

## SAN FRANCISCO ESTUARY PARTNERSHIP WORK PLAN CORE ELEMENTS NARRATIVE SUMMARY

July 2009-June 2014

This summary narrative covers the projects and programs that SFEP supported through staff time, Section 320 CWA EPA funds, and other grant and contract funding. More information about these projects is available on our website, our past Biannual EPA Reports, and in final reports that were completed for each of the projects closed between the dates covered under this Program Evaluation. Links are provided with more information about these projects. Each of our biannual reports to EPA also provided a status of all the current projects open at the time of the report and are an excellent source of additional information about overall program efforts.

### **ELEMENTS/SUB ELEMENTS:**

Ecosystem Restoration and Protection Projects; Technical Assistance and Capacity Building

### **Outputs**

All SFEP activities (NEP work plan projects) are grant funded planning or implementation projects. Outputs include regular project progress reports, quarterly or semi-annually, and a final project report. If the project includes restoration or construction, the project completion itself is an output and is documented photographically on the website or in the final project report. Other outputs may include write-ups in the quarterly Director's Report to the Implementation Committee, an article in the *Estuary News* magazine, a website page, a write-up in the annual SFEP Highlights flyer.

### **Outcomes**

- 1) Short-term: Increase in the number of project implementing partners and fund sources for SFEP to implement the CCMP. Increase in variety and types of projects. Increased knowledge of benefits of partnering with SFEP for project partners and stakeholders.
- 2) Intermediate: SFEP can show a change in behavior by the increased diversity of our partners and stakeholders.
- 3) Changes (+/-) in Pressure Targets: California is in its 4<sup>th</sup> year of drought and the pressures on fresh water usage for cities and farms impacts all estuarine species, habitats, and water quality. Climate change is affecting all aspects of the estuary. Funding for habitat and species restoration projects remains a stressor.
- 4) Long-term: Trying to restore and maintain the ecological integrity of the estuary during a critical drought remains a major challenge but great progress has been made in some area such as the restoration of hundreds of acres of baylands around the region over the past 5 years.

**WORKPLAN GOAL:** Goal 1: Build Estuary readiness to deal with the effects of climate change

Expand the toolbox of habitat protection measures needed under a changing climate regime, and provide the necessary baseline information to adaptively manage the health of our waters.

**Objectives:**

- Support research and analysis into effects of climate change on the ecology of the estuary
- Support and implement stream, wetland, riparian and fluvial/tidal restoration
- Implement multi-benefit climate adaptation strategies including flood protection
- Support sediment/sand research and policy development
- Refine existing and create new environmental indicators to measure and report health of the estuary

**Activities**

Support research and analysis into effects of climate change on the ecology of the estuary by

- 1) Staffing the Joint Policy Committee (JPC).
- 2) Staffing the SF Bay Restoration Authority.
- 3) Provide Regional Board Stream and Wetland Protection amendments for SF Bay Water Quality Control Plan (Basin Plans) and statewide Wetland Protection Policy
- 4) Manage and assist partners on Projects

- [Bahia Marsh Restoration & Re-vegetation Project](#)
- [Bay Area Stream Channel Restoration Design Curves](#)
- [Bay Point Stormwater and Flood Reduction Strategies Pilot Project](#)
- [Chelsea Wetlands](#)
- [Pinole Creek Restoration Projects](#)
- [Creek Mouth Assessment Project](#)
- [Flood 2.0: Rebuilding Habitat and Shoreline Resilience through a New Generation of Flood Control Channel Design and Management](#)
- [Flood Infrastructure Mapping & Communication \(SFEI-DAC\)](#)
- [Habitat Evolution Monitoring Pilot Program, and Pond A8 Muted Tidal Restoration](#)
- [Innovative Wetland Adaptation Techniques in Lower Corte Madera Creek Watershed](#)
- [JPC Regional Sea Level Rise Planning and Adaptation Strategy](#)
- [Napa Co Miliken Creek Flood Damage Reduction and Fish Passage Barrier Removal project](#)
- [Oakland Sausal Creek Restoration](#)
- [Petaluma Flood Reduction, Water and Habitat for Capri Creek](#)
- [Pescadero Water Supply and Sustainability project](#)
- [Pescadero Integrated Flood Reduction and Habitat Enhancement Project](#)
- [Redwood City Bayfront Canal Flood Management and Habitat Restoration](#)
- [Re-oaking Stanley Reach of Alameda Creek](#)
- [Richmond Shoreline and San Pablo Flood Project](#)
- [Richmond Breuner Marsh Restoration](#)
- [San Francisco Bay Climate Change Pilot Projects](#)
- [San Francisco Bay Living Shorelines](#)
- [San Francisco International Airport Industrial Waste and Reclaimed Water Facility](#)

- [San Francisquito Watershed Design Curves](#)
- [San Pablo Rheem Creek Wetlands Restoration](#)
- [St. Helena Upper York Creek Dam Removal and Ecosystem Restoration](#)
- [Stream Restoration with schools in Disadvantaged Communities of the North Bay \(STRAW\)](#)
- [Stonybrook Creek Bio-Engineered Bank Stabilization](#)
- [Subtidal Habitat Goals Project for San Francisco Bay](#)
- [Support the San Francisco Bay Restoration Authority](#)
- Watershed Scale Map Tools and Shoreline Change Study
  - [Project Report](#)
  - [Shoreline Study](#)

### **Partnerships**

Please see linked descriptions for list of partners

### **WORKPLAN GOAL: Goal 2: Increase Watershed Health**

Increase the health and resilience of watersheds. Build additional active partnerships in the region to improve water quality and habitat health. Integrate projects within key watersheds, from headwaters to tidal waters.

### **Objectives:**

- Build, promote and support community based approaches to watershed protection, restoration and stewardship
- Increase watershed management capacity of local governments
- Support implementation and management of the state aquatic invasive species management plan
- Support and promote new water use conservation methods
- Support efforts to restore adequate flows to bay tributaries

### **Activities**

- 1) Support watershed activities through support of BAWN (Bay area Watershed Network)
- 2) Manage and assist partners on Projects

- [Application of the Watershed Assessment Framework \(WAF\) as a Tool for Integrating and Communicating Watershed Health Indicators for the San Francisco Estuary](#)
- [Bay Area Regional Water Conservation project](#)
- [East Bayshore Recycled Water Pipeline](#)
- [Eden Landing/MLK Shoreline Habitat Restoration: Invasive Plant Removal and Native Planting](#)
- [Invasive \*Spartina\* Project](#)
- [Lagunitas Creek Watershed Sediment Reduction & Management](#)
- [Marin/Sonoma: Conserving Our Watersheds: AG BMP project](#)
- [North Bay Water Reuse Program](#)
- [Roseview Heights Water Supply Infrastructure Upgrades](#)
- [SFPUC regional groundwater storage and recovery project](#)

- [Stream Management Program for Landowners](#)
- [Stream and Wetlands Protection Policy](#)
- [Protecting Instream Flows for Fish in the North Bay](#)

### **Partnerships**

Please see linked descriptions for list of partners

### **WORKPLAN GOAL: Goal 3: Improve Water Quality**

Focus on pollution prevention, urban runoff/stormwater quality, and “Green Infrastructure” projects (“low impact development,” or LID).

### **Objectives:**

- Implement the Clean Water Act by supporting TMDL development and implementation across the region
- Expand existing SFEP programs and projects to focus on water quality improvements
- Develop and implement well-designed and effective green infrastructure projects to reduce stormwater pollution throughout the region

### **Activities:**

- 1) Implement SFEP directed projects
- 2) Manage and assist partners on Projects

- [Bay Wide Trash Capture Demonstration Project](#)
- [City of Richmond Stormwater Project](#)
- [El Cerrito Green Streets and Rain Gardens](#)
- [Fremont LID Tree-Well Filter Pilot](#)
- [“Got Ants” pesticide reduction project](#)
- [Green Infill Monitoring Project](#)
- [Green Solution Project](#)
- [Hicks Flat Mine Waste Erosion Control](#)
- [Implement Pathogen TMDLs in Napa County](#)
- Implement Sediment TMDLs in [Marin](#), [Napa](#), and [Sonoma](#) ([Second Sonoma Project](#)) Counties
- [Invasive Species and Ship Ballast Water Exchange Outreach/ Education](#)
- [Keep It Clean](#)
- [Littorina Eradication Project](#)
- [North Richmond Pilot to Treat Stormwater Flows](#)
- [Recreational Boater Pump-out Education Program](#)
- [Richardson Bay Pathogen TMDL Implementation](#)
- [San Francisco: Newcomb Avenue Stormwater LID Project](#)
- [San Jose Green Streets LID Demonstration project](#)
- [San Pablo Avenue Stormwater Spine Project](#)
- [Senador Mine Erosion Control](#)
- [Taking Action for Clean Water: TMDL Implementation for Sediment](#)

- [Taking Action for Clean Water: TMDL Implementation to Decrease PCB Contaminated Runoff](#)
- [Taking Action for Clean Water: TMDL Implementation for Urban Pesticide Pollution Prevention](#)
- [Strategy for Resolving Methyl Mercury \(MeHg\) and Low Dissolved Oxygen \(DO\) Events in Northern Suisun Marsh](#)

**WORKPLAN GOAL** : Goal 4: Champion the Estuary

Through conferences, workshops, print media and our website, provide local decision makers and the general public with a reliable source of information needed to make policy and personal decisions in favor of Estuary health.

**Objectives:**

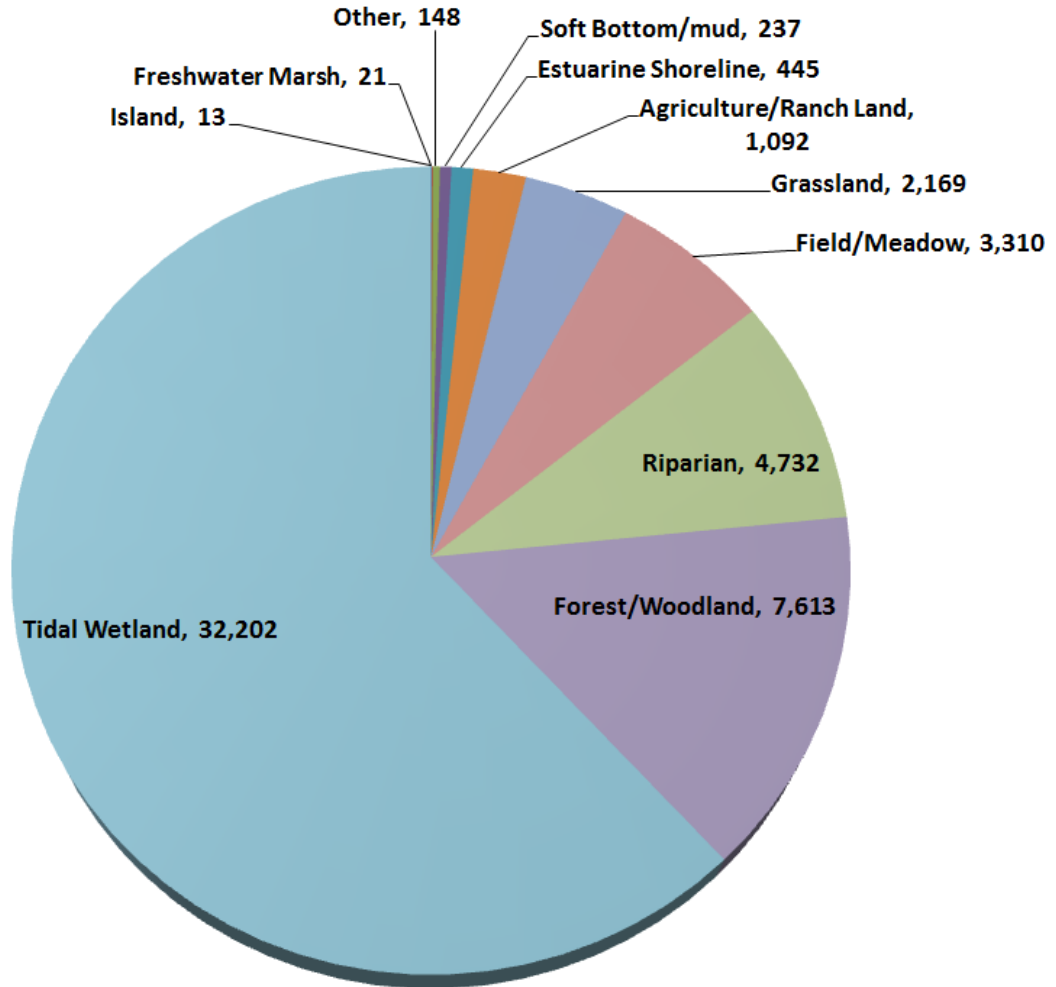
- Promote public involvement in estuary protection through redesigned interactive website
- Educate the community through the biennial State of the Estuary Conference
- Create and publish the 2015 State of the Estuary Report

**Activities:**

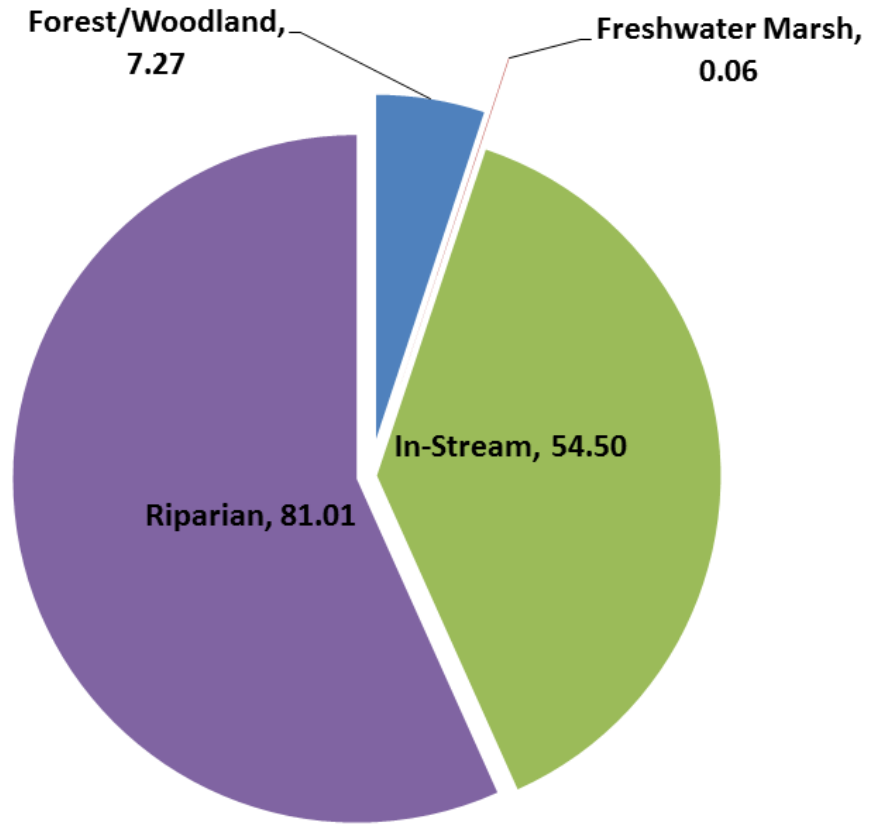
- [Organize and manage a Biennial State of the Estuary Conference](#)
- [Organize and manage the Biennial Delta Science Conference](#)
- Organize Ad Hoc Workshops
- [Support the Estuary Newsletter](#)
- [Maintain a State of the Art Web Portal](#)
- Connect/collaborate with other NEPs and regional programs
- [Support Bay Youth for the Environment work at Yosemite Slough](#)

## HABITAT ACCOMPLISHMENTS

**Total Acres Reported in NEPORT by Habitat Type for the San Francisco Estuary Partnership from 2009 - 2014**



### Total Linear Miles Reported in NEPORT by Habitat Type for the San Francisco Estuary Partnership from 2009 - 2014



## CLEAN WATER ACT IMPLEMENTATION

- **Strengthening Water Quality Standards**

SFEP worked with the San Francisco Regional Water Quality Control Board over the time period of this review (July 2009-June 2014) to develop a Stream and Wetlands Preservation Policy for the Bay Area Region to cover streams and wetlands excluded from Clean Water Act or Porter Cologne by lack of inclusion or court determinations. This effort was superseded by the State Water Board and is not yet concluded.

The SFEP assists the Regional Water Board with implementing water quality standards by providing support staff to work on permitting for several local water agencies: the Santa Clara Valley Water District, Marin County and Marin County Flood Control District, the Sonoma County Water Agency, and the Alameda County Flood Control and Water Conservation District.

- **Improving Water Quality Monitoring**

SFEP works with the California Water Quality Monitoring Council, a joint project of the California Environmental Protection Agency (CAL/EPA) and the Natural Resources Agency to improve efforts and seek consistency statewide. The Council maintains a website, My Water Quality with the most up to date information for stakeholders at <http://www.mywaterquality.ca.gov/index.shtml>

- **Developing Total Maximum Daily Loads**

The San Francisco Regional Water Quality Control Board is delegated to develop TMDLs for the San Francisco Bay Region. Over the period of this review, SFEP supplied staff to assist both the Regional Board with TMDL development and the State Water Board with reviewing regional board TMDLs for consistency. New legislation by California now prohibits these types of personnel services contracts so SFEP support is no longer direct but staying informed of TMDL progress by the Regional Board at Implementation Committee meetings. Additionally, SFEP has obtained funding to implement projects in the Guadalupe watershed to support that TMDL and also to support implementation of TMDLs in the North Bay.

- **Controlling Nonpoint Source Pollution on a Watershed Basis**

SFEP has been a long time proponent of green infrastructure to control nonpoint source pollution from urban runoff and has obtained grant funding to both implement specific green infrastructure projects and develop planning tools to assist local jurisdictions in siting green infrastructure projects in specific watersheds where it is most effective and cost effective.



**External factors affecting the NEP work plan goals and/or progress, and related adaptive management strategies.** (Indicate ways EPA can support you in managing external factors)

Over the course of this review, SFEP has generally been very successful at completing many projects included in the annual workplans. However, a number of those project timelines had to be extended due to outside circumstances. These include 1) work delayed due to low precipitation [i.e. monitoring of the Fremont Treewell project and other LID projects] and other natural conditions. Permits have also caused delays and affected the schedule of some of our workplan projects [i.e. mercury work in the Guadalupe River watershed has been delayed due to backlogged permitting at the Corps of Engineers]. Lag time in acquiring needed match funds [i.e. Yosemite Slough Phase II restoration work] impacted another of our workplan efforts and in a few instances, the projects just did not achieve the desired ends. In those cases, SFEP has worked with the local project leads to evaluate lessons learned from these projects so that better projects can be conceptualized in the future.

**ADDRESSING CHALLENGES FROM PRIOR PE**

Our last Program Evaluation was completed in December 2010 the results of which were described in a letter from Paul Cough to Judy Kelly on December 10, 2010. In that letter, EPA described three challenges that SFEP should address going forward:

- Priority Setting
  - “EPA acknowledges that the SFEP’s Strategic Plan was an important step toward setting priorities, but also recommends that the SFEP work with its steering and implementation committees to refine its priorities. The SFEP should consider using such tools as the Plan2Fund Objectives Prioritization Tool and watershed characterization to better target efforts”
- Governance
  - “... EPA recommends that the SFEP establish clear roles and responsibilities for its executive, steering and implementation committees. This could include rotating membership in its newly forming Steering Committee as well as rotating the chair of the existing Implementation Committee. .. SFEP should examine the role that ABAG and Friends of the Estuary play in the Management Conference”
- Indicators and Tracking
  - SFEP [should] increase its efforts to link Program actions with outcomes...[such as] environmental, behavioral, health related, or programmatic in nature, but should be quantitative ... [with] special

emphasis on specifying quantitative outcomes related to achievement of water quality objectives and the protection of beneficial uses.”

The Partnership has addressed each of these issues in the following manner:

Priority Setting. The current SFEP CCMP [2007] has 205 separate actions in 9 separate program areas. The large number and diversity of these actions has long been a concern of the Partnership in terms of being able to prioritize work efforts and funding opportunities. The 2010 EPA letter rightfully calls attention to this issue – and while issues like this are inherent in a plan that is truly “comprehensive” in nature, the Partnership made streamlining and prioritizing SFEP’s efforts a major focus of work over the past 5 years.

To begin to address this issue, the Partnership undertook a review and update of the 2010-2012 Strategic Plan, honing the Goals and Objectives and actions to a set of focused efforts that tackled all the program areas of the CCMP but highlighted the specific actions and issues that were deemed to be most important to current needs. This culminated in the 2012-2018 Strategic Plan <http://www.sfestuary.org/wp-content/uploads/2012/10/stratplanweb.pdf>

The Partnership also reviewed several available tools for priority setting [but found them too limiting for the very dynamic funding opportunities usually presented to the Partnership]. However many sister efforts and programs have help set regional priorities for action including our local Joint Venture’s work which defines available bayland habitat restoration and enhancement efforts and tracks progress on the implementation of those projects. The region also now greatly benefits from the completion of goals projects for all of our habitats; subtidal goals project- <http://www.sfbaysubtidal.org/report.html>; baylands goals project; <http://baecc.org/pdf/sfbaygoals031799.pdf> and uplands goals project; <http://californialcc.org/projects/san-francisco-bay-area-upland-habitat-goals>

Several other major plans were completed by the region and the state in the intervening years since the last Program Evaluation including the Delta Plan <http://www.deltacouncil.ca.gov/delta-plan-0> and the regional transportation and housing plan – PlanBayArea. <http://planbayarea.org/index.php>. SFEP has been careful to recognize the purview and efforts of the many other involved entities in our priority-setting efforts and in the end, concluded that a total rewrite of the current CCMP was required to best address the fundamental issue of what actions the Partnership should consider priorities. We have been working hard on the CCMP rewrite process since summer 2014 and expect to release a short summary of our Draft set of much-streamlined [less than 50] proposed CCMP actions to the public and stakeholder at the State of the Estuary Conference in September 2015.

Governance. SFEP has made much progress on this recommendation since 2010. The Implementation Committee revisited its internal Policies and Procedures and has revised them to include a rotating Chair and Vice Chair of the existing Implementation Committee. This has allowed for greater participation by member entities in the work of the Committee

and built stronger working relationships within the Committee. We also strengthened the relationship between SFEP and ABAG's Executive Board and now periodically provide updates and briefing to the Board, the Administrative Committee of the Board and other ABAG Committees. We currently provide staff support to the Hazardous Waste Committee of ABAG bringing SFEP's interest in reducing pollutants to the working of the Committee. Our related 501C(3) organization, Friends of the Estuary has, at the encouragement of the SFEP Director, taken on a much larger role in the critical issue of adequate freshwater flows into the Estuary and is working directly with elected officials around the region to bring attention to this critical issue and to build support for action at the state level to institute regulatory changes that will better protect the Bay and Delta.

Indicators and Tracking. As noted in the 2010 Program Evaluation letter, "measuring outcomes is a challenge common to many programs including the NEP." This is an especially thorny issue for the SFEP with an estuary that drains over two thirds of the state of California which has a current population of nearly 40 million people – the most populous state in the country. The current 2007 CCMP actions cover 9 program areas, from wetland restoration to sediment and waterway modification work. It is beyond the reach of the Partnership, and likely impossible, to devise a direct mechanism to determine the exact response in the environment to each implemented CCMP action. That is why the Partnership, working very closely with our science arm – the San Francisco Estuary Institute-- is in the process of updating our science and policy-based State of the Estuary Report for 2015. With so many of our estuary's inputs out of the control of the agencies and organization that comprise the Partnership- we have followed the advice of EPA's Science Advisory Board and created a reporting process that uses established public goals [where they exist] to measure progress toward estuarine health. The logic for this work is articulated in the 2011 State of the Bay Report [see pages 3-8 [http://sfep.sfei.org/wp-content/uploads/2012/12/3Intro\\_SOB2011.pdf](http://sfep.sfei.org/wp-content/uploads/2012/12/3Intro_SOB2011.pdf)]. We have also made it a priority for the new CCMP to include quantitative related measures of success for each of the draft actions. Also as part of the new CCMP, there will be an action progress tracking report [with Puget Sound as the model] so that stakeholder and interested parties will be able to easily see the implementation status of each of our final actions once they go into implementation phase.

## BUDGET SUMMARY

### NEP FUNDS BUDGET SUMMARY

	07/01/09-06/30/10	07/01/10-06/30/11	07/01/11-06/30/12	07/01/12-06/30/13	07/01/13-06/30/14
Personnel	\$ 359,021.02	\$ 375,794.91	\$ 222,748.16	\$ 260,338.42	\$ 454,750.99
Consultants	\$ 154,284.59	\$ 248,628.94	\$ 74,771.31	\$ 35,752.95	\$ 66,488.06
Other Direct					
Costs	\$ 50,105.33	\$ 32,348.03	\$ 33,203.63	\$ 53,785.35	\$ 31,430.21
Indirect Costs	\$ 9,595.12	\$ 6,272.67	\$ 3,105.54	\$ 2,559.66	\$ 2,034.67
Total	\$ 573,006.06	\$ 663,044.55	\$ 333,828.64	\$ 352,436.38	\$ 554,703.93

Most post CCMP funding during the period of this Program Evaluation was used to maintain core SFEP staff. These funds enabled staff to obtain grant funding for CCMP implementation projects. In FY09-10 funds in addition to staff costs, our EPA grant funds supported a redesign of the SFEP website, the hiring of a habitat restoration consultant to implement a campaign for increased Bay Area regional habitat restoration, supported a K-12 student environmental education/poetry contest, and supported the continuing publication of the Estuary News magazine. In FY10-11 funds were critical to the creation of the 2011 State of the Bay Report which established benchmarks and indicators to measure and report on the ecological health of the San Francisco Bay. EPA funds also continued to support the Estuary News magazine, the habitat consultant, produce video podcasts for the website and backroom website support. In FY 11-12 and 12-13 NEP funds again supported the Estuary News magazine and website support. In FY 13-14 funds supported 11 small grant projects as well as the Estuary News magazine and website.

**SFEP BUDGET SUMMARY-  
LEVERAGING**

Year	Section 320	Role	Subtotal	Yearly Total
FFY 09-10	\$ 600,000	Primary	\$ 14,890,000	
		Significant	\$ 68,000	
		Support		\$ 14,958,000
FFY 10-11	\$ 800,000	Primary	\$ 3,621,000	
		Significant	\$ 520,000	
		Support	\$ 620,000	\$ 4,761,000
FFY 11-12	\$ 598,800	Primary	\$ 8,853,000	
		Significant	\$ 832,000	
		Support	\$ 36,000	\$ 9,721,000
FFY 12-13	\$ 597,334	Primary	\$ 770,000	
		Significant	\$ 200,000	\$ 970,000
FFY 13-14	\$ 512,000	Primary	\$ 10,227,000	
		Significant	\$ 769,000	
		Support	\$ 72,000.00	\$11,068,000.00
<b>GRANT</b>	\$ 3,108,134		<b>LEVERAGED</b>	\$41,478,000.00