SFEI WETLANDS PROGRAM STRATEGY 2001
Program Director – Josh Collins

Program Objectives

Wetlands Regional Monitoring Program (see appendices A and B)

SFEI will help develop and then will lead the scientific aspects of a Wetlands Regional Monitoring Program (WRMP) to assess the ambient status and trends of the wetlands ecosystem of the San Francisco Bay Area region, and to assess the performance of wetlands restoration and mitigation projects in the region. SFEI will conduct the following activities of the WRMP:

- Establish and support scientific teams that foster approaches to wetlands assessment that integrate across disciplines and scientific institutions;
- Establish and support a system of governance for the program that features collaborations among wetlands managers and scientists that integrates among wetlands government agencies;
- Develop new methods to monitor wetlands;
- Enhance coordination of wetlands science between and among state and federal agencies and academia within the region;
- Develop and maintain strong ties between the WRMP and complementary programs in other regions of the greater watershed of the Golden Gate.
- Create and maintain a regional public access Geographic Information System (GIS) of information about local and regional wetlands conditions and management status.

Wetlands Independent Research and Professional Development

The WRMP will be the major part of the Wetlands Program at SFEI. To maintain a leading role in the WRMP, the wetlands scientists at SFEI will need to maintain active roles in the wetlands research community. The wetlands scientists at SFEI should:

- formulate and test hypotheses to explain the ambient status and trends of the wetlands ecosystem and the success or failure of wetlands projects;
- publish the results of original scientific research in refereed journals;
- participate in local and regional scientific forums;
- serve as information resources for government agencies and the news media.

Guiding Principles

- The primary purpose of the Wetlands Program should be to improve the management of wetlands by helping to formulate and address the management questions and objectives. *The Wetlands Program should strive to answer the questions: how is the wetlands ecosystem doing, and is the wetlands project successful?*
- The Wetlands Program should serve a region that is self-evident with regard to general physiography, climate, and the culture of wetlands management agencies. The San Francisco Estuary downstream of the Delta is the focus of such a region, called the San Francisco Bay Area.
- Wetlands are transitional environments between terrestrial and aquatic systems. They express some terrestrial and aquatic attributes as well as their own attributes. They can link terrestrial and aquatic system together or prevent such linkages, depending upon the attributes. Understanding the relationships between terrestrial and aquatic systems, such as hillslopes and creeks, or local watersheds and San Francisco Bay, can require an understanding of the mediation roles played by wetlands.
- Wetlands are important unto themselves. They support unique vistas and communities of plants and animals that contribute to the overall aesthetic and ecological health of the region.
- The Wetlands Program should build upon existing wetlands science and monitoring experience in the region, and should try to complement existing monitoring programs.
- The administrative framework of the Wetlands Program should promote cooperation and partnerships among governmental agencies, the citizenry, and the private sector to minimize policy conflicts and to assemble the financial and human resources necessary to grow the program.
- The monitoring component of the Wetlands Programs (the WRMP) should focus on the status and trends of the wetlands ecosystem and wetlands projects by measuring indicative conditions of health according to agreed upon and current conceptual models of wetlands form and function for the region.
- The products of the monitoring component (the WRMP) should represent a consensus of scientific understanding about the status and trends and expected future conditions of the wetlands based upon data collection, data management, analysis, interpretation, and reporting that are subject to ongoing professional advice and review.
- The Wetlands Program should enroll new scientific talent and foster mentoring between senior and junior scientists to maintain program continuity and data integrity while remaining open to new ideas.

Geographic Scope

The geographic scope of the WRMP includes the tidal flats, estuarine wetlands, diked baylands, and palustrine wetlands of the San Francisco Estuary and its attending watersheds downstream of the Delta at Broad Slough. There is no particular geographic scope for the research component of the Wetlands Program, although the research should improve the understanding of wetlands in the region. The Wetlands Program at SFEI should strive to link to complementary programs in the Delta and further upstream within the greater watershed of the Golden Gate.

Program Funding Past, Present, and Future

The WRMP was initiated by SFEI as part of the San Francisco Estuary Project. In March 1995, SFEI produced version 1 of the Regional Wetlands Monitoring Plan for the San Francisco Bay Area. This version of the plan called for regional wetland habitat goals to define the desired state of the wetlands ecosystems as the first step in a regional wetlands monitoring program. This first version of the plan also outlined a scientific approach to set the habitat goals, institutional arrangements to achieve the goals, a scientific framework for monitoring progress toward the goals, and a model wetlands health report. From March 1995 to March 1999, SFEI coordinated the scientific support for the Bay Area Wetlands Ecosystem Goals Project that established the regional wetlands habitat goals. In August 1999, SFEI began to revise the scientific framework for the wetlands monitoring program. In 2001, the ambient monitoring component of the WRMP will begin.

Development of the Wetlands Program at SFEI has depended upon a long series of short service contracts relating to wetlands restoration, planning and management. All of these various projects have helped build the technical staff and computing capability that is necessary to implement the Program Strategy.

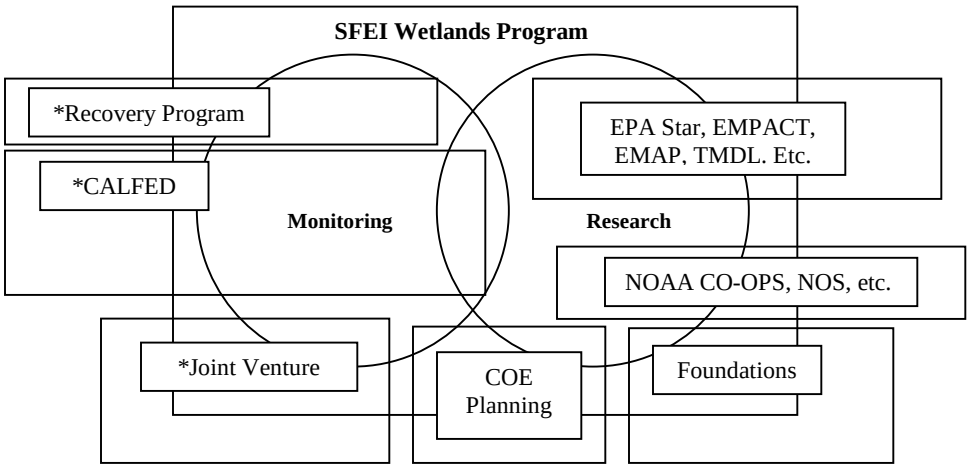
Current efforts to develop the Wetlands Program at SFEI are focused on winning larger, multiple year contracts and institutional agreements that are explicitly designed to implement the WRMP plan. These efforts include linking the WRMP to:

- Ecological Restoration Program of CALFED;
- San Francisco Bay Area Habitat Restoration Program;
- San Francisco Bay Area Joint Venture;
- Federal and California State Oil Spill Planning and Response;
- Mandatory wetlands monitoring under Sections 401 and 404 of the US Clean Water Act;
- TMDL (total maximum daily load) studies as required by US EPA;

In addition to these federal, state, and regional programs, SFEI will continue collaborating on projects sponsored by competitive grants to government agencies and private institutions.

Partnerships

The Wetlands Program at SFEI will continue to depend upon partners to provide expertise, in-kind services, and a wetlands management framework to apply the results of the program. The following organizational chart depicts the partnerships that exist at this time.



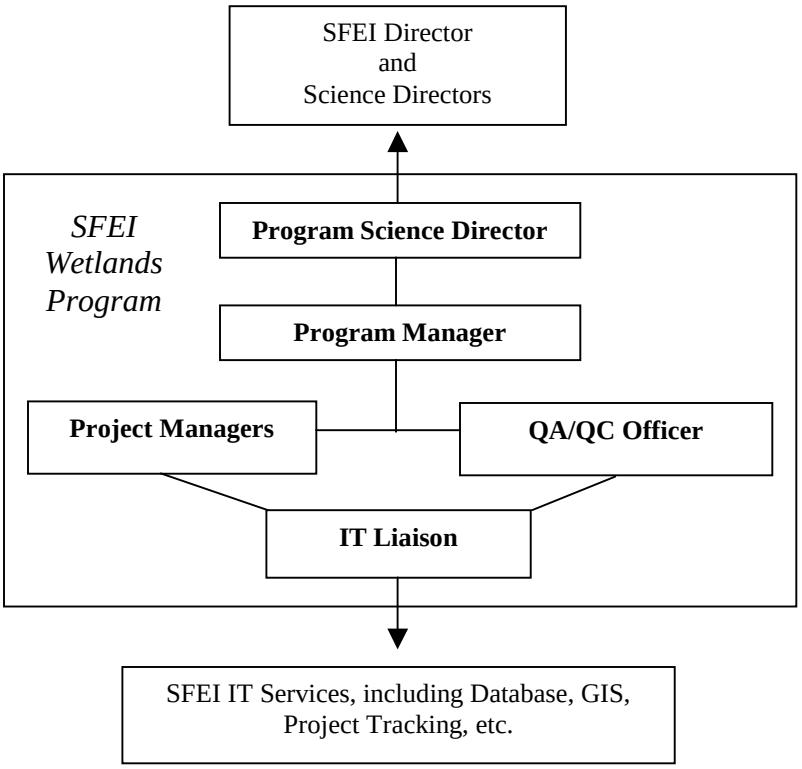
* These are multi-agency and multi-NGO consortia

Resource Allocation

Most of the funding will be for monitoring. But each staff person within the program will have some unbilled time to use for research and professional development. The amount of unbilled time will vary among personnel. The professional staff should expect to spend about 75% of their allowed unbilled time (about 12 hours per week on average or 30% of their total time) in research and professional development.

Staffing

As the ambient component of WRMP is implemented during 2001, the staffing of the Wetlands Program must increase. The following organizational chart is envisioned.



The Program Science Director will work with the Executive Director and existing and potential sponsoring agencies to develop funding and partnerships for the Wetlands Program, set overall program goals and objectives, and coordinate between the Wetlands Program and other programs inside and outside of SFEI.

The Program Manager will coordinate the daily activities within the program for its component projects and sponsors, manage work schedules to meet contract deadlines and program milestones, and advocate for solutions to technical and staffing problems.

One or more Project Managers may be required to oversee the daily activities of very large and complex projects and contracts that require abundant shared technical staff within SFEI or between SFEI and other organizations. The Project Manager position might be part time.

As data are collected and managed, the Wetlands Program will require a person who is dedicated to implementation of the data quality assurance and control plan. This might be a person shared with other programs at SFEI.

The Information and Technology Liaison will assure that the needs of the Wetlands Program are met for database, GIS, graphics, report layout, Internet, and project tracking.

Expected Timeline 2001

The following schedule of milestones for 2001 highlights the major tasks foreseen for either the monitoring or the research components of the Wetlands Program. During this next year, the Wetlands Program will focus on starting the ambient monitoring component of the WRMP, preparing to start the wetlands project monitoring component in 2002, and submitting proposals for research and monitoring projects for 2002.

	Month during 2001											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
WRMP Milestones												
Final State Wetlands Grant IT proposal	X											
Final USEPA EMPACT IT proposal	X											
Final CALFED-WRMP monitoring proposal		X										
Initial Data Collection Protocols Completed						X						
QA/QC Plan Initiated							X					
Staffing Completed										X		
Sampling Started										X		
Draft Annual Report Outline												X
Research and Professional Development Key Milestones (as of January 2001)												
Historical Ecology Paper submitted	X											
Tidal Marsh Geomorphology paper submitted										X		
Wetlands and Watersheds Integrated Landscape Science Framework		X										
Integrated Landscapes White Paper to SFO Expansion Managers Group		X										
Spartina Ecological Risks White Paper to EPA							X					
NIS Plants Online Control Guidelines												X
US EPA STAR Estuarine Indicators liaison					X			X			X	
S. California Wetlands Recovery Advisory									X			
EPA EMPACT Proposal		X										
CWA Section 104 pre-proposal							X					
Final NOAA GIS online Proposal							X					
West Coast EMAP draft proposal						X						
Tidal Wetland Methyl Mercury Proposal							X					
Tidal Marsh Sediment Source Signal Proposal							X					