management (and its associated information collection), the project managers would not understand the restored system nor would they be able to explain their management actions the public. Furthermore, responses to unanticipated changes would be based on guess work and could exacerbate problems. For these reasons, adaptive management is integral to the project and construction cannot proceed without funding for the applied studies and science support required by the Adaptive Management Plan.

Most of the first phase of studies are now completed, thanks to several research partners and funding from members of the Project Management Team (PMT). Much has been learned about key uncertainties in the restoration process ([see here](#)).

There are a number of processes for the results of scientific studies to be incorporated into the manager's decision making process, and for the development and prioritization of new scientific studies:

- Lead Scientist is a member of the PMT and provides a science update at each monthly meeting
- Lead Scientist established several topic-specific working groups comprised of research and managers to discuss study results and make management recommendations. Current working groups include a Mercury Working Group, a Pond Management Working Group, a Mudflat Working Group, and a Water Quality Working Group.

Exhibit 6: Summary of SBSP Restoration Project Adaptive Management Program

- An annual Researcher/Manager meeting is held in which the entire Science Team and PMT meet to provide an overview of key studies, discuss and provide recommendations to managers, and identify further scientific studies.
- The Lead Scientist provides email synopsis of the findings of key studies, reports, or journal articles that pertain to the AMP and management decision-making.

The Science Program and the Lead Scientist also receive guidance from the [Project Science Technical Advisory Committee \(TAC\)](#), with specific TAC members also participating on the Working Groups and which reviews Science Program progress; provides advice on restoration/engineering design, research and applied studies; and assists in identifying emerging key uncertainties and management decisions required to keep the project on track toward its restoration objectives. Results of the Applied Studies are also shared with the public and researchers at a biannual [South Bay Science Symposium](#).

Results from [Applied Studies](#) and [Monitoring](#) are updated regularly and provided on the Project website at www.southbayrestoration.org. This site also gives other Science Program activities and products.

Figure 1: Adaptive Management Organizational Structure and Function

